Blue Book Quarterly
A Review of the Publications
of the
Government of Bombay
Nos 3 and 4 of 1914

Government

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LIST OF ABBREVIATIONS.

N. B.—The following abbreviations are used in the Quarterly:—

G. R. = Government Resolution.

P. N. = Press Note.

Ec D. = Ecclosiastical Department.

Ed, D. = Educational Department.

F. D. = Financial Department.

G. D. = General Department.

J. D. = Judicial Department.

M. D. = Marine Department.

P. D. = Political Department.

P. W. D. = Public Works Department.

R. D. = Revenue Department.

Blue Book Quarterly.

A Review of the Publications of the Government of Bombay.

No. 3.

OCTOBER 1914.

PRICE 4 ANNAS.

PART I.

Administration.

LAND REVENUE ADMINISTRATION REPORT, PART I, OF THE BOMBAY PRESIDENCY, INCLUDING SIND, FOR THE YEAR 1912-1913.—Foolscap folio, 68 ρρ. (Government Book Depôt, Bombay)—price 10 annas or 11d.

It was explained in the last issue of the Quarterly, page 30, that Part I of this report is of the nature of a statement of accounts, and that its publication is delayed by exigencies of audit. Part II has been already published and reviewed. The present publication, being mainly of a statistical nature, obviously requires no detailed notice, but anyone desirous of ascertaining particulars of collections, remissions, suspensions and the like, will be able to trace therein the Presidency, Divisional and District figures under each head.

Agriculture.

IMPROVEMENT OF THE INDIGENOUS PLOUGH OF WESTERN INDIA, being Bulletin No. 57 OF 1913 of the Department of Agriculture, Bombay-Super-royal 8vo., 19 pp. with 4 illustrations and numerous diagrams (Government Book Depôt, Bombay)—price 12 annas or 1s. 2d.

The author of the Bulletin, Mr. S. S. Godbole, L.C.E., Assistant Professor of Physics at the Agricultural College, points out that the indigenous plough of Western India is doubly inefficient, because it demands haulage disproportionate to the amount of work done, and ordinarily leaves a considerable portion of the soil unworked and unploughed. But it has two great and saving virtues; it is

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very cheap and very easily repaired even in the remotest village. It has therefore been considered important to see if it cannot be given greater efficiency without materially increasing its cost and without making it more difficult to repair.

The author's solution of the problem is to make a change in the share. The ordinary Deccan share is triangular, with the apex downward. Mr. Godbole proposes a share, also triangular in shape, but with the apex upwards, and the flat surface resting on the bottom of the furrow. The advantages claimed for such a plough-share are (1) that it will cut a rectangular instead of a triangular furrow, as broad at the bottom as at the top, and (2) that it will to some extent turn over the loosened soil and prevent the formation of large clods. It is, however, obvious that a plough of this nature will demand increased draught, and it has to be determined whether the advantages gained are sufficient to outweigh this disadvantage.

Mr. Godbole has tested this point first by theoretical mechanics, next by laboratory experiments with small models, and last by field tests with full-sized working models, and the conclusion reached by him is that the experimental plough, though it requires more haulage, is nevertheless more efficient than the ordinary plough; that is to say, it requires much less force per square inch of furrow opened than the ordinary plough. It can be run straight, balanced and worked as easily as the old plough, and as the method of yoking and working is the same, no special training in its use is required. In fact, Mr. Godbole claims that this is merely an improved form of the ordinary plough which can be turned out in any village.

PRICKLY-PEAR EXPERIMENTS, being Bulletin No. 58 of 1913 of the Department of Agriculture, Bombay.—Super-royal 8vo., 11 pp. with 10 plates (Government Book Depôt, Bombay)—price 14 annas or 1s. 4d.

In this bulletin Mr. E. W. Horn, Manager of the Kirkee Civil Dairy, describes a six months' experiment in the preparation and use of prickly-pear as a famine or emergency fodder. In January 1913 six bullocks were purchased from the

famine-stricken district of Ahmednagar. With one exception they were in extremely poor condition. The pear used was the common variety which is to be found anywhere along the roadsides and in jungles. The spines were removed by burning with oil stoves or blow-lamps, the most economical of which proved to be one called the 'Effective,' price Rs. 22. Care has to be exercised to see that all he bigger spines are removed; some fine hair-like spines are almost certain to remain but will not have any ill effect. After the spines have been burnt off the slabs of pear are passed through a chaff-cutter. A knife, such as is used for chopping kadbi, can be substituted, but a chaff-cutter is, of course, quicker and more convenient. As the pear fed alone would not be sufficiently nutritious an addition of 6 per cent. of cotton-seed was made, and this mixture was fed to the cattle. the beginning small quantities of the mixture were given with a quantity of chaffed kadbi, and the mixture was increased and the kadbi decreased daily, until after about a week the kadbi was entirely omitted. Of the six bullocks, four took to the pear readily and ate it greedily after about ten days. One other gave some little trouble, but ate it readily after a month. The last only began to eat it at the end of the experiment, but this was probably due to his extremely emaciated condition, for it was with great difficulty that he could be got to eat sufficient good fodder of any sort to regain condition. The cattle lost weight to some extent at the beginning of the experiment, but soon made up the loss and then actually gained weight. One bullock gained as much as 70 lbs. The average amount of pear consumed was 32 lbs. per head per day.

The pear can be prepared at a cost of Re. 1-4 per 1,000 lbs. in a day of 10 hours, and without allowing for wages a pair of bullocks can be fed with pear and cotton-seed at a cost of Re. 0-4-9 a day. One stove is sufficient to burn pear for 20 head of cattle. Prickly-pear fodder was used for dairy stock at Mánjri farm when other fodder was dear and effected a considerable saving. It was also used at the cattle camps in the Ahmednagar district in the 1913 famine with great success and the leading cultivators were much impressed with the demonstrations. Thus it is held to be conclusively proved that prickly-pear, if fed with a 6 per centum admixture of cotton-seed, is a valuable emergency fodder in famine times and that it can be profitably fed to cattle in conjunction with other fodder when the price of ordinary fodder rises.

SUGARCANE, being leaflet No. 3 of 1913 of the Department of Agriculture.—(Government Book Depôt, Bombay).

This leaflet replaces leaflet No. 11 of 1909, and explains all points in sugarcane cultivation by modern methods from the choice and tillage of the soil down to the extraction and boiling of the juice.

Commerce and Industry.

ANNUAL REPORT ON THE WORKING OF THE INDIAN COMPANIES ACT, 1882, FOR THE OFFICIAL YEAR 1913-1914.—Foolscap folio, 6 pp. letter-press and 30 pp. statistical tables (Government Book Depôt, Bombay)—price 6 annas or 7d.

This report is compiled by the Registrar of Companies, Bombay, and deals not only with the main Companies Act, but with all the cognate Acts, such as the Societies Registration Act of 1860 and the Provident Insurance Societies and the Indian Life Assurance Acts of 1912.

The report shows that 62 new companies were registered in the Bombay Presidency during the year ending 31st March, 1914. In the previous year there were only 43 registrations. The Registrar attributes the largeness of the increase to the rush of intending promoters to complete and register their projects under the old Act, so as to avoid the stricter provisions of the new Act which came into force on 1st April, 1914. He thinks that the increase would have been still greater but for the banking crisis of the latter half of the year. The number of companies which went into liquidation rose from 26 to 46. This increase is also attributed in part to the failure of the Credit, Specie, and other Indian banks. The position at the close of March 1914 was that there were 613 companies limited by shares with a nominal capital of Rs. 52,56,56,900 and a paid-up capital of Rs. 29,53,08,206. The corresponding figures for the previous year were 593, Rs. 52,34,96,900 and Rs. 27,47,01,104. Thus the year saw an increase under each head despite the bank failures.

One new company applied for registration under the new Provident Insurance Societies Act, and this application, together with those of other companies which have come within the provisions of the Act, was awaiting disposal at the close

of the year, pending the final publication of the rules. The Registrar has only 10 provident societies on his books, although there were over 200 such societies a decade ago. Most of these collapsed owing to defects in their constitution. Three companies were registered under the new Indian Life Assurance Companies Act after complying with the provisions of section 4 regarding deposits.

* * * * *

REPORT OF THE MARITIME TRADE OF THE PROVINCE OF SIND FOR 1913-1914.—Foolscap folio, 35 pp. (The Commissioner's Printing Press, Karáchi)—price 4 annas.

This report is prepared by the Chief Collector of Customs in Sind. The report for the Presidency proper 'was reviewed at page 44 of the last issue of the Quarterly. The detailed trade and navigation statistics for both the Presidency and Sind are published later in the year in separate volumes.

The total value of the foreign import trade rose from Rs. 1,785 to Rs. 2,017 lákhs, an increase of more than Rs. 2½ crores, or approximately 13 per centum. The principal articles which contributed to the increase in imports were sugar, tobacco, wood and timber, metals, yarns and textile fabrics. Cotton manufactures alone contributed Rs. ¾ crore to the increase. The total value of the import trade was easily a record.

On the other hand, the value of foreign exports fell from Rs. 3,287 to Rs. 2,665 lakhs, a decrease of approximately 19 per centum. The diminished exports of wheat and barley alone account for the total decrease. The Sind and Punjáb wheat outturn was somewhat lower than in the preceding season, but the chief factor in the decrease of shipments was the bumper crops produced in Canada and the United States. Similarly, exports of barley, gram, maize and pulse were stimulated in the previous year by the failure of crops or scarcity in Europe. With this factor removed, exports fell heavily in the year under notice. Nevertheless, the total value of the foreign export trade was higher than in any year except the last.

The total value of the trade at the subordinate ports of Keti Bandar and Sirganda fell by 24 per centum to Rs. 15'13 lákhs. The decline is accounted for

by the fact that the rice crop was below normal in quantity, and also inferior in quality, owing to heavy rains and an unusual inundation.

The customs revenue of the year, after deducting refunds and drawbacks, amounted to Rs. 93\frac{1}{3} lakhs. This represents an increase over last year's figure of Rs. 11 lakhs or nearly 13\frac{1}{3} per centum.

* * * *

REPORT ON THE EXTERNAL (TRANS-FRONTIER) LAND TRADE OF THE PROVINCE OF SIND AND BRITISH BALUCHISTAN FOR 1913-1914.—

Foolscap folio, 5 pp. letter-press and 25 pp. statistical tables (The Commissioner's Printing Press, Karáchi)—price 8 annas.

This report is prepared in the office of the Chief Collector of Customs in Sind. The companion report for the Presidency proper deals with conditions of greater complexity, and is issued later in the year.

The trade reviewed in this report is the land trade of Sind and British Baluchistan with Afghanistan, the Kelat and Las Beyla territory in Baluchistan, and Persia. Its total value, excluding treasure, advanced from Rs. $190\frac{1}{2}$ to Rs. $197\frac{3}{4}$ lákhs. There was a large increase in the import, but a considerable decrease in the export trade, and thus the net gain was only 4 per centum. Nevertheless, the increase in the past five years has been 34 per centum, and in the past decade no less than 88 per centum.

The Afghanistan trade is by far the most important, amounting in value to Rs. 1,56½ lákhs. For the first time since 1904-1905 trade was recorded with Northern and Eastern Afghanistan. Its value was nearly Rs. 2 lákhs. The most important trade route to Afghanistan and also Persia is the Nushki route. Some remarks of the Political Agent, Chagai, on this trade are quoted in the report, and it is interesting to find that the effects of the failure of the People's Bank of Lahore and other banks were distinctly felt in the Nushki bázár. A stagnation was caused among buyers, and to this is attributed in part a decrease in the imports from Persia. The panic and timidity caused by the bank failures seems also to be partly responsible for the general decline in the export trade.

ANNUAL FACTORY REPORT OF THE PRESIDENCY OF BOMBAY, 1913.

Notice of this report is postponed until the Government resolution reviewing it is published.

Education.

ANNUAL REPORT OF THE REFORMATORY SCHOOL AT YERA'VDA FOR THE YEAR 1913.—Foolscap folio, 7 pp. (Government Book Depôt, Bombay)—price 2 annas or 2d.

The report of the Superintendent shows that the health and discipline of the inmates were satisfactory. The average daily number of boys in the institution decreased from 145 to 131 owing to discharges (63) out-numbering admissions (44). The boys are educated and taught useful industries such as gardening, carpentry, smith's work, painting and polishing, book-binding and type-setting. Out of the 120 juveniles discharged during the past triennium only 3 have been reconvicted and 27 cannot be traced. The remainder are known to be living honestly.

Finance.

REPORT ON THE OPERATIONS OF THE PAPER CURRENCY DEPARTMENT IN THE BOMBAY AND KARACHI CIRCLES AND ON THE MOVEMENT OF FUNDS IN THE PRESIDENCY OF BOMBAY INCLUDING SIND FOR THE YEAR 1913-14.—Foolscap folio, 59 pp. letter-press and 8 pp. statistical statements (Government Book Depôt, Bombay)—price 8 annas or 9d.

This report is submitted to the Controller of Currency by the Accountant General of Bombay. It contains a review of the seasonal and trade conditions of the year from the financial point of view and illustrates their effect on the movement of funds and the absorption of currency. The subject dealt with is entirely controlled by the Government of India, but the following summary is included in the *Quarterly* because the report must necessarily be of great interest to the public of the Bombay Presidency.

The paper currency returns show that there has been a steady increase in the circulation of notes of the lower values, which is believed to represent an

increase in their popularity and in their use as a medium of exchange and The circulation of notes of a higher denomination than Rs. 100 is decreasing, especially in the Bombay Circle, where this tendency was so marked that in spite of a rise of Rs. 32 lakhs in the average net circulation of small notes, there was a fall of Rs. 28 lakhs in the total active note circulation. balance was, however, redressed at Karáchi, where there was a rise in the circulation both of low and high-value notes. Trade being slacker in Karáchi than in the previous year, it seems that a proportion of the available funds was kept idle in the form of Rs. 10,000 notes, while the financial crisis in the Punjáb doubtless induced local banks to strengthen their reserves and to hold an unusual number of high-value notes during what is normally the busy season. The steady increase in the circulation of Rs. 5 notes in both circles is very marked, and shows that notes of small value are readily accepted by the masses. The circulation of Rs. 10 notes, which in the previous year was practically stationary, rose sharply in the Bombay and moderately in the Karáchi Circle. This affords proof of the proposition that there is room for both gold and small-value notes in the ordinary currency in circulation among the people. The increase in the circulation of Rs. 50 and Rs. 100 notes is also maintained, but the increase in the circulation of Rs. 100 notes in Bombay is not as remarkable as in the preceding year. These notes are largely used for remittance purposes, and the crisis in the money market seems to have checked such remittances from Bombay merchants up-country.

The total absorption of gold coin increased from £1 $\frac{1}{3}$ million in 1911-12 and £1 $\frac{1}{2}$ million in 1912-13 to a little over £4 millions in 1913-14. The absorption may indeed be even greater, as the Customs Department returns the import of sovereigns at £7,290,000 while the Currency Office figure is only £6,091,000. The difference is believed to represent imports of 'shield' sovereigns, which command a premium, and of other sovereigns in small amounts which pass into circulation direct. The very large increase in absorption is a striking proof of the growing popularity of gold coins, to whatever use they may ultimately be put.

The net absorption of rupees and half-rupees was Rs. 404.86 lákhs as against Rs. 71.67 lákhs in 1912-13 and Rs. 460.27 lákhs in 1911-12. The reduced absorption in 1912-13 was due to the failure of the 1911 monsoon, in

Gujarát especially, which resulted in the return of a large amount of coin from circulation in the first seven months of 1912-13. Thus the silver balance (including the balance of coin in the Gold Standard Reserve) at the beginning of the year under report had reached the abnormal figure of Rs. 768.51 lákhs, but by reason of the greater absorption and a decrease in the receipts from the mint and from other provinces, the closing balance stood at Rs. 341.8 lákhs. The exports of private merchandise from Bombay in 1913-14 exceeded those of 1912-13 by over Rs. 10 crores, and the larger issues of silver, pari passu with a greatly increased absorption of gold, are regarded as a result of the improvement in trade conditions.

The net absorption of quarter and eighth-supees amounted to Rs. 938 lákhs as against Rs. 489 and Rs. 453 lákhs in the two previous years. The net absorption of nickel coin also rose from Rs. 352 to Rs. 359 lákhs. The nickel one-anna piece has been very popular in the Bombay Presidency since its introduction, and the total absorption from 1907-08 to 1913-14 has amounted to Rs. 2765 lákhs. Its popularity continues to have a marked effect on the circulation of single pice, of which Rs. 1 lákh returned from circulation in the year under review. New coins are however still in demand for weddings and festivals, where custom requires the distribution of largesse.

Legislation.

THE DEKKHAN AGRICULTURISTS' RELIEF ACT.

The following draft of a Bill for the Protection of Agriculturists and Explanatory Note were published in Press Note No. 858, L. D., 17th July 1914:—

EXPLANATORY NOTE.

Certain difficulties having arisen in connection with the working of the Dekkhan Agriculturists' Relief Act, the Bombay Government decided in 1912 to appoint a Commission consisting of Mr. S. R. Arthur, I. C. S., then Additional Member of the Council of the Governor-General, and Mr. V. M. Bodas, retired 1st Class Sub-Judge, to inquire into and report on the working of the Act.

- 2. Some specific questions were referred to the Commission for opinion; but they had also authority to report generally on the working of the Act, and were thus enabled to consider the Act as a whole.
- 3. The Commission submitted an able and exhaustive report on the subject. Their conclusions were briefly that the Dekkhan Agriculturists' Relief Act should be repealed and that a short Act to take its place should be passed in the Bombay Legislative Council. The Commission, while recommending that several Chapters of the Act should disappear, were in favour of retaining Chapter III, giving power to go behind the bond; and they made an important new proposal on the subject of the method in which the accounts of money-lenders should be kept.
- 4. On receipt of the report, Government considered the question whether the time had arrived to repeal the Dekkhan Agriculturists' Relief Act altogether without passing any new Act to take its place. The majority of the officers consulted, however, were found to be in favour of legislation generally on the lines proposed by the Commission to take the place of the Dekkhan Agriculturists' Relief Act. A preliminary draft of a Bill has accordingly been drawn up mainly on those lines, and it is now published for general information, after having been revised in consultation with some experienced Judges and Revenue Officers.
- 5. The view that Government are at present disposed to take in respect of the draft Bill is as follows:—

Agriculture is the leading industry in the Presidency; and in the four Deccan Districts there has been since 1879 a special procedure devised with the intention of affording special protection to those who follow that industry, that procedure having been extended in recent years to the Presidency generally. The definition of "agriculturist" in the present Act includes many who do not really depend on agriculture, and it is desirable to amend it so that it may apply only to those who really live by agriculture. Further, owing to economic changes the need for a special procedure designed for the special protection of agriculturists is less than it was 35 years ago, some indeed holding that it is now not needed at all. The better opinion, however, seems to be that it would be unwise to abolish at once a procedure which has been in force for so many years, so that the present generation of agriculturists have known no other, at least in the four districts, or to

abolish it before the effect of the economic changes in progress has been more fully developed and observed. The Governor in Council, as at present advised, considers, therefore, that immediate abolition is undesirable, though entire repeal may become proper in future; and that meanwhile restriction in the scope of application is sound and justifiable. Restriction of scope should take place by excluding from the application of the Act agriculturists who are in a good position and therefore are not in need of special protection but are able to take care of themselves under the ordinary law; and by excluding also those who do not really depend on agriculture (that is the cultivation of their own fields) for their living, but depend as much, or more, on money earned as labourers, briefly those who do not possess "economic holdings". The best measure of position as an agriculturist is the amount of land revenue paid on the land cultivated, together with the qualification that the individual himself does the cultivation of his lands.

- 6. The definition of agriculturist in the draft Bill has been drawn up accordingly. At the same time it is recognised that there is room for difference of opinion regarding the best method of defining an agriculturist, and an alternative definition is therefore attached hereto. This alternative definition provides for the exclusion of non-economic holders and contemplates restriction by class or classes. It is thought that either of these definitions is preferable to that proposed by the Commission which is open to the objection that it is not sufficiently definite. Under the Account sections money-lenders are to keep accounts with agriculturists in a certain form, and it is therefore essential that they should be able to ascertain without difficulty at the time of making a loan whether the borrower is an agriculturist or not.
- 7. Section 10A of the present Act is the object of very strong and very conflicting opinions. Clause 7 of the draft Bill, which is based on the draft proposed by the Commission, aims at meeting some of the objections raised to the existing section by those who condemn that section, and at making adequate provision to meet the views of those who press for its retention.
- 8. The most striking novelty in the draft Bill is clause (5) prescribing the keeping of accounts between money-lender and agriculturist. The recommendations of the Commission have been received with considerable difference of opinion

among the officers consulted, but they are on the whole supported in the Presidency proper, not in Sind. It is recognized that the present sections (Chapter IX of the Dekkhan Agriculturists' Relief Act) are inoperative, and the object of the new provision is to secure an effective statement of account between creditor and debtor being maintained for the protection of the smaller agriculturists.

- 9. As proposed by the Commission, the Chapter of the Act regarding Village Munsiffs has been omitted from the Bill. The question of the retention of these Courts and of the extent of their jurisdiction will be examined along with that of the constitution of Village Panchayats for the disposal of petty suits, which is at present under the consideration of Government.
- new definition of agriculturist and the provisions relating to accounts shall apply to transactions entered into subsequent to the date of the new Act coming into force and that the rest of the amendments in the Act (e.g., the revised provisions regarding instalments) shall apply to transactions whether previous or subsequent to the new Act coming into force. It is also intended that the new Act shall not come into force till some date (a year, say) after it has been passed in the Legislative Council.
- 11. On a consideration of the Report of the Commission the Governor in Council decided that, whatever might be the ultimate conclusion on the question of mending or ending the Dekkhan Agriculturists' Relief Act as a whole, it was desirable to take action on two of the recommendations of the Commission:—
 - (I) that the conciliation system should be abolished, and
 - (II) that the remission of Court-fees should be withdrawn.

Orders have been issued accordingly. The system of Village Registration has also been discontinued.

12. The Governor in Council desires to take this opportunity to record his appreciation of the valuable services rendered by many gentlemen who have worked gratuitously as Conciliators for a number of years throughout the Presidency.

13. This note is published for the information of the public and the subject will be taken into further consideration by the Governor in Council after the end of October. Any representations or opinions which may reach him, addressed to the Secretary to Government, Legal Department, before the 1st November, will be considered in the renewed examination of the question which will take place after that date.

Alternative definition of agriculturist.

An agriculturist is a person who holds land within the territories to which this Section is extended of which the revenue is not less than such minimum as may be prescribed in the case of each district or part of each district by the Governor in Council by notification in the *Bombay Government Gazette* and who belongs to such class or classes of persons as the Governor in Council may by notification prescribe.

Explanation.—For the purposes of this section revenue shall not include revenue assessed on any land for purposes other than agriculture; nor shall it include a rate for the use of water under section 55 of the Bombay Land-Revenue Code, 1879.

BILL No. of 191 .

(An Act for the Protection of Agriculturists in the Bombay Presidency.)

WHEREAS it is expedient to protect agriculturists in the Bombay Presidency in their dealings with money-lenders;

AND WHEREAS the previous sanction of the Governor-General under section 5 of the Indian Councils Act, 1892, has been obtained for the passing of this Act; It is hereby enacted as follows:—

CHAPTER I.

PRELIMINARY.

1. (1) This Act may be called the Bombay Agriculturists' Relief Act, 191; and it shall come into force on the first day of 191.

- (2) This section alone shall extend to the whole of the Bombay Presidency. The rest of the Act may be extended wholly or in part by the Governor in Council by notification in the *Bombay Government Gazette* to any district or districts in the Bombay Presidency or to any part or parts of any such district or districts.
 - 2. In this Act, unless there is anything repugnant in the subject or context,
 - (1) "agriculturist" means a person
 - (i) who holds land within the territories to which this section is extended, of which the aggregate land revenue assessed under the Bombay Land Revenue Code, 1879, does not exceed one hundred rupees in the Presidency proper and three hundred rupees in Sind, and also is not less than such minimum as may be prescribed in the case of each district or part of a district by the Governor in Council by notification in the Bombay Government Gasette, and
 - (ii) who ordinarily participates personally in the physical labour of cultivating that land or part of it, and includes any relative of such person who is ordinarily resident in his house and dependent upon him; or, in the event of his decease, his widow, or any heir otherwise qualified who on account of his youth is unable to participate personally in the physical labour of cultivation; and also includes, in reference to any suit or proceeding, a person who, when any part of the liability which forms the subject of that suit or proceeding was incurred, was an agriculturist within the meaning of that word as then defined by law in the area in question:

provided that the Governor in Council may by notification in the *Bombay Government Gasette* exclude any class of persons from the scope of this definition.

Explanations.—(a) A person shall be deemed to hold land if he is law-fully in possession of land whether such possession is actual or not:

provided that a mortgagee of land shall not be deemed to hold such land if the mortgagor remains in actual possession thereof.

(b) A person does not cease to be an agriculturist within the meaning of this definition if he is prevented from personally participating in the physical labour of cultivating the land by age or bodily infirmity, or if he

temporarily ceases to do so owing to necessity or reasonable cause. Reasonable cause in this explanation includes absence in the military service of His Majesty.

- (c) A person shall not be deemed to be an agriculturist in respect of any particular transaction unless he, or the person through whom he claims, was an agriculturist at the time when the transaction took place. Even if he subsequently ceases to be an agriculturist, his status as an agriculturist shall not be affected in respect of that particular transaction.
- (d) For the purposes of this section land-revenue shall not include land-revenue assessed on any land for purposes other than agriculture; nor shall it include a rate for the use of water under section 55 of the Bombay Land Revenue Code, 1879.
- (2) An agriculturist shall be deemed to reside where he personally participates in the physical labour of cultivating land as aforesaid.
- (3) "Money" shall be deemed to include agricultural produce, implements and stock.
- (4) "Lease" shall be deemed to include a counterpart, a kabulayat, an undertaking to cultivate or occupy, and an agreement to lease.
- (5) "Standing crops" shall be deemed to include crops of all sorts attached to the soil, and leaves, flowers and fruits upon, and juice in, tree and shrubs.
- 3. The decision of any Court of first instance that any person is or is not an agriculturist shall, for the purposes of this Act, be final, subject only to the exercise by the High Court of their revisional jurisdiction on a point of law; and a person, who has not claimed to be an agriculturist in the Court of first instance and been admitted or held to be an agriculturist by such Court or by the High Court in revision, shall be debarred from claiming such status in any subsequent proceedings arising out of, or relating to the execution of, the decree passed by such Court or by any Appellate or Revisional Court.
- 4. Every jágirdár or other authority invested with powers under Bombay Regulation XIII of 1830 or Act XV of 1840 shall, for the purposes of this Act, be deemed to be a Subordinate Judge of such *class as the Governor in Council may from time to time direct.

BLUE BOOK QUARTERLY.

CHAPTER II.

ACCOUNTS.

- 5. (1) Every person who lends money to an agriculturist shall, from such date as may be prescribed in this behalf by the Governor in Council, keep an account of all money transactions between himself and that agriculturist prepared in the following manner, namely:—
 - (a) the account shall be kept in duplicate, and one of the copies shall be kept by the creditor and the other by the debtor;
 - (b) all transactions between the parties shall be entered in the accounts, and each transaction shall be attested by the signature of both the parties or by the thumb-impression, in lieu of signature, of any party who is illiterate.
- (2) If the debtor has a copy of the prescribed accounts but fails to bring it with him when an entry for payment by him has to be made in the accounts, the creditor shall give the debtor a separate receipt (hát pávti) and the requisite entry in the accounts shall be made as soon as possible afterwards.
- (3) Provided that the provisions of sub-section (1) shall not apply to money-transactions of rupees ten or less, so long as the total of the amount due on these transactions, including interest, does not exceed rupees twenty, but where the amount exceeds rupees twenty the prescribed accounts shall at once be opened.

CHAPTER III.

OF SUITS AND OTHER PROCEEDINGS TO WHICH AGRICULTURISTS ARE PARTIES.

- 6. The provisions of this Act shall apply to the following suits only, namely:—
 - (a) Suits for the recovery of money alleged to be due to the plaintiff, when the defendant, or any one of the defendants, is an agriculturist,
 - (i) on account of money lent,

- (ii) as the price of goods sold, or
- (iii) on a written or unwritten engagement for the payment of money not hereinbefore provided for;
- (b) suits for the recovery of money due on contracts other than the above and suits for rent or for moveable property, or for the value of such property, or for damages, when the defendant, or any one of the defendants, is an agriculturist;
- (c) suits for foreclosure or for the possession of mortgaged property, or for sale of such property, or for foreclosure and sale, when the defendant, or any one of the defendants, is an agriculturist; and
- (d) suits for the redemption of mortgaged property when the plaintiff or, where there are several plaintiffs, any one of the plaintiffs, is an agriculturist.
- 7. Notwithstanding the provisions of section 92 of the Indian Evidence Act, 1872, when it is alleged at any stage of a suit or proceeding to which an agriculturist is a party that, at the time of any transfer of immoveable property or of the right to enjoy such property by such agriculturist, or by the person, if any, through whom he claims, there was an oral agreement that the said transaction should take effect as a mortgage, the Court may declare the transaction to be a mortgage if, upon examination of the parties to the suit and upon consideration of relevant circumstances preceding, attending and following the alleged sale, which circumstances may be proved by oral or documentary evidence, it is satisfied that there was such an agreement.
 - (1) Provided that such agriculturist or the person, if any, through whom he claims, was an agriculturist at the time of such transaction.
 - (2) Provided also that direct oral evidence of witnesses other than the parties to the suit as to the existence or non-existence of a contemporaneous oral agreement that the transaction should take effect as a mortgage shall not be admissible as evidence.
 - (3) Provided further that the matter comes, or is brought, before the Court in a suit instituted, or a proceeding commenced, either H 438—3

- (b) in the account of principal there shall be debited to the debtor such moneys as may from time to time have been actually received by him or on his account from the creditor, and the price of goods, if any, sold to him by the creditor as part of the transactions:
- (c) in the account of principal there shall not be debited to the debtor any accumulated interest which has been converted into principal at any statement or settlement of account or by any contract made in the course of the transactions, unless the Court, for reasons to be recorded by it in writing, deems such debit to be reasonable:
- (d) in the account of the interest there shall be debited to the debtor, monthly, simple interest, on the balance of principal for the time being outstanding, at the rate allowed by the Court as hereinafter provided:
- (e) all money paid by or on account of the debtor to the creditor or on his account, and all profits, service or other advantages of every description, received by the creditor in the course of the transactions (estimated, if necessary, at such money value as the Court in its discretion, or with the aid of arbitrators appointed by it, may determine), shall be credited first in the account of interest; and when any payment is more than sufficient to discharge the balance of interest due at the time it is made, the residue of such payment shall be credited to the debtor in the account of principal:
- (f) the accounts of principal and interest shall be made up to the date of instituting the suit, or if the Court thinks it fit to do so, up to the date of the decree, and the aggregate of the balances, if any, appearing due on both such accounts against the debtor on that date shall be deemed to be the amount due on that date, except when the balance appearing due on the interest account exceeds that appearing due on the principal-account, in which case double the latter balance shall be deemed to be the amount then due.
- 11. (1) In any suit of the description mentioned in clauses (a), (b) and (c) of section 6, the plaintiff, if the suit is brought within an area to which section 5 has been extended, shall annex to the plaint an extract from his account relating to the transaction or transactions in suit, and such extracts shall be

duly verified by him in the manner prescribed by Order VI, rule 15, of the Code of Civil Procedure, 1908.

- (2) If such plaintiff fails so to do for any cause which the Court deems sufficient, he shall produce such extract within a reasonable time to be fixed by the Court, and, if such extract is not so annexed or produced, the plaint shall be rejected.
- 12. (1) In any suit of the description mentioned in clauses (a) and (e) of section 6 the plaintiff, and in any suit of the description mentioned in clause (d) of that section the defendant, if the suit is brought within an area to which section 5 has been extended, shall, if required by the Court, produce accounts regularly kept by him in the ordinary course of business, containing entries as to the transaction or transactions in suit, or, so far as regards any transaction between the parties which takes place on or after such date as may be prescribed by the Governor in Council in this behalf for any specified area to which section 5 extends, accounts kept in the manner prescribed by that section.
- (2) If any such plaintiff or defendant fails to produce such accounts, the Court, unless it is satisfied that such default is due to circumstances beyond the control of the defaulter, or is due to any cause which, in the circumstances, affords sufficient excuse for the default, shall draw a presumption adverse to the case of such plaintiff or defendant of such kind and to such extent as the Court may think fit, and where such default is, in the opinion of the Court, deliberate and inexcusable, may refuse the claim of such plaintiff or defendant except to the extent to which it is admitted.
- 13. Where the mortgaged property is in possession of the mortgagee or his tenants other than the mortgagor, and the Court is unable to determine what profits have been actually received, it may fix a fair rent for such property and charge such rent as profits for the purpose of section 10:

Provided that, if it be proved that in any year there was an entire or serious failure of the crops, an abatement of the whole or part of such rent may be allowed for the year.

14. (1) In a suit of the description mentioned in section 6, clause (d), the Court shall not be debarred from passing a decree for redemption merely on the ground that the time fixed for the payment of the principal of the mortgage money has not arrived, or on the ground that the mortgage-debt has not been completely discharged, or on both of these grounds together; and the Court may in its discretion pass a decree for redemption either immediately, or after a certain time, or upon the expiry of the time fixed in the mortgage-deed, as it may think fit:

Provided that the Court shall refuse to pass a decree for redemption prior to the expiry of the time fixed in the mortgage-deed unless the plaintiff shows good cause why redemption should be granted earlier.

- 15. So far as it may be consistent with the provisions of this Act, every decree for redemption or foreclosure of any mortgage, and every decree or order for the sale of any mortgaged property made at the instance of a mortgagee thereof, shall name such future day, not being less than six months after the date of such decree, as the Court may think reasonable for the payment by the mortgagor of the money payable under the decree, and no such foreclosure shall be made absolute nor shall any such sale take place before the day so named.
- 16. (1) Subject to the provisions of section 18, the Court may in its discretion—
 - (i) in passing a decree for redemption, foreclosure or sale in any suit under this Act,
 - (ii) in the course of any proceedings under any decree passed, whether before or after the Act comes into force against an agriculturist, direct that any amount payable by the mortgagor or by such agriculturist under the decree shall be payable in such instalments, on such dates and on such terms as to the payment of interest, and, where the mortgagee is in possession, as to the appropriation of the profits and accounting therefor, as it thinks fit:
- (2) In passing a decree for redemption or foreclosure in any such suit as aforesaid, or when the amount payable to a mortgagee in possession has been determined in any such suit, the Court may, in its discretion, direct that the amount

payable by the mortgagor shall be discharged by continuing the mortgagee in possession for such further period (to be specified by the Court) as will, in the opinion of the Court, be sufficient to enable him to recover from the profits the amount payable by the mortgagor with reasonable interest, and that on the expiry of such period the property mortgaged shall be restored to the mortgagor.

17. (1) Subject to the provisions of section 18, the Court may, if it thinks fit, in any suit for the possession of mortgaged property under section 6, clause (c), instead of passing a decree for possession of that property, pass a decree directing that the amount payable by the mortgagor shall be payable in such instalments, on such dates and on such terms as to the payment of interest, and as to the appropriation of the profits and accounting therefor, as it thinks fit:

Provided that the Court shall not make a direction as described in this section unless the mortgagor shows good cause why the said concession should be granted to him.

- (2) If the sum payable under any such order is not paid when due, the Court may, if it thinks fit, instead of making any other order which it is empowered to make for the realisation of that sum, make an order directing that the mortgagee be put in possession of the whole or any portion of the property mortgaged for such period (to be specified by the Court) as will, in the opinion of the Court, be sufficient to enable him to recover from the profits the amount payable by the mortgagor with reasonable interest and that on the expiry of such period the property mortgaged shall be restored to the mortgagor.
- (3) The proviso to sub-section (1) shall apply in the case of mortgages executed before the date on which this Act comes into force as well as to mortgages executed on or after that date.
- 18. (1) When the Court decides that the amount due by a mortgagor should be paid by instalments it shall fix such instalments as may seem equitable, and such instalments shall not extend over a period exceeding eight years unless the Court thinks it necessary, for reasons to be recorded in writing, so to extend it. It shall also allow future interest at a moderate rate, unless, for reasons to be recorded in writing, it deems it unnecessary to do so.

- (2) If the mortgagor makes default in respect of two instalments, so that at any given time the payment of two instalments is in arrears, except on account of failure of crops for two successive years or for other similar reasons beyond the control of the mortgagor, the whole of the decretal amount shall at once become due and be recoverable in execution.
- 19. No agriculturist shall be arrested or imprisoned in execution of a decree for money passed whether before or after this Act comes into force.
- 20. Immoveable property belonging to an agriculturist shall not be attached or sold in execution of any decree or order passed whether before or after this Act comes into force unless it has been specifically mortgaged for the repayment of the debt to which such decree or order relates, and the security still subsists. For the purposes of any such attachment or sale as aforesaid standing crops shall be deemed to be moveable property.
- 21. (1) When any immoveable property belonging to an agriculturist has been sold by public auction under the provision of paragraph 10 of the Third Schedule of the Code of Civil Procedure, 1908, the sale may within thirty days from the date of the auction be set aside by the Collector, if he considers the price bid by the purchaser to be inadequate.
- (2) When the sale is so set aside the purchaser shall be entitled to receive back his deposit or his purchase-money, as the case may be, and the Collector may resell the property by public auction or private contract, as he thinks fit. Every such resale shall be deemed to be a sale under the provisions of paragraph 10 of the Third Schedule of the Code of Civil Procedure, 1908.

CHAPTER IV.

REGISTRATION.

22. When any document is presented for registration by an agriculturist or when the execution of any document presented for registration is admitted by an agriculturist, the sub-registrar before registering the document, shall read and explain it to the agriculturist and shall satisfy himself that the said person understands the meaning of the document and shall endorse upon the document a note under his hand to the effect that he has acted in accordance with the provisions of this section.

CHAPTER V.

LEGAL PRACTITIONERS.

23. When in any suit or proceeding before a Subordinate Judge under this Act to which an agriculturist is a party, any pleader, vakil, or mukhtár, or any advocate or attorney of a High Court, appears on behalf of any party opposed to such agriculturist, the Subordinate Judge, if he is of opinion that such agriculturist has not the means of obtaining proper professional assistance, may, with the consent of such agriculturist, direct the Government Pleader or any other fit person (who is willing to do so) to appear on his behalf.

CHAPTER VI.

MISCELLANEOUS.

24. No mortgage, lien or charge of or upon any immoveable property belonging to an agriculturist shall be valid unless it is created by an instrument in writing under the hand of the person creating such mortgage, lien or charge.

Nothing in this section shall apply to any mortgage, lien or charge created by mere operation of law, or in favour of the Government or of any officer of the Government in his official capacity.

- 25. The last clause of Order XXI, rule 2, of the Code of Civil Procedure, 1908, shall not apply to payments out of Court made in any proceeding under this Act, in any case where an acknowledgment by the judgment-creditor for the same is produced, or when the payment is either admitted by him or proved.
- 26. In taking an account under section 10 or in any suit under this Act where interest is chargeable, such interest shall be awarded at the following rates:—
 - (a) the rate, if any, agreed upon between the parties or the persons (if any) through whom they claim, unless such rate is deemed by the Court to be unreasonable;
 - (b) if such rate is deemed by the Court to be unreasonable, or if no rate was agreed upon, or, when any agreement between the parties or the persons if any, through whom they claim, to set off profits against interest and assess-H 438-4

ment and similar charges without an account, has been set aside by the Court, such rate as the Court may deem equitable taking into consideration the nature of the security, if any, and the normal rate of interest prevailing in the locality.

- 27. Any Court which receives an application to file an award to which an agriculturist is a party shall scrutinise the award and may (in addition to exercising, if necessary, any of the powers possessed by the Court under the Second Schedule to the Code of Civil Procedure, 1908) refuse to file such award if it considers it to be bogus or inequitable.
- 28. Except sections 2 and 19, the provisions of this Act shall not apply to any matter to or in which any society registered under the Co-operative Credit Societies' Act, 1904, or the Co-operative Societies' Act, 1912, is a party.
- 29. The Governor in Council may, from time to time, make all such rules as he may deem necessary,
 - (a) generally for carrying out the provisions of this Act;
 - (b) in particular for prescribing the account books to be kept in accordance with the provisions of section 5.
- 30. All rules made by the Governor in Council under this Act shall be published in the *Bombay Government Gazette* and shall thereupon, in so far as they are consistent with this Act, have the force of law.
- 31. Where any provisions of this Act are extended to any specific area under sub-section (2) of section 1, such provisions shall, unless there is anything repugnant in the subject or context thereof, apply to transactions entered into before the date of such extension as well as to those entered into after that date:

provided that the definition of agriculturist and the provisions of sections 5 and 29 (b) shall apply only to transactions entered into after the date of such extension to any specific area, and in the case of the transactions entered into before such date agriculturist shall mean an agriculturist as then defined by law in that area.

32. The Dekkhan Agriculturists' Relief Act, 1879, as subsequently amended, is hereby repealed.

Local Self-government.

THE ADMINISTRATION OF THE LOCAL BOARDS IN THE BOMBAY PRESIDENCY, INCLUDING SIND, FOR THE YEAR 1912-1913.—Foolscap folio, 7 pp. letter-press and 28 pp. statistical tables (Government Book Depôt, Bombay)—price 7 annas or 8d.

The letter-press of this publication consists of G. R. No. 5433, G. D., 10th July 1914, which reviews the financial and executive administration of the district and taluka local boards. The statistical tables exhibit in detail the constitution, income and expenditure of each board.

The review runs as follows:-

The number of district local boards remained unchanged during the year under review, but the number of taluka local boards was increased by one by the creation of a board for the newly constituted taluka of Miro Khan in the Larkana district.

- 2. There was a nominal increase of nine square miles in the total area in charge of the boards due to the correction according to the revised Imperial Census tables of the figures of area in the case of the Ahmedabad, Surat and Thána districts. The total population of the area administered by the local boards was 18,061,323.
- 3. In the Northern Division changes were made in the constitution of the taluka local boards of Dhandhuka and Ankleshvar with a view to the due observance of the prescribed proportion between official and non-official members. In the case of the Thana District Local Board it came to notice that the number of nominated salaried servants of Government, inclusive of the President, exceeded half the total number of nominated

members. In order to cure this defect in the board's constitution a non-official member was nominated in the place of an official who retired so as to admit this being done. In the Southern Division the Dhárwár Táluka Board, which had been superseded in 1910, was re-established during the year under report. In the Kolába district a seat on the Alibág Táluka Board which had remained vacant during the previous year was filled by election.

Triennial elections were held in the districts of Surat, Thána, Ahmednagar,

East and West Khándesh, Kánara, Kolába and
Ratnágiri, and in three tálukás of the Sátára district.

The elections generally failed to arouse much interest, except in the Surat and
Ratnágiri districts where the seats were for the most part well-contested. In
Sálsette an elective seat had to be filled by nomination for want of a candidate.
Regarding the elections held in the districts of the Central Division it is reported
that in no case did more than one-third of the total number of electors trouble
to record their votes. The triennial terms of the district and táluka local boards
of Karáchi, Hyderabad, Lárkána, Thar and Párkar and Upper Sind Frontier
having expired, these boards were also re-constituted in the year under report.

- 4. The total number of meetings held during the year rose from 1,320 to 1,336, of which latter number 68 were adjourned for want of quorum. The rule regarding the holding of half-yearly meetings was complied with by all the district boards. Thirteen taluka boards in the Northern Division, three in the Southern Division, and two in Sind failed to hold the minimum number of four meetings in the year. In the Central Division, and especially in East Khandesh, the taluka boards appear to be more active, and the average number of meetings per board was five. The average percentage of members attending the meetings in the Northern, Central and Southern Divisions and in Sind was respectively 58, 51.7, 53.4 and 57 as against 58, 53.9, 52.3 and 57 respectively in the previous year.
- 5. The aggregate income of the boards rose from Rs. 68,31,000 to Rs. 74,60,000, a somewhat remarkable increase.

The following statement compares the receipts under the principal heads of revenue with those of the preceding year:—

•			<u>-</u>	1912-1913.	1911-1912.	Increase.	Decrease.	
			Ţ		(Rupees in	thousands.)		
Land Revenue	•••		•••	2,05	1,98	7	•••	
Provincial Rates	•••		•••	32,21	28,38	3,83	•••	
Interest	•••		•••	17	17		•••	
Police	• • •		•••	1,50	1,68	•••	18	
Education	•••	•••		22,24	19,64	2,60	•••	
Medical	•••			97	1,42		45	
Scientific and oth	er Minor D	epartments		, 78	88	·	10	
Miscellaneous	•••			75	98	•••	23	
Civil Works	•••	•••	• • •	13,93	13,19	47	***	

6. The slight increase under the head "Land Revenue" is principally due to the increase in Sind. In the Northern Division also there was an increase mainly attributable to larger realizations from quarrying fees in the Kaira district and to the recovery of arrears of royalty from contractors. The very large increase under the head "Provincial Rates" was principally contributed by the Northern Division, in which the favourable season experienced during the year of report facilitated the recovery of arrears of local fund cess suspended in the preceding year. The other two divisions in the Presidency furnished increases of about half a lákh each, but there was a decrease under this head in the receipts from Sind.

The considerable increase under "Education" was chiefly due to the grants made by Government for opening new schools for primary education and for

improving the pay of teachers in primary schools, and, in a minor degree, to the fee receipts derived from recently opened schools. The decrease under the head "Police" is attributed to the reduction in the number of impoundings of cattle, due to the absence of the fodder famine which prevailed in the previous year. The decreases under the heads "Medical," "Scientific and other Minor Departments" and "Miscellaneous" call for no special remarks.

In the Northern Division an extra Government contribution to the Kaira District Local Board and the inclusion of the usual grant Civil Works. to the Panch Maháls formerly shown under the head "XXV.-Miscellaneous" make up a large proportion of the net increase of Rs. 74,000 under this head. In the Central Division the real increase, as distinguished from a large nominal increase due to certain readjustments of accounts, amounted to Rs. 9,000, being mainly attributable to larger receipts from tolls in the Ahmednagar district and to a contribution of Rs. 4,500 from His Highness the Nizam's Government for a causeway over the Sinna river. In the Southern Division the receipts under this head show a net decrease of Rs. 21,000, all the districts except Dhárwár contributing to it. The decrease occurred mainly under "Tolls on ferries and roads" and "Contributions from Government." In Sind the decrease, which amounted to Rs. 13,000, was due in the Karáchi district to the last instalment of a ferry farm not having been recovered during the year and in the Hyderabad district to a falling-off in the realizations from the ferry contract and the sale of lac and babul pods and to the fact that nothing was utilized out of the Government grant for water-supply during the year under report.

- 7. The incidence of income per head of population rose from 6 annas 4 pies to 6 annas 7 pies, and that of taxation from 2 annas 8 pies to 2 annas 9 pies.
- 8. The total expenditure of the boards amounted to Rs. 78,28,000 as against Rs. 73,63,000 in the preceding year.

The following statement exhibits the distribution of the expenditure under the several heads as compared with that of the previous year:—

	•			1912-1913.	1911-1912.	Increase.	Decrease,
					(Rupees in	thousands.)	
Administration	•••	•••		1,83	1,52	33	• • •
Education		***		30,31	27,36	2,95	•••
Medical	***	***	•••	4,74	4,31	43	•••
Scientific and of	her Mino	r Departments		1,31	1,21	10	•••
Stationery and I	Printing			20	18	2	• > >
Miscellaneous		•••		1,17	1,01	16	•••
Civil Works	•••			36,94	37,18		24
Debt	•••	.,,	444	1,07	45	62	•••
Interest on Deb	·	***		15	3	12	•••

^{9.} The most important variations in the above figures are commented on below:—

Education.—The expenditure on education rose from Rs. 27,36,000 to Rs 30,31,000. The increase was shared by all the divisions of the Fresidency including Sind, and was mainly due to the additional sums devoted to the improvement of the pay of teachers in local board schools, the opening of new local board schools, the consequent entertainment of additional teaching staff, the purchase of furniture for schools, and grants to educational institutions. As an instance of the development which is taking place in this direction it may be mentioned that in the Southern Division 13 new schools were opened during the year in Belgaum, 18 in Bijápur, 20 in Dhárwár and 9 in Kánara, in addition to four schools for girls (two in Belgaum and two in Kánara). The institution of scholarships for the children of criminal tribes was an innovation in the Dhárwár district. In Sind a novel item of expenditure was the provision

of small stipends for mullahs attached to local board schools with a view to providing religious instruction and thus attracting Mahomedan pupils in greater numbers.

Medical.—There was an increase of Rs. 43,000 under this head, for which Sind alone was responsible. The increase is attributable to a variety of causes. the principal among which was the distribution of quinine in malarial tracts. In the Karáchi district a sub-assistant surgeon continued to be specially employed for the purpose of organizing and watching the distribution of the drug. The Collector reports that the people now appreciate the use of quinine thoroughly and buy it freely. Efforts to popularize the use of the drug in the Lárkána district are also reported to have been attended with considerable success. Ouinine was administered daily to the children in the local board schools of this district with the result that the masters reported an appreciable improvement in their general health and the regularity of their attendance. The Karáchi and the Thar and Parkar District Boards contributed Rs. 5,100 and Rs. 2,000, respectively, towards the construction of the Louise Lawrence Institute at Karáchi. The latter district also contributed Rs. 6,000 towards the construction of the Mirpur Khás municipal dispensary. In the Northern Division, the presentation by the Broach District Board of a medicine chest valued at Rs. 181 to the wife of a coast guard inspector in appreciation of her work among the sick of the neighbourhood, and the distribution of quinine and permanganate at a cost of Rs. 544, are items which are specially noticeable.

Scientific and other Minor Departments.—Under this head there was an increase of Rs. 13,000 in the Northern and Central Divisions and in Sind, counterbalanced by a decrease of Rs. 3,000 in the Southern Division. Of the total increase of Rs. 5,000 in the Northern Division the appointment of a paid secretary and staff for the District Agricultural Association of Kaira accounted for nearly half. In Broach the opening of a new veterinary dispensary at Ankleshvar entailed an extra expenditure of Rs. 1,000. The Pratt Free Veterinary Dispensary at Godhra, which is an important institution, is reported to have done good work throughout the district. In the Central Division the increase of Rs. 4,300 under this head is chiefly due to the opening of new veterinary dispensaries at Shirpur in the West Khándesh district and Islámpur

in the Satara district, and to the contribution paid by the Sholapur district Board towards the local cattle and agricultural shows. In the Southern Division, the Collector of Kanara reports that the veterinary dispensary at Sirsi is growing popular as a result of the distribution of hand-bills and the delivery of practical lectures by the veterinary assistant at shows, etc., and of discussions with farmers at cattle fairs and religious or other assemblages.

Civil Works.—The expenditure under this head showed a net decrease of Rs. 24,000 on the preceding year's outlay of Rs. 37,18,000. The Northern and Southern Divisions and Sind contributed Rs. 5,244, Rs. 31,346 and Rs. 13,627 towards the decrease, which was to some extent counterbalanced by an increase of Rs. 24,000 in the Central Division. The expenditure under this head for the whole Presidency represents 47,2 per cent. of the entire expenditure of the boards against 50.5 per cent. in the preceding year. The following statement compares the charges under the various sub-heads with those of the preceding year:—

			1912-1913.	1911-1912.	Increase,	Decrease.
				(Rupees in	thousands.)	
Buildings	(Original	•••	3,51	3,08	43	•••
	··· (Repairs		1,17	1,11	6	
Communications	(Original		8,40	9,72	•••	1,32
	··· { Repairs	•••	13,57	13,65 <u>₹</u>		8
Water-supply and works.	water (Original		2,60	2,34	26	•••
	{ Repairs		1,721	1,56	161	•••
Other works of improvement			30	141	152	•••
Establishment and contingencies			3,33	3,18	15	•.••
Tools and plant	•••		53½	48 1	5	
Staging bungalows	•••		16	15	I	•••
Arboriculture	•••		1,00	79 1	. 201	•••
Miscellaneous	***		151	141	ı	•••

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Communications.—The major portion of the outlay on "Civil Works" was as usual devoted to the construction and repairs of roads and bridges. In the Northern Division all the district local boards except those of Broach and Thána spent less under "Communications" than in the previous year. In Ahmedabad the small balance available during the year, coupled with the large amount of Rs. 57,000 appropriated to the paying off of Government debts, curtailed the outlay on "Civil Works" generally. The Kaira board has spent large sums on the Nadiád-Anand, Dákore-Pali and Mátar-Cambay roads still under construction, and the President reports that these roads cannot be left in their present incomplete state, as that would tend to undo what has so far been done and mean the loss of money already spent; at the same time the ordinary income of the board is insufficient to provide for their early completion. He has been advised to postpone expenditure on the last named project until the other two have been completed. It seems that the board has undertaken road-extension in excess of its financial capacity. In the Panch Maháls famine conditions during the first part of the year, combined with the general exiguity of the resources of the board of this district, hindered all further advance, although the roads there admittedly need much attention. Surat suffers likewise. Broach spent a considerable amount on metalling portions of the Derol-Wágra and Broach-Jambusar roads. Central Division the reduction in expenditure under "Communications" was due to the fact that the East Khándesh board spent less on original road works than in the previous year. In the Southern Division more than half the total expenditure on "Civil Works" was devoted to "Communications," the percentage rising from 59.2 to 63.4. Several road works were undertaken in the districts of Belgaum, Bijápur and Ratnágiri. A new ferry boat at Ghodgeri in Belgaum district was constructed at a cost of Rs. 1,100. In Kanara repairs were effected to four large roads at a In Sind, eight new roads and 53 kacha bridges were concost of Rs. 13,000. structed in the Karáchi, three roads and 54 such bridges in the Hyderabad, and three bridges in the Thar and Párkar districts. The new works of construction carried out during the year included a large number of school-houses and dharmashálás, besides several medical and veterinary dispensaries.

Water-supply.—The expenditure on water-supply and water works increased by Rs. 42,500 during the year under review. In the Northern Division, the boards spent Rs. 2,22,167 on the improvement of village water-supply. In the

Kaira district, owing to the failure of the monsoon, the ordinary works for the improvement of the water-supply were undertaken on a more extended scale than usual and were moreover supplemented by extensive boring operations, the object being both to prevent a water famine and to provide labour for the distressed. For the conduct of these boring operations a considerable sum was spent by the Kaira Board on the purchase of a new petrol boring plant and a Davis Calyx drill machine. The water-supply obtained was utilized both for consumption and for irrigational purposes. In Thana 94 new wells were constructed and a number of existing wells were repaired at a total cost of Rs. 46,000. In the Central Division, increased expenditure was incurred in the Ahmednagar, West Khándesh, Násik and Sholapur districts on the improvement and extension of water-supply. In the Southern Division, 57 new wells were constructed and 103 old ones repaired in the above-ghát districts of Belgaum, Bijápur and Dhárwár. The coast districts also spent a reasonable amount on water-supply. In Ratnagiri the existing water pipes from the Nawadi tank to Sangameshwar were renewed. In Sind, the expenditure incurred under this head was chiefly on the construction and repair of wells. Karáchi eight, in Hyderabad four and in Sukkur seven new wells were sunk.

Arboriculture.—The increase of Rs. 20,500 under this head was principally shared by Sind (Rs. 11,410) and the Central Division (Rs. 7,809). In the former province a total of 219 miles of roads was planted with trees during the year under review, and in the Central Division increased expenditure was incurred on tree planting in the Sátára, Sholápur and Násik districts. In the Northern Division the net increase of Rs. 1,318 under this head was contributed chiefly by Kaira and Surat. Regarding the latter district the Collector reports that special efforts are being made in this direction under the orders contained in Government Resolution, Public Works Department, No. A.-2289, dated the 26th October 1910, and the instructions given in the manual which has just been published by Government. Working plans for tree plantation are being prepared by the local boards, and considerable progress is likely to be recorded in the next administration report. In the Panch Mahals it is reported that all the important roads being either provincial or handed over to the Public Works Department, the drawing up of plans for roadside trees has been left to that department subject to money allotments by the district local board. In the Southern Division the operations under this head were confined to the Bijapur and Dhárwar districts.

The table* appended to this resolution exhibits the opening and closing balances of the boards of the several districts of each Closing balances. division. The closing balances of the boards in the Presidency aggregated Rs. 24\frac{3}{4} lákhs, against Rs. 26\frac{1}{2} lákhs in the preceding year. The total closing balances of the boards in the Northern and Central Divisions and in Sind fell from Rs. 5,00,000, Rs. 8,54,000 and Rs. 6,12,000 to Rs. 4,72,000, Rs. 7,09,000, and Rs. 5,32,000 respectively, while the total for the boards in the Southern Division rose from Rs. 6,82,000 to Rs. 7,69,000. These closing balances. notwithstanding the reductions noticed above, are still much in excess of the prescribed minima, the total for Sind representing nearly ten times the amount fixed. A considerable portion of these unduly inflated balances belongs to the educational fund, the spending of which is in most cases retarded by the delays incidental to the acquisition of sites and the preparation of plans for school buildings. In the Northern Division, the boards of Broach, Surat and Thana reduced their balances substantially. The presence of famine conditions in the Panch Mahals afforded the board of that district an opportunity of doing likewise of which, however, it apparently failed to take advantage. By the payment of the last instalment of the Government debt incurred during the famine of 1899-1900 and subsequent years and the sum of Rs. 38,067 overdrawn from the Government treasury in the preceding year, the Ahmedabad Board became entirely free from Government debt after a period of 13 years' indebtedness. In the Central Division the closing balances were much in excess of the prescribed minima in all districts except Ahmednagar, of which the Collector remarks that the needs of the district are permanently greater than the district local board's resources, that the poverty of the board is not a passing phase due to famine or other temporary causes, and that the fund has managed to keep out of actual debt only by the simple process of leaving necessary and even urgent works undone. In the Southern Division the large closing balance is attributed to unexpected receipts from the one-anna cess, scarcity of labour, lack of efficient establishments and consequent inability to complete works in time, and the non-utilization by the Public Works Department of the amounts placed at its disposal for certain works. Provision has, however, been made in the supplementary budget for utilizing the excess balances. The Governor in Council trusts that in the current year a determined

effort will be made by the boards to utilize a substantive portion of the Rs. $18\frac{1}{4}$ lákhs which still remain unprofitably locked up in the Government treasuries.

- In the Northern Division the members of works committees are generally reported to have displayed a fair amount of interest in Works Committees. their duty of supervising works in progress. In the Central Division the works committee of the district board of East Khándesh showed a great improvement in this respect during the year under report, and the committees of the several táluka boards in the same district also worked well. committee has been formed for the district board of West Khandesh as the need for one was not felt, all works there being carried out or controlled by the Executive Engineer, but the members of the works committees appointed by the taluka boards of the district did their work well on the whole. In Násik both the district and taluka local boards have appointed works committees. The works committee of the Sátára district, consisting of eleven non-official members, continued in office during the year, but it is reported to have completely neglected its functions. the Southern Division, rules on the lines of those adopted in East Khándesh, defining the duties of works committees, were framed for the Belgaum and Dhárwár districts in the preceding year, and these are reported to have worked well in the latter district. In Bijápur, works committees have been appointed in each taluka, and the members of it have been entrusted with the supervision of particular works. With a few exceptions, all the works committees in the Kánara and Kolába districts are reported to have taken a commendable interest in their duties. In Sind, these committees are reported to have discharged their functions efficiently in every case.
- General remarks.

 Control of the general administration of the local boards was on the whole satisfactory. In Sind, these bodies are reported to have done much good work in improving the conditions of rural life, and no doubt the same may be said of the boards generally. In the Central Division the year was a bad one from an agricultural point of view over a large part of the division, and as a necessary consequence the revenues of the boards, excepting those of East Khándesh, were not so large as they might have been. In Ahmednagar, in particular, a succession of bad seasons has had a disastrous effect on the finances, already none too prosperous, of the district board. In

order, however, that the district may not fall seriously behind the rest of the division and may in particular be in a position to improve the present state of its communications, Government have recently sanctioned a grant of Rs. 30,000 from provincial funds to supplement the resources of the district board. Increased grants from Government under the head of "Education" have helped the boards to add materially to the number of their schools and to effect some improvement in the pay of the teachers employed in them. But more extended communications and the improvement of the village water-supply still represent two great and general wants which make themselves felt throughout the areas administered by In the Northern Division, the latter need received special attention during the year. Allusion has already been made to the success of the boring operations undertaken by the Agricultural Committee of Kaira, who also lent their help to private agriculturists. But this activity under one head was obtained at the expense of the other, for communications appear to have suffered from lack of The Governor in Council is glad to notice further indications of a movement, referred to in last year's review, on the part of the people in the direction of helping themselves in the matter of works of purely local utility instead of remaining entirely dependent on grants from public funds. Instances of this are reported from the Surat district where villagers assisted in the construction of local board works by means of contributions in cash and labour. Even where such contributions are not forthcoming, the local people can do much to assist the boards by supervising the execution of works in their neighbourhood. With regard to this it is satisfactory to note that in the Ahmednagar and West Khándesh districts the services of village punchas were utilized to advantage in connection with the execution of local works, while it is reported from the Southern Division that the system of getting petty village works carried out by voluntary labour has been successfully instituted in the Ratnágiri district. Such instances of co-operation on the part of the public in the activities of the local boards are deserving of every encouragement, for it is in the highest degree desirable to enlist the interest of the people in the work of these bodies and thereby to secure the infusion of fresh spirit and vitality into a system of administration which, so long as it continues to be entirely dependent on official interest and effort, must necessarily tend to be somewhat lacking in life and reality. Government trust, therefore, that every endeavour will be made to give this tendency a more extensive scope throughout the local boards of this Presidency.

MUNICIPAL TAXATION AND EXPENDITURE IN THE BOMBAY PRESIDENCY (INCLUDING SIND) FOR THE YEAR 1912-1913.—Foolscap folio, 17 pp. letter-press and 196 pp. statistical tables (Government Book Depôt, Bombay)—price Re. 1-14 or 3s.

The letter-press of this publication consists of G. R. No. 5644, G. D., 18th July 1914, which reviews the year's working of all the district municipalities. From the tables that accompany it can be gathered details of the constitution, income, expenditure, taxation and loans of each and every district municipality, and also of the Bombay Municipality and of the "Notified Area" Committees.

The review runs as follows:-

The number of municipalities remained unchanged during the year. Proposals for the constitution of the taluka towns of Muddebihal and Karjat as notified areas having been approved by Government, the number of such areas was brought up to 24. The Erandol Municipality continues to be superseded, while the period of supersession of the Ahmedabad Municipality has been extended to the 31st March, 1915.

- 2. There was a rise of about 3,000 in the total recorded population resident in municipal districts. In the Northern Division the Changes in the population and increase of 13,000 was due chiefly to the Ahmedabad Municipality having added to its figures the 11,000 which represent the population of the suburban area to which municipal taxation was extended with effect from the 1st April, 1912. The limits of the Amalner and Poona Suburban Municipalities in the Central Division, of Ránebennur in the Southern Division and of Hyderabad in Sind were extended during the year under report; otherwise the municipal boundaries remained unchanged.
- 3. In the Northern Division triennial elections were held in Dholka,
 Viramgám, Gogha, Modása, Godhra and Dohad, and
 in all the municipalities of the Thána district except
 Bándra and Bassein. In the last mentioned district the elections aroused keen
 competition everywhere except at Máhim. In the case of the Thána elections
 there were strong rumours of the prevalence of corrupt practices. In the Central

Division triennial elections were held by the Karád, Tásgaon, Islámpur, Ashta, Malcolmpeth and Rahimatpur Municipalities in the Sátára district and by all the municipalities of the West Khandesh and Nasik districts except the Dhulia Municipality in the former and the Trimbak Municipality in the latter. The average percentage of voters who attended the poll in the West Khandesh district was only 35, and no particular interest was evinced at the elections except at Karád and Tásgaon. In the Southern Division new elections for the triennial period commencing from the 1st April, 1913, were held in all the municipalities of the Belgaum district, in all the municipalities of the Kolába district except Mátherán, and the municipalities of Bijápur, Kárwár, Kumta, Sirsi and Haliyál. Considerable interest is reported to have been taken by the public in the elections in all these places except Nipáni and Gokák where the proportion of voters that attended the poll was small. The triennial term of office of the Dharwar, Hubli and Nargund Municipalities which was extended expired on the 31st March, 1912, and the new boards came into being with effect from the 1st April, 1912. In Sind triennial elections were held in Hyderabad and Shikarpur and were keenly contested in the former place.

In Government Resolution No. 1134, dated the 20th February, 1912, the

The Municipalities of—
Bassein
Pandharpur
Málegaon
Poona City
Poona Suburban
Lonávla
Talegaon-Dábháde
Khed
A'landi
Junnar

Sásvad and Bárámati. amended election rules of the Ahmednagar Municipality were sanctioned. Under these rules voting by proxy is not admissible, the reasons for proscribing such voting being that it unnecessarily complicates the system of voting by ballot and facilitates personation. The municipalities mentioned in the margin* have since followed the example of the Ahmednagar Municipality by adopting the above system, a change which has been attended by eminently satisfactory results. Government have recently directed that the

system of voting by secret ballot should be extended to, and voting by proxy abolished in, all the district municipalities of the Presidency.

In the Northern Division the newly constituted boards of Umreth, A'nand and Borsad, to which the elective franchise had been extended in the previous year, came into being on the 1st April, 1912. The elective franchise was restored

to Kaira and its municipal board was re-constituted with fourteen councillors. The Dákor and Kapadvanj boards were also re-constituted, two more councillors being added to the non-official element with a corresponding decrease in the number of officials. Dákor also exercised the privilege of selecting its President. Two municipal councillors of Ránder were disqualified under the orders of Government for tampering with the municipal demand registers with a view to bringing partizans on to the list of voters, and a third councillor who was similarly implicated only escaped disqualification by previously resigning. In the Southern Division the extended franchise was conferred on the Bijápur Municipality, the total number of councillors being increased from 12 to 18 and the elective element from 6 to 12. In the Northern Division the total number of municipal councillors rose from 469 to 489 in consequence of the changes in Kaira, Umreth, A'nand and Borsad. In the Central Division the number was 811 against 810. In Sind, however, it fell from 356 to 346. In the Southern Division there was no change in the number of councillors (495).

In the Northern Division, except for some improvement in the case of the non-official members of the municipalities in the Kaira Attendance municipal and the Panch Maháls districts and in Ahmedabad. meetings. Dholka and Viramgám, the attendance of councillors at meetings was not particularly encouraging. Cases of default in regard to attendance at two-thirds of the meetings are reported in respect of nearly every municipality in the Ahmedabad and Kaira districts, Dholera in the former and Umreth and Kaira in the latter being the only exceptions. In Nadiád three councillors were disqualified for non-attendance. In the case of Surat, the Commissioner remarks that the municipality appears to have suffered a set-back since the withdrawal of the Collector's control, and that the numerous adjournments recorded do not indicate a healthy administration. In the Central Division the total number of meetings held by the several municipalities was 842, of which no less than 150 or 17'8 pet cent. proved abortive owing to want of quorum, as many as fifteen municipalities having adjourned more than 25 per cent. of their meetings for this reason. In the Southern Division and in Sind the attendance of members at the municipal meetings was on the whole satisfactory.

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4. A decrease is recorded in the aggregate gross income of the municipal income.

Municipal income.

Cipalities, which amounted this year to 109\frac{3}{4} lákhs as against 116\frac{1}{4} lákhs in the preceding year. But deducting the receipts under "Extraordinary and debt," the net revenue shows an increase, being 88 lákhs as compared with 84 lákhs in the previous year. The following table indicates the fluctuations under the principal heads of income:—

		ı	1912-1913. 1911-191		Increase.	Decrease.
			In thousands.	In thousands.	In thousands,	In thousands
J. Municipal rates and taxes-			Rs.	Rs.	Rs.	Rs.
(a) Octroi (net receipts, refunds)	<i>i. e.</i> , de	educting	25,78	27,89		2,11
(b) Taxes on houses and la	nds		8,95	8,50	. 45	• • • • • • • • • • • • • • • • • • • •
(c) Water rate			9,30	9,03	27	•••
 Revenue derived from n perty and powers other taxation 			14,42	13,31	•1,11	•••
Grants and contributions and special purposes	for	general	t 5,05	I 2,00	3,05	,
4. Extraordinary and debt	•••		21,84	32,31	•••	10,47

octroi.

Only Rs. 11,65,000 as against Rs. 14,06,000 in the previous year. This falling-off is most noticeable in the Karachi Municipality, regarding which it is reported that large stocks of duty-paid grain which were lying in the port at the close of the previous year were exported and thus became eligible for refunds during the year under report. In the Northern Division, in consequence of a prosperous season, octroi showed an increase of nearly Rs. 30,000, for which Ahmedabad and Broach were chiefly responsible. In the Central Division the decrease of Rs. 16,000 in the Sholapur district was chiefly due to the unfavourable season there, and that of Rs. 4,000 in East

Khándesh to the substitution of a terminal tax for octroi by the Jalgaon Municipality. In the Southern Division the increase of about Rs. 15,000 in the octroi receipts at Dhárwár and Hubli is satisfactory and speaks well for the supervision exercised, seeing that the opening months of the year were months of scarcity.

6. The receipts under this head rose by Rs. 45,000, of which Rs. 26,000,

Rs. 14,000 and Rs. 8,500 were contributed by the Northern and Central Divisions and Sind, respectively, these increases being to a small extent counterbalanced by a falling-off of Rs. 3,500 in the Southern Division. In the Northern Division the rise in Ahmedabad is due to the extension of municipal limits. In the Central Division the increase was shared by all the districts except Násik, and in Sind it occurred mainly in the Karáchi district. The increase is generally attributable to the recovery of past arrears or to the revision of the assessment registers.

In the Northern Division, although Ahmedabad showed increased realizations from its water-tax amounting to nearly Rs. 7,500, Water rate. and Bándra made a further advance of about Rs. 1,500, the total decrease of Rs. 11,000 in Thána and Kurla alone resulted in a net deficiency of Rs. 2,300 under this head. In the Central Division the increase of Rs. 6,500 was due mainly to the raising of the water rates by the Jalgaon Municipality and to larger recoveries by the Poona City Municipality. In the Southern Division the increase occurred in the Dhárwár Municipality and was due to the recovery of Rs. 7,000 on occount of private connections. Karachi, Hyderabad and Sukkur are the only municipalities which are provided with regular water works. The increase of Rs. 8,000 in the case of the Karáchi Municipality was due to a larger consumption of water by the North-Western Railway and the Karáchi Port Trust. The increase in Hyderabad (Rs. 8,500) and Sukkur (Rs. 1,000) was due chiefly to the extension of private water service connections.

In the Northern Division the figures of demand for the year 1912-1913 and of the outstandings of previous years under the head "Taxes on houses and lands" were Rs. 3,82,000 and Rs. 42,500 respectively. At the close of the year

the balances still unrealized stood at Rs. 27,600 and Rs. 16,600 respectively, or a total of Rs. 44,200. This represents a slight increase on the corresponding figure of arrears for the preceding year. In the Central Division, out of a total demand of Rs. 6,00,000, including arrears amounting to Rs. 55,000, a sum of Rs. 41,000 remained to be realized at the close of the year, the preceding year's unrealized balance being Rs. 54,700. Half of the uncollected balance this year occurred under house-tax, and the Municipalities of Bhusával and Yaval in the East Khandesh district, Ahmednagar, Vambori and Kharda in the Ahmednagar district and Ashta in the Sátára district showed heavy arrears. In the Southern Division the figures of demand for the year 1912-1913 and of the previous year's outstandings under the head of house-tax were Rs. 1.33,000 and Rs. 32,000 respectively. The total of the unrealized balances at the close of the year was Rs. 29,000, a distinct improvement on the preceding year's results. The arrears at Dhárwár were again heavy though the collections this year showed a slight improvement, being Rs. 16,000 as against Rs. 14,700 in the preceding year. The figures of collections at Gadag-Bettigeri were also not altogether satisfactory, nearly 25 per cent. of the demand for the year 1912-1913 remaining unrealized at the close of the year. Regarding Sind, no information is furnished by the Commissioner as to the progress of collection work during the year under report. The attention of the Commissioner in Sind should again be invited to paragraph 7 of Government Resolution No. 1773, dated the 24th March 1911, and he should be requested to furnish in future the information referred to therein.

From the foregoing information it appears that, although there has on the whole been an appreciable improvement in the recovery of municipal dues, more attention to this branch of the administration is still generally required. The Collectors should be requested to put pressure on the municipalities concerned to take prompt and effective steps for the recovery of their arrears.

7. Sind contributed Rs. 65,000 towards the increase of Rs. 1,11,000 under this head, the Northern and Central Divisions

Revenue derived from municipal contributing Rs. 12,000 and Rs. 42,000 respectively.

The Southern Division showed a decrease of Rs. 8,000.

The receipts under this head are chiefly made up of the grants given by Government to municipalities for the improvement Grants and contributions for of water-supply and drainage, for the opening up of general and special purposes. congested localities and for educational purposes-During the year under review there were increases under this head of Rs. 2,82,000 in Sind, Rs. 1,24,000 in the Central Division and Rs. 50,000 in the Northern Division, counterbalanced by a decrease of Rs. 1,61,000 in the Southern Division. In the Northern Division, Ahmedabad received Rs. 1,00,000 for opening out congested areas in the Khadia, while grants were made of Rs. 1,00,000 to the Broach Municipality for (1) the opening out of Fort Parsiwad, (2) the Boharwad improvement scheme, and (3) the filling in of Fata Taláo, and Rs. 12,500 to Kalyán for its drainage scheme. In the Central Division, Dhulia received a grant of Rs. 30,000 for raising the waste weir at Dedargaon, Karád Rs. 90,000 in aid of its water-supply scheme, Panchgani Rs. 5,000 for the construction of development roads, and Pandharpur Rs. 27,000 for opening up congested quarters. In the Southern Division grants-in-aid from Government amounted to Rs. 1,20,821, which included Rs. 30,000 for the opening of conservancy lanes in Dhárwár, Rs. 23,000 for the sanitary improvement of the town of Hubli, Rs. 9,000 for a drainage scheme to carry off storm water from the town of Guledgud, Rs. 7,000, each, to Alibág and Pen for opening out insanitary areas, and Rs. 5,000, each, to Bijapur and Bagalkot for the construction of gutters. In Sind, the Karáchi Municipality received a grant of Rs. 2,00,000 for the extension of the drainage system in the Civil Lines and the Frere Town quarters, and the Kotri and Mirpur Khás Municipalities Rs. 5,000 and Rs. 5,500 respectively for filling up hollows.

The total increase of Rs. 1,80,000 in the whole Presidency including Sind under grants from Government for educational purposes was distributed over all divisions and was chiefly attributable to the revision of the grants-in-aid to municipal primary schools with a view to making them equal to half the gross expenditure incurred on these institutions. In the Northern Division Mr. Bhaishankar Nanabhai gave a donation of Rs. 8,000 for the construction of a school house in Ráipur. In the Central Division a grant of Rs. 3,500 was made by the District Local Board of East Khándesh towards the construction of a new school house at Erandol. There was also an increase of Rs. 10,500 in the

contributions from other sources for educational purposes due to (1) popular contributions received towards the building of a school house at Chopda and (2) a private donation for the construction of a Hindu girls' school in Dhulia. In Sind, liberal donations were received by the Karáchi Municipality during the year from public-spirited citizens for the erection of a girls' school in the jail quarter.

In the Southern Division contributions from other sources included one of Rs. 50,000 from the Madras and Southern Marátha Railway Company towards the Hubli water-supply scheme, and a sum of Rs. 12,000 contributed by the people of Nárgund towards the erection of a dispensary. In Sind, large contributions were made by the citizens of Karáchi for a charitable dispensary in the Ramswamy quarter. The Port Trust gave Rs. 5,000 for facing with stone masonry the basin formed by the Lyari river.

- Out of the aggregate income of municipalities Rs. 55,01,000 were realized from municipal rates and taxes, as compared with Rs. 56,45,000 in the previous year, indirect taxation yielding Rs. 25,78,000 or 46 9 per cent. of the abovementioned amount and direct taxation Rs. 29,23,000 or 53 1 per cent. The corresponding percentages last year were 49 and 51 respectively. The incidence of taxation per head of population fell from Rs. 2-6-4 to Rs. 2-5-5, while the incidence of income rose from Rs. 3-9-1 to Rs. 3-11-9. Bándra had the highest incidence of taxation (Rs. 5-4-3) and Betávad the lowest (Re. 0-4-1).
- Doctroi and terminal taxation.

 Octroi and terminal taxation.

 The Southern Division a joint octroi system was proposed for the town and cantonment of Belgaum. The scheme has since been sanctioned.

Government have directed that the system of terminal taxation should be introduced tentatively for a period of two years in selected municipalities of the Presidency, the number of such municipalities being fixed at three per division. In the Northern Division, Ahmedabad is the only municipality which has so far been selected for the application of this system of taxation; the rules and by-laws

for the levy of the tax are still under the consideration of the committee of management of the municipality. Proposals for the selection of the other two municipalities of this division are awaited. In the Central Division, the municipalities which have been selected for the experiment are Jalgaon, Dhulia and Ahmednagar, and in the case of the first two of these the necessary rules and by-laws have recently been sanctioned by Government. Arrangements in respect of the third municipality, vis., Ahmednagar, have still to be completed. In the Southern Division, Hubli is the only municipality which has expressed its willingness to introduce the system, but the arrangements for working it are still under consideration. In Sind, the Commissioner has issued instructions for the introduction of the system as a tentative measure for a period of two years in the municipalities of Sukkur, Lárkána and Umarkot.

pared with Rs. 106\frac{3}{4} lakhs in the preceding year.

Expenditure.

Expenditure Excluding the item of "Extraordinary and debt," the expenditure amounted to Rs. 98\frac{1}{2} lakhs against Rs. 86 lakhs.

The following table indicates the more important fluctuations under the several heads of expenditure:—

		1912-1913.	1911-1912.	Increase.	Decrease.
		In thousands.	In thousands.	In thousands.	In thousands.
1) General administration	and	Rs.	Rs.	Rs.	Rs.
collection charges	2110	8,36	10,8	35	
2) Public health and venience	con.	63,00	54,84	8,16	
3) Public instruction		15,00	12,75	2,25	
4) Extraordinary and debt		21,02	20,74	28	

General administration.

Ceneral administration.

Division (Rs. 24,000), the Southern Division (Rs. 2,000) and Sind (Rs. 9,000). In the first named the increase is ascribed to the payment of grain compensation and the royal bonus by the several municipalities, the revision of the pay of establishments and the payment

of arrears in the Násik and Sátára districts, and the grant of a gratuity to the Chief Officer of the Poona City Municipality on his retirement. In Sind, the increase under this head occurred chiefly in the municipalities of Karáchi and Sukkur. In the case of the former it was due to the revision of the salary of the municipal staff and to the increase in the remuneration of the legal adviser from Rs. 2,000 to Rs. 3,000 per annum. In Sukkur it was due to the grant of annual increments, the payment of grain compensation allowance, a durbár bonus, municipal contributions to the provident funds, and the supply of warm clothing to the menial staff.

Public health and convenience.

Public health and convenience.

an increase of Rs. 9,45,000, again rose by Rs. 8,16,000, a notable indication of the closer attention which, under the stimulus of liberal Government grants, is now being devoted to the spread of sanitation and the promotion generally of the material welfare of the population of the urban areas.

Capital Outlay.—In the case of the Northern Division the rise under this head from Rs. 1,85,000 to Rs. 2,70,000 occurred Water-supply. chiefly in Ahmedabad, where there was an increase of Rs. 86,000. Nadiád, which is entirely dependent on deep well boring for its water-supply, spent Rs. 1,251 on the purchase of a new apparatus. Thána incurred an outlay of Rs. 3,000 on the survey of the Yeur tank scheme and in raising the dam and waste weir of the Pokhran tank to increase its storage capacity. In the Central Division the increase of nearly 21/4 lákhs was due mainly to the municipalities of Násik and Sholápur having paid Rs. 1,50,000 and Rs. 20,000 respectively to the Public Works Department for expenditure on their water works and to the expenditure at Jalgaon of Rs. 18,000 on repairs to the Meherun tank. In the Southern Division, the total capital outlay for the year amounted to Rs. 2,18,000 as against Rs. 2,35,000 in the previous year. bulk of the amount, viz., Rs. 1,77,000, was spent on the Bijápur water works. In Sind, there was a marked increase of expenditure under this head in Karáchi (Rs. 1,51,000), due to the extension of the water works and the laying out of mains in various quarters of the town. The expenditure of the Hyderabad Municipality in connection with its water works improvement scheme was reduced by Rs. 77,000 during the year under report.

In the Northern Division the total expenditure under the head of establishment and repairs fell from Rs. 1,98,000 to Rs. 1,91,000. Establishment and repairs. The diminution was due to the fact of Thana having paid nothing for Tánsa water during the year under report and Ránder failing to pay its usual contribution to Surat from which it derives its supply. In the Central Division, the largest increase occurred in the Ahmednagar Municipality which spent Rs. 20,000 on temporary measures for increasing its water-supply which had run alarmingly low owing to the scanty rainfall. Among the minor improvements were the laying out of new pipes by the Sholapur Municipality at a cost of Rs. 7,000, the purchase of pumping engines by the Yeola and Bársi Municipalities, and the improvements effected by the Dhulia Municipality to its water-supply at a cost of Rs. 7,600. In the Southern Division, the total expenditure for establishment and repairs amounted to Rs. 43,200 as against 34,000. The increase was marked in Dharwar, Hubli and Alibag. In Sind, there was an increase of Rs. 6,700 in the actual expenditure under this head in the Karáchi Municipality, due chiefly to a larger consumption of coal for pumping water at Dunlotte, the short rainfall having rendered increased pumping necessary. At Hyderabad there was increased expenditure on fuel and stores, and a sum of Rs. 1,100 was spent in overhauling the Fort lift.

In the Northern Division, the total receipts from water rate in Ahmedabad increased from Rs. 1,58,000 to Rs. 1,65,000, of which Financial working of water Rs. 56,000 came by direct taxation and Rs. 1,10,000 installations. by indirect, the proportion of revenue from the direct sale of water and from indirect taxation being as one to two. The total expenditure amounted Rs. 1,45,000, which included Rs. 62,000 on account of interest and sinking fund and Rs. 8,000 partly contributed to the depreciation fund and partly spent on repairs to machinery. The net profit realized was Rs. 20,000, The percentage of profit on the total capital outlay of Rs. 12,29,000 was 16 as against 3.5 in the previous year. The falling off is ascribed to the high prices of fuel and the cost of the execution of various new works. In Surat, the total receipts remained at Rs. 90,000, direct and indirect receipts being classified as Rs. 89,000 and Rs. 1,000 respectively, the latter purely miscellaneous. expenditure decreased from Rs. 96,000 to Rs. 86,000, of which interest absorbed Rs. 13,500, instalments in repayment of loans Rs. 17,400, and sinking н 438---7

fund Rs. 3,000. The percentage of profit on the total capital outlay was 3 only. The receipts in Ránder which were all direct amounted to Rs. 6,000. As no contribution was paid to Surat the expenditure side showed Rs. 1,500 only. From the Pokhran tank, which is Thána's installation, the municipality's direct receipts amounted to Rs. 5,500 as against Rs. 9,500 in the preceding year, the decrease being due to the fact that it was not necessary to indent on the Bombay Municipality for a supplementary supply, so that the public were charged a lower rate for water. Indirect receipts amounted to Rs. 2,000, of which Rs. 1,800 were from the water-tax and the rest miscellaneous. The proportion of revenue from the direct sale of water and that from indirect taxation was 3: 1. The capacity of the Pokhran tank has been found insufficient for the needs of Thána, and the municipality contemplate embarking upon another project known as the Yeur scheme which is still under the consideration of the Sanitary Engineer. The Varála Tank—the source of Bhiwndi's water-supply yielded the same revenue as last year, vis., Rs. 2,100. The cost of upkeep was Rs. 700, leaving a net profit of Rs. 1,400. No regular water-tax is levied by the municipality, its income being derived from an annual charge of Rs. 9 for each house-connection. The tank requires improvements in various ways and private subscriptions are being raised for the purpose.

In the Central Division, Jalgaon incurred a capital outlay of Rs. 3,16,000 on the Meherun tank works. The direct income from water rates in this municipality was Rs. 14,500, and the revenue from indirect taxation Rs. 4,500, the expenditure amounting to Rs. 18,000, which included Rs. 10,000 on account of loan instalments and interest. The total income at Dhulia was Rs. 88,500, being Rs. 43,000 from direct receipts and Rs. 45,500 from indirect receipts, while the expenditure was Rs. 80,000 which was made up of (1) Rs. 60,000 on account of capital outlay, inclusive of a Government contribution of Rs. 30,000 for raising the waste weir and dam of the Dedargaon tank, and (2) Rs. 11,000 on account of repayment of loan and interest.

In the Southern Division, the income derived by the water works at Dhárwár amounted to Rs. 11,500, of which Rs. 500 are classed as direct receipts and Rs. 11,000 as indirect receipts. The expenditure incurred on the works was Rs. 35,000. This serious divergence between income and expenditure requires careful attention at the hands of the municipility, to whose notice it should be

specially brought. The receipts and expenditure on account of the Hubli water works were Rs. 30,000 (inclusive of direct receipts amounting to Rs. 5,000) and Rs. 11,000 respectively.

The attention of the Commissioner in Sind should be again invited to paragraph 5 of Government Resolution No. 4202, dated the 2nd July 1912, and he should be requested to include in his next municipal administration report information regarding the financial working of the water installations in his charge.

With regard to the expenditure on drainage, the small net increase of Rs. 500 under this head in the Northern Division Drainage. indicates little general progress. In Ahmedabad, however, sewer extensions, new house connections and improvements at the sewage farm were executed at a capital cost of Rs. 12,000 with a consequent decrease of Rs. 9,000 in expenditure on establishment and repairs. In the Central Division, the decrease of Rs. 37,000 under capital outlay was due to the smaller expenditure incurred in Poona City on the new drainage works and the absence of expenditure at Bhusaval and Dhulia on the construction of new drains. Liberal grants from Government enabled some of the municipalities in the Southern Division to incur large expenditure under this head, the capital outlay rising from Rs. 7,000 to Rs. 37,000. The increase of Rs. 8,000 at Bijápur was due to the new drainage scheme carried out during the year of report, and that of Rs. 4,000 at Guledgud to the construction of a channel to carry off storm water and to the repair of old gutters. The increases of Rs. 8,000 at Ránebennur and of Rs. 14,000 at Kárwár represent expenditure on the drainage of the Musalmán quarters in the former town and of the Koney Nullah in the latter. In Sind, the extension of the drainage system into the Civil Lines and Frere Town quarters of Karáchi was taken in hand. Altogether the project is estimated to cost Rs. 5,64,000, to which the Government contribution is Rs. 2,00,000.

The expenditure under conservancy in the Northern, Central and Southern

Divisions rose by Rs. 19,000, Rs. 35,000 and

Rs. 10,000 respectively. These increases were due
to such causes as the erection of new latrines, the purchase of dustbins and nightsoil and refuse carts, the employment of additional establishment, and additions to

the salaries of existing establishment, etc. In the Central Division, the considerable increase of Rs 13,000 in the Ahmednagar district was due to the compensation for the acquisition of land for open spaces paid by the Ahmednagar City Municipality out of the special grant made by Government. In Sind the increase occurred chiefly in Karáchi (Rs. 19,000) and Lárkána (Rs. 3,000).

The large increase of Rs. 50,000 in the expenditure under this head in the Northern Division testifies to the closer attention Road expenditure. paid to communications. The acquisition of land for road widening absorbed the bulk of the expenditure in Ahmedabad, Dákore and River floods in Bulsár necessitated special repairs to the Bandar road. The increase in Bandra was due almost entirely to the construction of two new roads for which the municipality received a Government subsidy of Rs. 23,000. The Central Division showed a decrease of Rs. 30,000 under this head. Southern Division expended Rs. 99,000 on roads as against Rs. 77,000 in the previous year. In Sind there was a marked fall under this head of Rs. 81,000 in the Karachi Municipality, due to the extraordinary expenditure incurred in the previous year on a number of objects connected with the improvement and extension of communications. The Hyderabad and Shikarpur Municipalities, however, showed increases of Rs. 24,000 and Rs. 36,000 respectively, the former municipality having spent Rs. 64,000 on compensation for land acquired for widening lanes and opening up congested areas in the city.

The eleven municipalities of the Northern Division noted in the margin

Appropriation of wheel tax and road tolls.

* Dholka, Gogha, * Nadiád, Godhra, * Jambusar, * Ránder, Thána, * Kalyáu, * Máhim, * Bándra, Bhiwadi. failed to observe the rule that the whole of the proceeds of wheel tax and road tolls should be expended on the maintenance of roads, the deficit being more than 50 per cent. in the case of those asterisked. For Nadiád the explanation offered is that the municipality had budgeted for an expenditure equal to its wheel and toll income, but that, owing to the zigzag alignment and the

steep gradient of its roads, it was advised to pave them with stone slabs instead of the usual metalling, a change of plans which delayed execution as the stones were not received in time for use. Rander failed to purchase gravel and metal. The Kalyan and Mahim Municipalities had incurred very heavy expenditure in the

previous year. In the Southern Division the defaulting municipalities, a list of

Athni, Bágalkot, Navalgund, Nargund, Ránebennur, Byádgi, Sirsi, Haliyal, Bhatkal, Alibág, Roha-Ashtami, Mahád, Pauvel, Vengurla. which is given in the margin, numbered fourteen. In some cases the municipalities are reported to be accumulating funds with a view to substantial improvements; in others, urgent calls in other directions or the fact of special expenditure having been incurred

previously are offered in explanation of the default. When resources are being accumulated for future expenditure it seems desirable that the savings should be credited to a special fund and not merged in the general balances.

In the Northern Division the expenditure under this head rose from Rs. 26,000 to Rs. 58,000. The acquisition of buildings Expenditure on buildings. for the extension of the municipal offices resulted in the additional outlay of Rs. 19,000 by Ahmedabad, while the Broach Municipality spent an extra Rs. 5,500 on the erection of its Victoria Memorial Clock Tower. The new municipal office and town hall at Bándra cost Rs. 7,000 in addition to the expenditure previously incurred on it. In the Central Division, there was an increase of Rs. 17,000 in the East Khándesh district on account of the construction of a new school building at Párola, improvements to the municipal office at Jalgaon, and the purchase of a site for school houses at Bhusával, and of Rs. 6,000 in the West Khandesh district, due to the construction of a new municipal office by the Shirpur Municipality. In Sind, there was a decrease of Rs. 1,19,000 under this head, which occurred principally in Karáchi. Some of the principal works executed by the Karachi Municipality during the year were two dispensaries, viz., the Nadirshaw Edulji Dispensary and a dispensary in the Lyari quarter, a vaccination office in the same quarter, footpaths along roads, a meat market in Dhobi Ghát, a new sea dues office and a new octroi office. In Shikarpur there was an increase of Rs. 2,000, due to additions and repairs to municipal buildings.

14. The cost of Public Instruction, which was already last year Rs. 67,000 in advance of the preceding year's figure, now shows a further considerable increase of Rs. 2,25,000. The excess, which is contributed to by all the divisions including Sind, is accounted for mainly by the raising of the pay of trained teachers in primary schools

and the construction of new school buildings. In the Northern Division, the purchase of sites for four primary schools and the revision of the schools' establishment in Ahmedabad alone were accountable for Rs. 34,000 out of the total increase of Rs. 73,000. In the Central Division, payments were made by the Erandol, Chopda, Rahimatpur and Bársi Municipalities for the construction of new school houses; lands were purchased by the Dhulia and Yeola Municipalities for school buildings and a school house was bought by the Násik Municipality. In the Southern Division, the most important fluctuations occurred at Bágalkot in the Bijápur district and Gadag-Bettigeri in the Dhárwár district. In the former an increase of Rs. 12,000 was due chiefly to the erection of a new house for the Maráthi school, and in the latter there was a decrease of Rs. 21,000 resulting from the heavy expenditure incurred in the preceding year. In Sind, there was an increase of Rs. 79,000, nearly half of which was contributed by Karachi and was due to the construction of a boys' school in the Rámbágh quarter and of a girls' school in the jail quarter. In Hyderabad the increase of Rs. 27,000 was mainly due to the construction of composite buildings for the municipal Fort and Sanskrit schools. The municipality also paid building grants aggregating to Rs. 10,500 to the Hindu Social Girls' school, the New Girls' school, the New Vidyalaya building and the Navalrai Hiranand Academy hostel.

and Rs. 2,06,000 in the Southern Division and in Sind respectively, which were counterbalanced by decreases of Rs. 1,12,000 and Rs. 1,82,000 in the Northern and Central Divisions. Under "Investments" the net decreases in Ahmedabad and Surat were Rs. 1,36,000 and Rs. 29,000, while Thana and Kurla together had a further decrease of Rs. 9,300. The Rander Municipality deposited Rs. 2,700 with the Bank of Bombay on account of its sinking fund. In the Central Division, there was a decrease of Rs. 19,000 under "Investments" in securities and of Rs. 10,000 under those in savings banks. The Malcolmpeth Municipality was the only one which invested in Government securities during the year. In the East Khandesh district the Chopda Municipality invested Rs. 11,000, being the amount of the popular contributions towards the construction of a municipal school. In the Southern Division, Rs. 5,000 were invested by the Byadgi

Municipality in Government securities as a dispensary fund, while Rs. 500, Rs. 600, Rs. 1,100 and Rs. 12,000 were deposited, respectively, by the Ilkal, Guledgud, Hubli and Navalgund Municipalities. In Sind, the Karáchi Municipality repaid debentures of the value of Rs. 60,000, while the Sukkur Municipality redeemed 30 debentures amounting to Rs. 15,000 remaining out of a loan of Rs. 1,00,000. The entry of Rs. 2,10,000 under "Deposits" represents the refund of deposits to contractors and investments on account of provident sinking funds.

- 16. The result of the year's operations was a decrease of Rs. 9,63,000 in the total closing balance, which was reduced in the Northern, Central and Southern Divisions and in Sind by Rs. 27,700, Rs. 29,400, Rs. 2,34,000 and Rs. 6,72,000 respectively. The total closing balance was Rs. 47,70,500.
- 17. In the Northern Division the only municipality in debt to Government is Bandra. Of its total debt of Rs. 50,900 outstanding at the beginning of the year the municipality paid off Rs. 4,500, leaving a balance of Rs. 46,400.

In the Central Division, the total liabilities at the end of the year amounted to Rs. 5,12,000, the amount of the instalments repaid being Rs. 57,000 inclusive of interest. The recovery of the debt still due by the Bhingar Municipality has been postponed pending consideration of the proposals for the inclusion of the municipal district in the Ahmednagar Cantonment. The Sholápur Municipality paid off the balance of Rs. 6,900 of the plague loan raised in the open market in 1900, and the Sátára Municipality is now free from debt, having paid off the last instalment (Rs. 7,100) of its loan for the construction of the Kás water-works. During the year under report Lonávla and Sholápur received instalments of Rs. 40,000 each of the water-supply loans granted to them. The Poona City Municipality obtained Rs. 2,50,000 on account of the second instalment of its loan for the drainage scheme.

In the Southern Division, ten municipalities were in debt to Government. Their liabilities, after deducting Rs. 26,500 paid during the year, now amount to Rs. 5,76,900.

None of the municipalities in Sind are in debt to Government.

General's Local Audit Department audited the accountantGeneral's Local Audit Department audited the accounts of all the municipalities with the exception of Borsad, Bulsár and Bhiwndi in the Northern Division, Athni, Saundatti-Yellámma, Sirsi, Kumta and Honávar in the Southern Division, and Mánjhand and Tando Adam in Sind. No serious irregularities were disclosed in any case. On the occasion of a surprise visit by the auditors to the octroi collecting stations at Panvel the balance in the hands of a nákedár was found short. The deficit was recovered from the defaulter and he was dismissed from municipal service. This was the second case of its kind brought to light by the auditors in connection with the Panvel Municipality. In the Northern Division certain municipalities in the Kaira and the Panch Maháls districts arranged to have their accounts audited locally, and in the Southern Division the accounts of the smaller and temporary municipalities were examined by municipal councillors or local Government

* Kharda, Vámbori, Sindkheda, Indápur, Mhasvad, Vita, Rahimatpur, Betávad, Jejuri, Islámpur, Ashta, Sátára Suburban and Sángola. officials. In the Central Division, the accounts of the marginally* noted municipalities were not scrutinized by the Government auditors, those of the first seven bodies having been audited by paid or honorary auditors.

19. Of the many needs of the municipalities of the Presidency the most pressing are a wholesome and plentiful water-supply, Municipal needs. efficient drainage, the opening up of congested localities to light and air, broad well-aligned thoroughfares and hygienic school-houses with adequate play-grounds, and although loans and liberal grants from Government have helped the more advanced municipalities to make appreciable progress towards the attainment of some of these desiderata, it is evident that a vast amount of work still remains to be done before it can be said that even the most elementary requirements of sanitation and public convenience In the Northern Division, the most pressing are adequately provided for. need both in Dholera and in Viramgam is a good potable water-supply which it is hoped to secure by deep boring. In Ahmedabad the committee of management has drawn up an extensive programme of improvements, and steps are being taken to deal with its more pressing items as funds permit. Wider streets combined with the opening up of congested areas

and the establishment of a pucca drainage system are urgent needs in Nadiád and Dakore, while in the former a city survey is also very desirable. Both these municipalities as well as those of Borsad, Kapadvanj, Godhra and Dohad are in crying need of a better water-supply. In Broach the work of slum improvement has received some attention, but the heavy cost makes progress very slow. In the case of Surat, although the question of the provision of sewers is of paramount urgency, it is regarded as undesirable that its consideration should indefinitely delay the disposal of the important one of the construction of hygienic school buildings regarding which the municipality has approached Government for assistance in the carrying out of an exhaustive three-year programme. It has been decided therefore that both questions should be considered simultaneously, and Government have recently appointed a special committee for the purpose with instructions to formulate definite proposals for the financing and execution of both The need of an adequate water-supply is keenly felt in Kalyán and the municipality's application for a loan and grant-in-aid from Government is under consideration. A system of surface drainage, in aid of which the municipality have been promised a grant of Rs. 12,500, is being considered by the Sanitary The Kurla drainage scheme is at present in abeyance, while the experiment of deep well boring in Mahim is reported to be still in its primary stage. In the Central Division, the new water-supply schemes for Ahmednagar and Nandurbár have received the sanction of Government, and projects for improved water-supply for A'landi and Wai are under consideration. The proposals for a drainage scheme at Dhulia have been considered by the Sanitary Board. The Násik water-works are nearing completion. Good progress is also being made with the new water-supply and drainage works in Poona City. Work on the tank at Lonavla and on the dams at Ahmednagar and Igatpuri has been started. The works in connection with the improvement of the watersupply and the construction of school-houses in the Sholapur City are about to be taken up by the municipality, Government having sanctioned loans for them in addition to a grant-in-aid for the former work. Government have also sanctioned a loan and a grant-in-aid to the Karád Municipality and a grant-inaid to the Bársi Municipality for their water-supply schemes. The Sátára Town Municipality has paid off its loan for the Kas water-works, and now proposes to prepare a project for laying iron pipes in place of the present earthenware ones.

Government have given a grant of Rs. 28,000 for paving the Manik nulla in Poona City, and plans and estimates for the work are ready. The special grant of Rs. 20,900 made by Government for improvements to streets and for surface drainage in Bhingar could not be utilized and was withdrawn from the municipality and deposited in Government treasury pending consideration of the proposal to merge the municipal area in the cantonment. In the Southern Division, a combined scheme for water-supply and drainage for the town and cantonment of Belgaum is being investigated by the Sanitary Engineer. Investigations have also been undertaken by the Sanitary Engineer's staff regarding an improved water-supply project for Nipáni, and these are almost complete. The Bhutnal tank at Bijapur is nearly completed. For the Dharwar City improvement scheme Government sanctioned a sum of Rs. 30,000 for acquiring sites needed for sweepers' passages and improving existing thoroughfares, and this sum has subsequently been supplemented by an additional grant of Rs. 26,300. A special acquisition officer has been appointed, and proceedings for the purchase of the necessary sites have already been instituted. In Karáchi the most pressing needs are a municipal office and council hall, the improvement of the water-supply and the street lighting, the extension of sewers and water mains, the construction of roads in the Machi Miani and Ranchore quarters and the improvement of the Lyari quarter. A water-works improvement scheme including the installation of a high level service tank in the Fort Tower, underground drainage, and the reclamation of tanks are among the most pressing wants in Hyderabad.

Last year's budget contained an aggregate provision of Rs. $21\frac{1}{2}$ lákhs on account of grants-in-aid to local bodies for sanitary projects. This provision was made up of (i) the improvement schemes.

lákhs for the improvement of sanitation in large towns, (ii) an allotment of Rs. 9 lákhs representing one-third of the special imperial non-recurring grant of Rs. 27 lákhs intended primarily for expenditure on urban sanitation and (iii) a provincial grant of Rs. 2 lákhs. Government have decided that the special non-recurring grant should, generally speaking, be expended on schemes for town improvement, for surface drainage in urban areas, for the filling in of insanitary tanks, etc., which do not involve heavy recurring expenditure, while, on the

other hand, the recurring imperial and ordinary provincial grants should be devoted principally to the promotion of important sanitary schemes, such as water-works and sewerage, which involve an outlay spread over a number of years and considerable maintenance expenditure.

The following grants were accordingly sanctioned against the special imperial non-recurring allotment of Rs. 9 lákhs:—

Northern Division.

Boharwad slum improvement scheme, Broad Deep boring operations at Dholka Works for the development of Sálsette subu	***		Rs. 50,000 3,240 55,000
	Tota	1	1,08,240
Central Divisi	on.	ŀ	,
Improvements to the water-supply at Sholá Laying out of building sites at Sholápur	pur	***	90,000
Sholápur town improvement scheme	•••	•••	15,000 3,200
Opening out of congested quarters at Bhusa	ival	,	15,000
Improvements to the water-supply at Jalgac			14,535
Additional grant for village water-supply	•••	•••	12,000
	Tota	d	1,49,735
Southern Divis	tion.		Rs.
Dhárwár town improvement scheme	•••		26,300
Belgaum town improvement scheme	•••	***	35,000
Widening of streets, opening out of cong	ested quarte	rs and	
provision of sites for town extension a		***	34,500
Construction of masonry drains at Gadag-I	Bettigeri	•••	20,000
Filling in of a tank in Ratnagiri	•••	•••	3,263
Improvements to water works at Panvel	•••	•••	1,105
	To	tal	1,20,168
			

			Rs.
Sin	d.		
Further grants for filling in hollows at	Mirpurkhás	•••	597
Filling in of Fulton tank at Shikarpur	•••	•••	3,500
Filling in of tank No. 1 at Hyderabad	•••		20,000
Filling in of a tank at Kambar	•••		70,000
Filling in of two tanks at Rátodero	•••	•••	3,000
	Total		37,097
	Grand Total	•••	4,15,240

Government also sanctioned last year the following expenditure from the imperial recurring and provincial grants of Rs. $12\frac{1}{2}$ lákhs:—

		Rs.
•••		3,74,000
•••	•••	- 3,20,000
•••	•••	2,36,500
•••	•••	1,75,000
Tota	l	11,05,500
		•••

Besides the above grants, an allotment of Rs. 1 lákh was placed last year at the disposal of the Sanitary Board, who have been authorized by Government to sanction sanitary projects of a non-recurring nature costing up to Rs. 20,000 and to make grants up to a limit of Rs. 10,000 for any work. The amount was distributed by the board as shown below:—

Sind.	Rs.
At the discretion of the Commissioner in Sind improvements of a non-recurring nature	•
improvements of a non-recurring nature	10,000
Northern Division.	
Replacing the main pipes in connection with the	e Bhiwndi
water-supply	10,000
Construction of a meat market at Godhra	4,468
Gandhi Bázár improvement scheme at Broach	4,007
New Mahomedan burial ground at Broach	2,000

Central Division.	Rs.
Pandharpur town improvement scheme	14,725
Construction of a surface drain for storm water at Shirpur	
Budruk in the West Khándesh district	2,000
Provision of public latrines at Taloda in the West Khándesh	
district	750
Sanitary improvements at Sávda in the East Khándesh	
district	20,000
Opening up of congested quarter at Lonávla	1,250
Public latrines at Jejuri in the Poona district	2,000
Minor sanitary improvements, such as latrines, dustbins, etc.,	
at Talegaon in the Poona district	1,000
Construction of public latrines at Junnar in the Poona district	1,000
Construction of public latrines at Sásvad in the Poona district	2,000
Southern Division.	
Removal of prickly-pear and filling up insanitary hollows in the	
park area at Bijápur	7,000
Widening streets at Byádgi in the Dhárwár district	950
Providing masonry gutters at Kalgargalli in Dhárwár	750
Filling up tank, constructing gutters and improving water-	750
supply at Byahatti in the Dhárwár district	1,500
Constructing gutters at Shiggaon in the Dhárwár district	2,000
Filling in a ditch and hollow at Ránebennur in the Dhárwár	-,
district	4,000
Constructing public latrines at Rájápur in the Ratnágiri	4,
district	500
Channelling the nulla through the western part of the town	•
of Alibág	2,500
Channelling the stream through the town of Roha in the	. •
Kolába district	5,000
Channelling a drain in Mahád in the Kolába district	. 600

Total	1,00,000

20. Ahmedabad.—The committee of management of the Ahmedabad Municipality continues to be actively engaged in restoring order in the municipal administration, improving the finances of the municipality and preparing

schemes for the improvement of the city. Its term of office has been extended to the 31st March 1915.

Surat.—Practically no progress has been made in the direction of proceeding with the important schemes which are before the municipality. Reference has already been made to the appointment by Government of a special committee to deal with the questions of sewerage and school buildings. The valuable recommendations of Mr. Thiselton-Dyer, who was specially deputed to see what could be done to prevent the shortage of water-supply during the hot weather, were under the consideration of the municipality. That body appears to be lacking in the capacity for dealing with important schemes in a reasonably expeditious and businesslike manner.

Poona.—Perhaps the most important event of the year was the issue of orders by Government instituting the ballot system at the municipal elections and abolishing voting by proxy in the case of female voters. These orders were rendered necessary by the gross malpractices which disgraced the elections of 1912-1913. The working of the municipality has suffered from repeated changes of Chief Officer. As regards general improvements, the councillors have taken considerable interest in the various schemes put before them, viz., the extension of the municipal limits, the construction of a new bridge over the Mutha river, the opening up of the city by wide arterial roads, the provision of public parks, and so forth. The Commissioner observes, however, that unfortunately this undoubted interest occasionally results in barren discussions of inordinate length and that apparent inability to take a broad view of local questions leads to the adoption of an unduly critical attitude towards proposals which militates against effective progress.

Sholdpur.—Under the guidance of an efficient President this municipality has made great progress in clearing congested areas and laying out extensions of the town. The municipality has also taken up a loan for the improvement of its water-supply and educational buildings. Having regard to these facts it is to be regretted that the defects to which reference has been made in previous years, vis., an unwillingness to impose the moderate scale of taxation necessary to provide for the growing needs of the administration of a rising town and a factious spirit of opposition to proposals with this end in view, should be still

noticeable. Sholapur has grown in wealth and population as fast as, or faster than, any other big city in the Presidency, and the city can beyond question bear a higher scale of taxation than as hitherto been imposed upon it.

Nasik.—This municipality sustained a great loss through the death of its President, Ráo Sáheb N. V. Gole, in the course of the year. It is fortunate in having the services of a very competent Chief Officer who has raised the efficiency of the administration to a high level. The town will soon have the benefit of an improved water-supply; it is to be hoped that there will be no disposition on the part of the councillors to avoid imposing the taxes necessary to pay for it as well as for the drainage which must necessarily follow. The town is so largely dependent on the pilgrim traffic that any epidemic which interferes with that traffic is a cause of heavy financial loss. Expenditure on improvements in sanitation is therefore, as rightly observed by the Commissioner, less a matter of administrative expedience than a sheer commercial necessity.

Karáchi.—The administration of the Karáchi Municipality is undoubtedly progressive, but the progress has not been as fast as the remarkable expansion of the city and port demands. These developments call for the initiation of an enterprising policy of large far-reaching schemes of improvement. A stage, in fact, is being reached in the affairs of this city when extraordinary measures are required to supplement the ordinary administrative machinery of a district municipality. The bill now before the Legislative Council providing for the appointment, in those municipalities where it appears desirable, of a chief executive officer corresponding in status and functions to the Municipal Commissioner for the City of Bombay, is calculated to meet the requirements of the situation. The wards of the city have recently been redistributed in accordance with a scheme drawn up by the Collector and designed to give larger representation to the quarters of the city which were formerly inadequately represented, and the results of the elections which were held on the new basis have shown that the redistribution was sound.

Hyderabad.—In Hyderabad the water improvement scheme is nearing completion and a good head of water will be obtained when the reservoir is constructed in the Fort Turret. The municipality have laid themselves open

to some criticism in regard to the state in which they have allowed their existing installation to lapse, and it will be necessary to insist on guarantees being forthcoming that the new water-works will not be exposed to the same neglect and mismanagement. The scheme for undergound drainage is hanging fire, but it is expected that a start in this direction will be made soon. Several works of public utility, viz., the Navalrai market, the Sanskrit school, and the Musafirkhana have been completed. In spite of the puerile bickerings and irrelevant interpellations which frequently form an undesirable feature of its meetings, the municipality has come through the year under report without incurring grave discredit. This result must be largely attributed to the good work of the President, Ráo Bahádur Bulchand Dayaram.

21. His Excellency the Governor in Council is pleased to note that the record of municipal administration during the year General remarks. under review is on the whole distinctly progressive The administration of the municipalities has, generally and encouraging. speaking, been carried on with discretion and energy under the direct control of the non-official presidents, who have as a body shown that they realize the personal responsibility which devolves on them for the efficient working of the municipal machinery. An increased interest in municipal affairs is also generally observable amongst councillors, notwithstanding the fact that the spirit of faction and self-interest is still in evidence here and there to the detriment of work and progress. On the whole, signs have not been wanting to indicate that the results of the extended franchise conferred on municipalities and the withdrawal in great measure of control by official and nominated presidents have justified these important steps in the direction of decentralization. The net revenue of the municipalities showed a large increase during the year under review, and the expenditure, generally speaking, was equitably distributed in satisfaction of the various public requirements.

With a view to the improvement of the sanitary services in urban areas the Government of India have offered, subject to certain conditions, to bear half the cost of the entertainment of qualified health officers engaged by municipalities. The local Government have also agreed to bear one-third of the remaining cost in the case of health officers and the same proportion of the whole cost in the

Ahmedabad.	Dhulia.
Surat.	Nadiád.
Poona.	Násik.
Hyderabad.	Belgaum.
Broach.	Dhárwár.
Hubli.	Gadag-Betti
Sholápur.	geri.

case of sanitary inspectors. The share of the cost devolving on the municipalities which accept the scheme will thus be one-third as regards health officers and two-thirds in the case of sanitary inspectors. Availing themselves of this assistance, the municipalities noted in the margin* have already agreed to appoint health officers and sanitary inspectors under the scheme.

It is gratifying to note that the liberal offers of Government assistance in carrying out schemes of sanitary improvement have encouraged local authorities to adopt a more progressive policy than has hitherto lain in their power, as is evidenced by the many important schemes of water-supply, drainage and town improvement which are in various stages of actual progress. Government have now had under consideration a question of sanitary improvement in another direction, namely, the prevention of the contamination of the milk-supply in large mofussil towns. Hitherto, except in cantonment areas, no systematic action has been taken in this respect. Much, however, can be effected by the provision of properly constructed and hygienic stables and dairy buildings which could be let to dairymen at low rentals, and by the supply to the latter, at a moderate charge, of milk vessels and dairy appliances of approved pattern. These are measures which municipalities can usefully undertake for the purpose of remedying, to some extent, the grossly insanitary conditions in which the milk trade is at present generally conducted in urban centres, and Government, although they are of opinion that the ultimate and only completely satisfactory solution of the question will be found in the total removal of the trade from those centres, which should in future be served by depôts supplied from purely rural dairy farms, are desirous of encouraging, as an initial step in the direction of reform, the adoption of such measures, merely palliative as they are. They have accordingly decided that approved schemes on the lines indicated will in future be entitled, pari passu with other sanitary projects, to support from the provision annually made for grants-in-aid to local bodies for the improvement of urban sanitation. Government have also declared that in cases where financial assistance is required to enable municipalities to maintain a normal standard of efficiency of administration, they will be prepared to consider proposals for the grant of such assistance. It is, however, an essential condition that any proposals that may be submitted must be supported by satisfactory evidence that the potential resources of the municipality concerned are already being drawn upon to the full extent practicable.

Police.

ANNUAL REPORT ON THE POLICE OF THE TOWN AND ISLAND OF BOMBAY FOR THE YEAR 1913.—Foolscap folio, 18 pp. letter-press and 17 pp. statistical statements, with Government review (Government Book Depôt, Bombay)—price 14 annas or 1s. 4d.

This report is reviewed in the following G. R. No. 5110, J. D., dated 14th July 1914:—

The rapid increase in genuine reported crime which had been a marked feature of the three previous years in Bombay City suffered a check in 1913. The number of true cognizable police cases under the Indian Penal Code, in 1909 as low as 4,552, had risen by 1911 to 7,086. In 1912 it was 7,599. In 1913 it showed an increase of 16 only upon that figure, the number being 7,615.

2. The explanation of the rapid increase in crime recorded in the last few years must be sought partly, no doubt, in the various changes which have taken place in the police force during those years. In 1910 three new sub-divisional police stations were opened, and have been worked on an improved system. A re-organization of the force commenced in 1912, and a gradual increase in the actual strength of the force has been carried out in the last few years. All these factors have contributed to increased facilities for the reporting and detection of crime. It is less easy, however, to account for the standstill at which the upward movement of the figures arrived in 1913. Two more sub-divisional stations were opened at the commencement of the year, and the actual strength of the force exceeded that reported in the previous year by 85 men. The rapid increase in registered crime in 1910 and 1911 was no doubt due only in part to the opening of the three new stations, and must be attributed largely to the improvement in registration which has been conspicuous, not only in the city, but throughout the Presidency. Increases due to this cause could not be expected

to continue indefinitely. Nevertheless, the absence of appreciable growth in the crime register in 1913 is unexpected, and is probably due to temporary causes, the nature of which is obscure.

- 3. The total number of cognizable and non-cognizable cases reported to the police and magistracy during the year was 60,861 as against 66,844 in 1912. The number of cognizable cases reported to the police was 40,492 against 46,752 in 1912. Of these, the great majority were under class VI, i. e., offences under special and local laws, such as the City of Bombay Police Act and the Prevention of Cruelty to Animals Act, and other petty offences. The number of cases reported under class VI fell from 38,894 to 32,497. This decline more than accounts for the decline in the totals of cases reported, and is attributed to a decrease of prosecutions under the heads "cocaine" and "hawkers." The decrease under "cocaine" is reported to be due in some measure to the prosecution and imprisonment of certain notable traffickers in the drug, and partly also to the fact that the officers of the Abkari Department have now been empowered to prosecute their own cases without reference to the police.
- 4. During the year, 40,492 cognizable cases were reported to the police, 39,810 were classified as true, and 35,225 resulted in conviction. The number of convictions under the Penal Code (classes I to V) was 3,639 as against 4,369 in 1912. The percentage of convictions to true cases was 9810 under class VI and 4778 in cases under the Penal Code. The latter percentage has shown a decided downward tendency for a number of years past, the number of convictions, however, varying but little. This state of affairs is not so satisfactory as might be wished.
- 5. The percentage of true cases of all classes which remained "undetected" rose from 5.96 to 8.32. The bulk of the increase is traced to cases of lurking house-trespass, theft, and criminal breach of trust, in the C Division, where the opening of two new police stations led to increased registration of complaints. Out of 24 cases of murder and attempt at murder, 9 were undetected, and 2 remained pending at the end of the year. As regards recovery of stolen property, although there was a slight increase in the absolute value of property recovered, the percentage of that recovered to that alleged to have been stolen fell from 39.52 to 33.72.

- 6. The number of officers and men punished was 397 as against 399, and the rewards granted fell from 1,499 to 1,127. It is observed that good service tickets were granted much less freely, and silver stripes more freely, than in the previous year. The percentage of literacy in the force continues to improve. The lectures and instruction in English which are being given to constables cannot fail to have beneficial results.
- 7. The number of recruits enlisted was 309 only against 386 in 1912. Great difficulty is reported to have been experienced in finding sufficient men to bring the force up to its sanctioned strength, and the Commissioner makes some interesting remarks on the tendencies and preferences of the various classes from which the force is recruited. Maráthás from Ratnágiri and Muhammadans both from the Bombay Presidency and from Northern India are the classes from which recruits are most readily obtained. Government consider it important, however, that the force should be recruited on as broad a basis as possible, and trust that the Commissioner will not relax his efforts to attract Gháti Maráthás and Upper India Hindus into the service. The schemes for the construction of new police stations, the lack of which latter is referred to by Mr. Edwardes as delaying the progress of re-organization, are being pushed forward as rapidly as possible.
- 8. The police had, as usual, much work of a miscellaneous nature to carry out. There were 540 motor-cars registered during the year, and 319 licenses and certificates of competency were issued to drivers of public motor vehicles. There were 338 accidents, of which 9 were fatal, caused by motor vehicles, as compared with 1,421, of which 46 were fatal, caused by all classes of vehicles. The arms census threw a large amount of extra work upon the police during the year.
- 9. A few of the statistics quoted in this resolution give, at first sight, a not altogether favourable impression of the work of the police for the year. Statistics can, however, be as misleading in police work as in any other subject. The returns of the year under review probably give a far more accurate account of existing crime than was given by the reports of some years back. If convictions under the Penal Code decreased in number in 1913, it is at least satisfactory that true crime, so far as can be judged, did not increase. In a review of the year's work it is impossible for Government to pass over the deplorable effects

which were caused by the misconduct of a commissioned officer of the force. Government are satisfied, however, that the City police force as a whole is in a sound state of efficiency, and continues to do good work. Their acknowledgments are due to the Commissioner of Police for this result.

Prisons.

ADMINISTRATION REPORT OF THE BOMBAY JAIL DEPARTMENT FOR THE YEAR 1913.—Foolscap folio, 20 pp. letter-press and 75 pp. statistical tables (Government Book Depôt, Bombay)—price 14 annas or 1s. 4d.

The report submitted by the Inspector-General of Prisons has been reviewed in the following Government Resolution, No. 5025, J. D., dated 9th July 1914:—

The daily average population of the jails in 1913 shows an increase, amounting to 11,437, as against 10,899 in 1912. This increase, however, appears to represent simply the cumulative effect of action taken in previous years. In other respects the jail statistics show a decline from the unusually high figures of 1912, a year which followed after a deficient monsoon and an inadequate rise of the Indus. The actual number of prisoners of all classes confined in 1913 was 103,861, showing a decrease of 5,598. Similarly, the annual number of convicts received into prisons and jails fell to 18,812 as compared with 20,186 in 1912 and 17,530 in 1911.

2. There was a satisfactory decline in the number of sentences of imprisonment for one month or less, the figures falling from 6,454 to 5,414. Almost the whole of this decline, however, is to be traced to Bombay City, the figures for the mofussil showing little improvement. A decrease in the number of such sentences, both in the case of first offenders and of habitual offenders, is much to be desired in the mofussil, and the attention of Magistrates should again be drawn to this point. It is well known that short terms of imprisonment tend to corrupt first offenders, and fail to deter habituals. In Bombay City the number of first offenders committed to jail in default of payment of fine was disproportionately high. A circular has recently been addressed by Government to the Presidency Magistrates on the subject, suggesting the freer use of the "first offenders" section of the Procedure Code.

- 3. The number of punishments increased in slightly less proportion than the daily average number of convicts subject to the control of the Department. Government have already taken due notice of the excess of floggings in the Ahmedabad and Yerávda Central Prisons.
- 4. Government agree with the Inspector-General of Prisons that it would be well if remands in the cases of under-trial juveniles and juvenile adults were curtailed, such prisoners being specially liable to contamination from being marched to and fro between the jail and the Court in company with hardened criminals. It is, no doubt, often difficult for the Courts to accord special treatment in this respect to juvenile offenders. But Government trust that Magistrates will bear this point in mind when occasion arises.
- 5. The vital statistics of the year are normal. Among the highest death-rates this year are those of the Common Prison and of the House of Correction, Bombay. This fact emphasises the need for the proposed new prison outside Bombay, at Andheri, the plans and estimates for which underwent revision in the course of the year, and the construction of which has been undertaken since the close of the year. The jail accommodation of the Presidency received the addition of a barrack for 64 prisoners in the Ahmedabad Central Jail.
- 6. The acknowledgments of Government are due to the Inspector-General and to the staff of the Department for their services during the year.

Public Health and Sanitation.

NOTE BY THE HONOURABLE MR. J. P. ORR; "HOW TO CHECK THE GROWTH OF UNSANITARY CONDITIONS IN BOMBAY CITY."—Foolscap folio, 35 pp. and 46 diagrams (Government Book Depôt, Bombay)—Price Rs. 8-4 or 12s. 6d.

Mr. J. P. Orr, C.S.I., I. C. S., as Chairman of the Bombay City Improvement Trust, is a recognized authority on housing problems. His note under review insists on the necessity of adopting measures to prevent the increase of congestion of buildings in all large and growing towns. In particular he discusses the building by-laws and regulations at present in force or contemplated by the various authorities in the cities of Bombay and Calcutta, and advocates the

adoption of the Bombay Improvement Trust's regulation, commonly known as 'the $63\frac{1}{2}$ ° rule,' in order that the provision of adequate open spaces around houses may be ensured. The actual operation of the $63\frac{1}{2}$ ° rule is fully explained, and the note is accompanied with a large number of illustrative diagrams.

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THE PAST, PRESENT AND FUTURE OF THE BOMBAY BACTERIOLOGICAL LABORATORY.—Royal 8vo, 23 pp. with 13 plates (Government Book Depôt, Bombay)—price 4 annas or 5d.

The following P. N., No. 6008, G. D., 30th July 1914, was issued on the publication of the pamphlet and adequately describes its contents:—

The Government of Bombay have just published an illustrated pamphlet entitled "The Past, Present and Future of the Bombay Bacteriological Laboratory." It describes the growth of the Plague Research Laboratory at Parel into the Provincial Bacteriological Laboratory, explains the many branches of its present activity, and indicates the directions in which its sphere of usefulness is likely soon to be extended. The pamphlet throughout is couched in language as untechnical as the subjects dealt with permit.

An important part of the Laboratory's present work is plague research. The pamphlet summarizes the latest expert knowledge of the disease itself and of the ways in which it may be combated, prevented and cured. The immense value of inoculation is proved by figures and facts, and a separate chapter is devoted to a detailed description of the manufacture of anti-plague vaccine, and the extraordinary precautions taken both to ensure that it leaves the Laboratory absolutely pure and to remove all chances of subsequent contamination.

The following chapter describes the other branches of the Laboratory's present work, and explains how its expert staff co-operates with the health officers of the municipality and with the hospitals, both of Bombay City and the mofussil. It also touches on the various branches of its research work on subjects other than plague, and on the educative functions which it already fulfils.

The pamphlet ends with a chapter dealing with the future of the Laboratory. The chief schemes mentioned are those for the establishment of a School of Tropical Medicine and of a Pasteur Institute in connection with the Laboratory.

The pamphlet is of a convenient size, is printed on art paper, and contains a number of illustrations. It can be obtained from the Government Book Depôt, Bombay, or any of the authorized agents for the sale of Government publications at the price of 4 annas.

Survey Settlement.

CHARACTER OF LAND TENURES AND SYSTEM OF SURVEY AND SETTLE-MENT IN THE BOMBAY PRESIDENCY, being No. DXXIV (new series) of the Selections from the Records of the Bombay Government.—Foolscap folio, 45 pp. (Government Book Depôt, Bombay)—price 6 annas or 7d.

This is a revised edition of the standard work on land tenures in the Bombay Presidency. It starts with a description of the antecedents and origins of the present "revenue survey," and explains the principles on which land was classified and assessed to revenue. In a historical sketch the development of the revenue system is traced, through the Survey and Settlement Act of 1865 and the Land Revenue Code of 1879, down to the introduction of a Record-of Rights in land and the modern rules for remission and suspension of land revenue in bad seasons.

Next follows a description of the hundred and one different tenures that still exist. The ordinary "survey tenure" is defined as "the right of occupancy of Government land continuable in perpetuity on payment of the Government demand and transferable by inheritance, sale, gift or mortgage without other restriction than the requirement to give notice to the authorities." From this tenure, and its variety created in 1901 and known as the restricted or non-transferable tenure, the publication turns successively to the varieties of tenure to be found in the Deccan, Gujarát and Konkan. The next subject dealt with is that of "inám tenures." Roughly speaking inám land is that of which Government has alienated the whole or part of the assessable land revenue. The following section deals with the land tenures and land revenue administration in the town and Island of Bombay, and the closing section with land tenures in Sind, a province which naturally contains considerable divergences from the system prevailing in the Presidency proper, though the underlying principles are maintained.

The last 20 pages contain public papers illustrating the growth and principles of the land revenue system.

PAPERS RELATING TO

- (1) THE REVISION SURVEY SETTLEMENT OF GUNI, BADIN AND TANDO BAGO TALUKAS OF THE HYDERABAD DISTRICT, being No. CCCCLXXXVIII (new series) of the Selections from the Records of the Government of Bombay.—Foolscap folio, 254 pp. and 7 maps (The Commissioner's Printing Press, Karáchi)—price Rs. 2-10-6.
- (2) THE REVISION SURVEY SETTLEMENT OF THE DERO MOHBAT TALUKA OF THE HYDERABAD DISTRICT, being Selection No. CCCCLXXXIX.—Foolscap folio, 87 pp. and 2 maps (The Commissioner's Printing Press, Karáchi)—price Re. 1-1-6.
- (3) THE ORIGINAL SURVEY SETTLEMENT OF THE VILLAGES OF KOTDA, KHABDA AND SALIA OF THE GODRA TALUKA OF THE PANCH MAHALS COLLECTORATE, being Selection No. DXXV.—Foolscap folio, 8 pp. (Government Book Depôt, Bombay)—price 2 annas or 2d.

The general system of survey settlement is described in the publication just reviewed, and a particular instance of a revision settlement has already been noticed in the *Quarterly* (No. 1, pages 15 and 16). It is therefore unnecessary to re-state general principles, and for details the student must be referred to the settlement reports themselves. It may be added that the villages with which Selection No. DXXV is concerned are inam villages which have now been brought under a survey settlement for the first time.

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PART II.

Agriculture.

SCARCITY IN THE SATARA DISTRICT.

P. N. No. 6394, R. D., 10th July 1914, runs as under:—

The conditions prevailing down to the close of April were described in Press Note No. 5454, dated 11th June 1914, and the Collector's report for the month of May shows that there has been little change. There has been no need to open relief works of any kind, but the number of persons in receipt of gratuitous relief has increased slightly from 800 to 826. During the month persons who had migrated began to return to their homes to prepare their lands for the coming season. Public health, with the exception of 42 deaths from cholera, has been normal.

- 2. Cattle were in fair condition, and no disease or starvation is reported. Grass to the amount of 637 bales from the Lonand depôt and 12 bales from the Koregaon depôt was issued to cultivators, and thereafter the remaining stock was transferred to Pandharpur, where grass was urgently needed, and the depôts were closed. Cultivators were first warned to obtain all the grass which they might need.
- 3. The total amount issued as loans for wells in the scarcity tract had reached the figure of Rs. 24,000 by the close of the month.
 - P. N. No. 7431, R. D., 10th August 1914, runs as under:—

The conditions prevailing down to the close of May were described in Press Note No. 6394, dated 10th July 1914. The Collector's report for the month of June shows that the district is regaining its normal appearance. Nearly all the persons who migrated in search of work have returned home and busied themselves in agriculture. The number of persons in receipt of gratuitous relief was 826 at the beginning and 784 at the close of the month, and such relief will, it is expected, soon prove unnecessary. Public health, with the exception of 58 deaths from cholera in the Mán táluka, was normal.

Cattle were in fair condition, and no disease or starvation is reported. The grass depôt at Lonand has been closed.

The total amount issued as loans for wells in the scarcity tract amounted to about Rs. 26,000 by the close of the month.

P. N. No. 8281, R. D., 3rd September 1914, runs as follows:

The Collector's report for the month of July shows that practically all those who migrated in search of work have returned to the district. Ample employment for all who needed it was available on the Nira Right Bank Canal works. The number of persons in receipt of gratuitous relief fell from 784 to 696. Public health was normal. Cattle were in fair condition, and green grass is available for grazing. The total amount issued as loans for land improvements including wells in the scarcity tract amounted to upwards of Rs. 27,000 by the close of the month.

SCARCITY IN THE SHOLAPUR DISTRICT.

P. N. No. 6654, R. D., 18th July 1914, runs as follows:—

Press Note No. 5498, dated 12th June 1914, described the conditions prevailing during March and April. The Collector's report for May shows that there have been no unexpected developments.

No new kitchens were opened during the month, and the number of inmates in the 21 kitchens already open fell from 720 to 637. The number of indigent persons in receipt of grain dole also fell slightly from 130 to 128. Inferior village servants to the number of 1,635 received a cash dole of one anna a day, and Rs. 2,000 were sanctioned for the payment of additional remuneration to pátils and kulkarnis. One hundred and twenty such officers have received aid. Public health has on the whole been well maintained, except for the fact that 71 persons died from cholera in the Málsiras táluka and 60 from cholera and dysentery in the Sangola táluka. Nearly 20,000 persons who had emigrated in search of work returned during the month in order to prepare their fields for the coming season.

The prices of kadbi in the Sholápur sub-division remained stationary at Rs. 30 to Rs. 40 per 1,000 bundles, but rose from Rs. 45 to Rs. 60 in the Pandharpur táluka and from Rs. 70 to Rs. 95 in the Málsiras táluka. Grass to the amount of $14\frac{1}{8}$ lákhs of pounds was sold during the month. The total importations of Government grass during the months of May and June are estimated to reach the figure of 35 lákhs, and no more will be needed, provided that the season is normal. The importation of grass is reported to have been of incalculable benefit to the district, not only directly, but, probably to an even greater extent indirectly, by keeping down the price of fodder.

In addition to the Rs. 40,000 advanced in the two preceding months Rs. 8,000 more were advanced as takávi for deepening wells and improving the water-supply. Rs. 47,000 were also given out under the Agriculturists' Loans Act, chiefly for fodder, but partly for the purchase of cattle and seed.

P. N. No. 7618, R. D., 15th August 1914, runs as follows:—

Press Note No. 6654, dated 18th July 1914, described the conditions prevailing down to the close of May. The Collector's report for June shows that it may soon be practicable to discard relief measures.

During the month the number of persons in receipt of relief in kitchens decreased from 637 to 631, and grain dole was given to 121 indigents as against 128. The kitchens were closed on 1st July, and all who still needed assistance were placed on grain dole. Inferior village servants to the number of 1,632 received a cash dole of one anna a day, and 115 pátils and 5 kulkarnis were awarded increased remuneration. Mortality was below normal in all tálukás except Sángola and Málsiras. In the former there were 47 deaths from cholera, and in the latter 51 deaths from cholera and 81 from fever. Agricultural operations were in full swing at the close of the month; nearly 41,000 men who had emigrated in search of work had returned, and the number of labourers on the Nira Right Bank Canal works and the Bhima bridge work at Pandharpur has decreased by more than a half to 3,450.

The prices of kadbi remained stationary, and the amount of grass sold advanced from 143 to 15 lákhs of pounds. The pressure on the kadbi supply is

lessening now that good rain has fallen and grazing is available. Agricultural operations have been forwarded by the grant of Rs. 68,000 as takávi for the purchase of seed, cattle and fodder, and Rs. 1,500 were advanced under the Land Improvement Loans Act in addition to the Rs. 48,000 advanced during the three preceding months.

Private charity was active; the Táluka Sub-committees collected Rs. 1,164 and the District Famine Relief Committee Rs. 7,700 during the month. The Táluka Sub-committees spent Rs. 2,000, and the District Committee resolved to spend up to Rs. 4,000 in buying bullocks and lending them to deserving cultivators for ploughing. They have decided to concentrate all their efforts for the present in Málsiras táluka, which has suffered most heavily on account of three successive bad seasons.

P. N. No. 8828, R. D., 18th September 1914, runs as follows: ---

The Collector's report for the month of July shows that satisfactory rain has fallen and that the kharif crops are in good condition. Practically all the people who had emigrated in search of work have now returned, and those who cannot get employment in the fields find ample work on the Nira Right Bank Canal and the Bhima bridge at Pandharpur. It may be added that the grant of gratuitous relief is now deemed unnecessary in both the Sholapur and Satara districts, and has been discontinued from 1st September in the former and 29th August in the latter.

Arrangements were made in the Sholapur district for extending timely relief to such persons and cattle as returned in need of assistance. No less than Rs. 56,000 were advanced during the month for the purchase of seed, cattle and fodder over and above the Rs. 68,000 previously advanced.

The mortality during the month was below normal in all talukas except Sangola and Malsiras. The excess in the former was due to cholera and in the latter to cholera (85 deaths) and fever (64 deaths).

The condition of cattle has much improved, for though the price of *kadbi* continued to rule high, there was an abundance of green grass available for grazing. Only 1 lakhs of pounds of grass were sold in July as compared with

15 lákhs in June. All the grass depôts but two have been closed by the end of July, and the Collector hoped to be able to close the remaining two at an early date.

As the conditions have become normal no further press notes on the scarcity will be issued.

FODDER CONCESSION RATES.

P. N. No. 7050, R. D., 29th July 1914, states as under:—

Press Note No. 1716, Revenue Department, dated 21st February 1914, announced that the Government of India had sanctioned the retention up to August of concession rates for consignments of grass to stations between Indi Road and Almati on the Gadag-Hotgi section of the Southern Marátha Railway. It is now notified that as the shortage of fodder has disappeared owing to satisfactory rain, the concession will be withdrawn with effect from 1st August 1914.

- P. N. No. 7857, R. D., 25th August 1914, notified that the Government of India have decided to withdraw, with effect from 24th August 1914, the concession rates for consignments of fodder booked to stations in Ajmer-Merwára as they are no longer justified by circumstances.
- P. N. No. 8928, R. D., 22nd September 1914, notified for general information that the Government of India have decided to withdraw the concession rates for all consignments of fodder booked to stations in the Punjab. These orders have effect from 17th September 1914.

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PROPOSED CESS FOR THE ORGANIZATION OF AGRICULTURE.

P. N. No. 7239, R. D., 4th August 1914, gives particulars of an important proposal:—

At the Agricultural Conference held at Poona in September 1913, Mr. W. W. Smart, I. C. S., then Director of Agriculture, read a paper entitled "The Organization of Agriculture by the Department of Agriculture in Ireland and its application to the conditions of the Bombay Presidency." He explained that the work was started in 1900 after a preliminary survey of the situation. The

conclusions arrived at after this survey were (1) that owing to the backwardness of the people and the aversion of the small land-owner to leave his land, a permanent and comprehensive scheme of agricultural education in the widest sense of the term was necessary, (2) that as far as practicable the Department should devote a large part of its funds as an endowment to aid local authorities in the development of agriculture, and (3) that the Department should guide the local authorities by laying down uniform lines of policy in order to gain co-ordina-Accordingly an Act was passed empowering the 33 County Councils at their option to levy a rate on agricultural holdings. It is worthy of note that though the levy was optional, yet since the second year after the passing of the Act every Council in Ireland has levied the rate. To the sum thus collected the Department adds an equal or in some cases rather greater sum. The resulting fund is administered by a committee appointed by each County Council from its own members and other persons. These committees consult freely with the Agricultural Department, and if any dispute arises as to the programme to be carried out, the committees can claim a reference to the Council of Agriculture, a body specially appointed for this purpose, and one to which the Department must answer if it ignores public opinion.

The work to be performed by the County Committees is limited by certain schemes which are drawn up for their guidance by the Department. They may adopt any one or more of them, but they cannot spend money outside them. These schemes cover a wide ground, and comprise improvements in the breeds of cattle and other animals, itinerant instruction in agricultural subjects, prizes for cottages and farms, subsidies to live-stock shows, field experiments and demonstrations with manure and seeds, instruction in the keeping and marketing of poultry, and instruction in bee-keeping and home butter-making.

2. The scheme has worked excellently in Ireland, and Mr. Smart, having demonstrated that the conditions in that country are in many respects very similar to those of the Bombay Presidency, suggested that a similar scheme should be adopted in this Presidency. His proposals were referred to a strong subcommittee, and this sub-committee's recommendations were unanimously accepted by the Conference after they had been thoroughly discussed. The recommendations are briefly as follows. A law should be passed empowering district local boards to raise at their option an agricultural rate of one pie per rupee on the

land revenue every year, or, as an alternative, a rate of one anna per rupee not more than once in 12 years. By the same law Government should be bound to contribute a sum equal to the proceeds of the rate. The joint fund thus formed should be handed over to an Agricultural Committee constituted as follows:—

One member to be elected by each taluka local board from its members, a number equal to the total number of taluka representatives to be elected by the district local board from its members and an equal number to be nominated by the Collector from persons specially interested in agriculture.

The Agricultural Committee so formed should expend the joint fund on schemes approved by the Agricultural Department, but otherwise should possess exclusive control of the fund. Lastly, when 10 districts out of the 19 in the Presidency proper have formed committees, a Council of Agriculture should be formed after the Irish model.

3. The Governor in Council recognizes that the scheme if adopted would provide an unique organization for the spread of agricultural education and improvement. Its chief advantage lies in the fact that it seeks to enlist the co-operation of the people. No increase in the staff of the Agricultural Department could achieve the same results, because it would be an attempt to solve the problem from without instead of from within. Similarly, agricultural associations have proved to be unable to carry out any systematic work owing to lack of staff and funds. But at the same time it must be fully realized that the scheme involves an increase in taxation. The increase is not large, being only 12th of the existing local fund cess, which in its turn is only 1 th of the land revenue assessment. Signs are not wanting that money comes in freely when solicited for objects of a strong local interest. One speaker at the Conference gave examples of persons coming forward in the East Khandesh district to subscribe 2, 4 and even 8 annas for each rupee of land revenue for local educational purposes, and Rs. 40,000 were actually subscribed in the Chopda táluka alone. representations have already been received from cultivators in the Thána and Kolába districts, expressing their willingness to pay 13 instead of 12 pies per rupee of land revenue as local fund cess if Mr. Smart's scheme is put into practice. Nevertheless, the Governor in Council would hesitate to empower local

Public Works Department.

Section B .- Public Works Establishment.

corresponding to those sanctioned for the European members of the Department should be considered; and he also directed that Civil Engineers were no longer to be designated "uncovenanted."

- A Departmental Committee appointed to report on the whole question.

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 Beginners in the Department, was appointed to report on the whole question.
 - 17. After considering the report of the Committee, the Government of India again addressed the Secretary of State in their despatch No. 15 P. W., dated April 21, 1884.
- 18. After briefly recapitulating the correspondence which had passed, and reporting the appointment of the Committee, the Government of India proceeded to reconsider the proposals which had before been made, and which had received the approval of the Secretary of State, for a reduction of the strength of the Department. The basis from which they started was the actual strength of the Department as it stood on January 1, 1884, viz.:—

Strength of the Department on January 1, 1884.

			:	-	Royal Engineers.	Civil Engineers.	Staff Corps,	Total.
On deputation out of the Departm In Military Works Branch In Civil Works Branch	ent :	•	•.	•	11 68 134	29 747	1 6 17	41 74 898
		Тота	L.	•	213	776	24	1,013

- 19. At that date the nominal sanctioned strength was 954, or excluding the Military Works Branch 880, officers. The Excess of actual over sanctioned actual strength was therefore 125, and the nominal sanctioned strength 66, in excess of the strength of 888 sanctioned for the future in the Secretary of State's despatch above summarised.
- 20. For the following reasons, however, it seemed doubtful to the Gov-Practicability of reductions doubt. ernment of India whether the proposed reduction of strength was practicable.

In the first place, they thought that sufficient allowance had not been made for the number of officers on deputation to Native and Foreign States and to Railway Companies, &c.

Secondly.—The calculation only made an allowance of ten per cent. for absentees, which was quite insufficient. It was considered that the allowance should be increased to fifteen per cent.

Thirdly.—There was an important and growing drain on the staff available for new works, to supply the Revenue Establishments needed for the main-

undue influence or otherwise, and, secondly, with a view to taking, if the Court in its discretion thinks fit, an account between such parties in the manner hereinafter provided.

- (2) When the amount of the claim is admitted and the Court for reasons to be recorded by it in writing believes that such admission is true and is made by the debtor with a full knowledge of his legal rights as against the creditor the Court shall not be bound to enquire, but may do so if it thinks fit. In other cases in which the amount of the claim is admitted the Court shall be bound to inquire as aforesaid.
- (3) If the amount of the creditor's claim is disputed, it shall enquire as far as possible into the history and merits of the case out of which the suit has arisen from the commencement of the transactions between the parties or the persons, if any, through whom they claim.
- (4) In any suit of the description mentioned in clauses (a), (b) and (c) of section 6 the plaintiff shall in the first instance defray the costs necessary for procuring the attendance of the defendant, subject to any order as to the party by whom such costs are to be borne that the Court may pass in finally deciding the suit.
- 10. (1) When the Court, in inquiring into the history and merits of a case under section 9, decides to take an account between the parties it may —

notwithstanding any agreement between the parties or the persons, if any, through whom they claim, as to allowing compound interest or setting off the profits of the mortgaged property without an account in lieu of interest, or otherwise determining the manner of taking the account,

and notwithstanding any statement or settlement of account or any contract purporting to close previous dealings and create a new obligation,

open the account between the parties from the commencement of the transactions and take that account according to the following rules (that is to say):—

(a) separate accounts of principal and interest shall be taken:

BLUE BOOK QUARTERLY.

- (4) whether a sub-soil survey is required; and
- (5) generally what can be done to facilitate the supply of water from artesian sources, both for agricultural and sanitary purposes.

The Committee are requested to arrange for the submission of their report before November 30th, 1914.

4 4 K

EARLY COTTON (DECCAN DISTRICTS ONLY): PRELIMINARY MEMORANDUM.

This memorandum, issued by the Director of Agriculture on 10th August 1914 shows that the area sown up to 1st August is about 10 per cent. over last year's figure and 32 per cent. over the decennial average. The crop is on the whole doing well.

GROUNDNUT: PRELIMINARY MEMORANDUM.

This memorandum, issued on 15th August 1914, shows that the area sown up to 1st August is about 13 per cent. below the corresponding area last year but about double the decennial average. The sowing was delayed in the south owing to the deficiency of the early rains. The crop is doing well everywhere.

SESAMUM: PRELIMINARY MEMORANDUM.

This memorandum was issued on 15th August and shows that the area sown up to 1st August is about 20 per cent. below last year's figure and 14 per cent. below the decennial average. The information to hand, however, is incomplete, and sowing is still unfinished. The crop is doing fairly well.

Commerce and Industry

LIGHTS ON THE SIND COAST

P. N. No. 750, M. D., 13th August 1914, runs as follows:-

The question of providing additional lights for the Sind Coast has been engaging the attention of the Government of Bombay for several years past.

Its decision could not but be delayed owing to the necessity of consulting a large number of official and non-official bodies, such as the naval authorities, shipping companies, chambers of commerce and even the English Board of Trade. In Marine Department Press Note No. 372, dated the 29th May 1912, Government were able to announce that, after carefully weighing all the opinions elicited, it had been held desirable to instal a first class light on Cape Monze and also a light ship, which could maintain its position all the year round, off the Khai mouth of the Indus. It was also indicated that legislative sanction would be sought for the levy of dues for the upkeep of these lights.

- 2. His Excellency the Governor in Council is now pleased to be able to announce that the Cape Monze lighthouse has been completed and that the light was exhibited on the 1st June 1914, the advertised date. The cost of this work amounted to nearly 1\frac{3}{4} lakh of rupees.
- 3. The Governor in Council desires to commend the services rendered by the local staff of the Public Works Department, and to thank the Karáchi Port Trustees and Commander N. F. J. Wilson, R. I. M., Port Officer of Karáchi, for their valuable assistance, without which it is doubtful whether this important work would have been completed by the due date.
- 4. The construction of the light ship for the Khai mouth of the Indus is making progress. The estimated cost of the ship and light amounts to nearly 2½ lákhs of rupees. There was every reason to hope that this light would be exhibited before the break of the 1915 monsoon, but in view of the outbreak of war this may prove impossible.
- 5. In addition to these two important lights it has been decided to exhibit one, and possibly more than one, lesser lights for the especial benefit of coasting craft, the great majority of which are of course native craft. The exact location of the light or lights will be decided in consultation with the masters of native craft. The original proposals contemplated a light costing Rs. 35,000 and involving maintenance charges of Rs. 4,180 per annum. As, however, enquiries have shewn that it is probably practicable to erect unattended lights on screw-piles, further out than a lighthouse could be put, at an initial cost of Rs. 20,000 and an annual maintenance charge of Rs. 200 only, it is hoped that in the near future two such lights may be erected in place of the one more expensive light.

6. It has already been mentioned that the initial cost of the Cape Monze lighthouse amounted to nearly 13 lákh and that of the light ship is estimated to reach nearly 2½ lákhs. The annual expenses in connection with the former are estimated at Rs. 11,000 and in connection with the latter at Rs. 20,466. these sums must be added the eventual initial and recurring cost of the additional light or lights, and interest and sinking fund charges on the total. meet these charges, a Bill has been drafted on the lines of the Madras Coast Lights Act (IX of 1904) to legalise the levy of dues on vessels of the burden of 45 tons and upwards on arriving at, or clearing out of, such ports in Sind as may be notified by the Commissioner in Sind. The minimum tonnage of 45 has been fixed so as to exempt a number of vessels which ply between the mouth of the Indus and Karáchi in the fuel trade. The maximum rate leviable will be 9 pies per ton, sailing vessels being liable to not more than half that rate. The maximum rate, however, will not necessarily be levied, and there is reason to believe that a lower rate, such as 7 pies, may prove adequate. Any vessel which has paid coastlight dues will be exempted from further payment of such dues for a period of thirty days from the date of such payment. The Bill, which has received the general assent of the Government of India, will probably be introduced into the Legislative Council in December next. As the various bodies, companies and persons interested have for the most part expressed their willingness to pay dues in return for the facilities accruing to them from the new lights, it may be expected that the Bill will become law with the minimum of delay.

PROHIBITION OF THE IMPORTATION OF HIDES, ETC., INTO ROUMANIA.

P. N. No. 7933, R. D., 26th August 1914, notified for the information of all concerned that the Government of Roumania has prohibited the importation of hides, wool, hair, horns, hoofs and bones shipped in a raw state from any port of the Continent of Asia and Ceylon, in order to prevent the spread to that country of cattle diseases prevalent in India.

THE EXPORT OF HIDES.

P. N. No. 8612, R. D., 14th September 1914, runs as under:-

It is notified for general information that the Government of India's prohibition of the export of tanned hides has been relaxed until further orders in the case of exports to the United Kingdom, France and Russia, where there is no reason to suspect possible diversion to other countries. It is also notified that the prohibition was never intended to apply to the export of raw hides. It is believed that butchers have in some cases raised the price of meat owing to the belief that no hides of any sort could be exported. The Government of Bombay trust that the removal of this misapprehension will tend to reduce the prices of meat to their normal level.

Co-operation

A CO-OPERATIVE MANUAL.

P. N. No. 6245, R. D., 6th July 1914, calls attention to the publication of the *Co-operative Manual*, a notice of which can be found in the *Blue Book Quarterly*, No. 2, pp. 49 and 50.

THE SPREAD OF CO-OPERATION.

P. N. No. 8120, R. D., 31st August 1914, runs as under:—

Since the passing of the new Co-operative Societies Act in 1912, which made it possible for co-operative societies to engage in activities other than those denoted by co-operative credit, there has been a steady tendency in the Bombay Presidency for co-operative societies to engage in activities of an agricultural nature. A number of credit societies now keep agricultural implements for the use of their members, and some societies have been specially formed for definite purposes of agricultural co-operation such as the supply of manure. In the Thána district, in particular, a number of such societies have come or are coming into existence. Two co-operative dairy societies have already been registered and several are about to start; a cattle-breeding society is now in formation; a successful manure supply society has begun work at Kelva Máhim, and with a capital of Rs. 8,000 was last year able to supply its members with castor-cake at Rs. 16 a khandi, when the local price was Rs. 20. Two more such societies are being started and there is a demand for still more. Again, an egg-selling society

has been initiated by Mahomedans at Panvel, and their egg-boxes and egg-testing apparatus have to be purchased. A society to buy rice-hulling machinery has also been registered, and other societies of a like nature are in contemplation. In addition to all this it seems likely that owing to new municipal regulations made in Bombay City a large number of "gaolis" will leave the city and settle in suitable localities outside municipal limits. If this proves to be the case, there will undoubtedly be room for a number of co-operative societies to finance them and organize their operations in supplying milk to the Bombay market.

2. Now it is obvious that this extension of co-operation needs careful and expert assistance if it is to go forward on correct lines, and this assistance is specially needed by young societies of a special nature in their early days. The Registrar of Co-operative Societies has therefore proposed, and the Director of Agriculture has warmly seconded the proposal, that a special temporary appointment should be created for a period of six months, and that its incumbent should deal with this special work. Such an officer must have a good practical acquaintance both with the co-operative movement and with the agricultural operations involved. Mr. V. H. Gonehalli, Extra Deputy Director of Agriculture for the Konkan, possesses both these qualities, and has already shewn considerable aptitude and energy in fostering the co-operative spirit. Government have therefore appointed him Assistant Registrar of Co-operative Societies for a period of six months, which will begin in October next.

Criminal and Civil Justice.

THE HONORARY PRESIDENCY MAGISTRATES; TRIENNIAL REPORT.

G. R. No. 4948, J. D., 6th July 1914, made public the Chief Presidency Magistrate's report on the working of the Benches of Honorary Presidency Magistrates, Bombay, for the years 1911, 1912 and 1913. The report shows that the total number of cases tried amounted to 123,126, in which 132,628 persons were implicated. Of the persons convicted, 3,012 only were imprisoned, 97 whipped and 4 sent to the David Sassoon Industrial and Reformatory Institution. The punishment ordinarily inflicted was that of fining. Fines were imposed to the amount of Rs. 2,40,907; of which Rs. 2,27,098 were recovered, Rs. 3,708

were paid as compensation, and of the Rs. 2,23,390 remaining, Rs. 1,67,834 were credited to Government and Rs. 55,556 to the Bombay Society for the Prevention of Cruelty to Animals.

The report contains a recommendation for the amendment of the Act for the Prevention of Cruelty to Animals in such a manner as to afford better protection to animals pronounced unfit for work and incurable. The Chief Presidency Magistrate points out that, though there may not be much danger of the owners of such animals working them again in Bombay, there is always the likelihood that they will be sold and worked up-country. He therefore proposes that a Court should be empowered by law to order the destruction of any animal pronounced unfit for work and incurable, or in its discretion to order the owner to enter into a bond that the animal shall not be worked, but shall be well cared for and produced for inspection at such intervals as the Court may direct.

The Government resolution reviewing the report runs as follows:-

- "The annual reports on the working of the Benches of Honorary Presidency Magistrates were abolished in 1911 in favour of triennial reports, and the report now before Government covers the triennium 1911 to 1913, inclusive.
- 2. The number of cases tried by the Benches during the triennium averaged over 40,000 per annum. In no case was the sentence of a Bench reversed or altered by the High Court in revision, except in one instance upon the application of the Bench itself.
- 3. The Governor in Council is glad to learn that the Honorary Presidency Magistrates, with few exceptions, were careful to arrange for the services of a substitute, or sent timely intimation to the clerk, when unable to attend Court, and that there were no more than six occasions during the triennium upon which a Court was prevented from being held by want of a quorum.
- 4. The work of the Honorary Presidency Magistrates, who perform a substantial service to the public at much sacrifice of time and convenience, is warmly appreciated by His Excellency in Council.
- 5. The suggestion of the Chief Presidency Magistrate for the amendment of the Prevention of Cruelty to Animals Act will be dealt with separately."

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Education.

SCIENCE TEACHING IN SECONDARY SCHOOLS.

P. N. No. 2204, Ed. D., 17th July 1914, runs as follows:—

In December, 1912, Government sanctioned a revised science curriculum for secondary schools, and directed that it should come into effect in November 1914. Its introduction into Government high schools involves the preparation of text-books, the purchase of apparatus, the provision of laboratories and the training of teachers. The steps taken towards supplying these needs are detailed below.

The text-books are being prepared by Mr. P. Wren of the Indian Educational Service, who has himself taught school science and has had previous experience in the writing of school books. His drafts are submitted to a number of experts before receiving final sanction. In all, seven readers will be required, one for each standard, together with a teacher's hand-book for each. Several of the text-books have already been published, and the remainder are in active preparation. In addition to this the Inspector of Science Teaching is preparing some special exercise books in which the pupils will record their observations and experiments, and which will be sent to him periodically for inspection.

Model indents for the apparatus necessary for physics and chemistry have been prepared and circulated, and in most cases the apparatus has already been ordered. Government have allotted a sum of Rs. 66,760 to defray the cost.

The present science rooms in the high schools are for the most part unsuited for the teaching required by the new course, as they are not designed for individual work on the part of the pupils. Hence the Inspector of Science Teaching has designed a type of school laboratory, and plans and estimates are in course of preparation. It is hoped that work will be begun in many cases during the current year. In the meantime temporary arrangements are being made for improving the present rooms sufficiently to enable the course to be taught, and for this purpose Government have sanctioned the expenditure of Rs. 11,054.

Every Government high school already possesses a special teacher for science. When the new course is fully developed, certain schools will probably

require to have the staff strengthened, either because of the number of boys working at mechanics, physics and chemistry in the upper standards, or because of the class teachers of the lower standards not proving competent to undertake the simple nature study prescribed. The strengthening of the staff will be considered in due course. Even the present science teachers are perhaps not fully qualified to teach the new course, because they themselves, though graduates, have had comparatively little experience of practical laboratory work. The Inspector of Science Teaching therefore intends to hold a training class for science teachers between November 1914 and March 1915. Each class will meet for a full fortnight and be put through selected experiments, the discipline of laboratory routine being explained at the same time. It is believed that by this method an efficient body of science teachers for schools will be obtained.

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THE NORMAL CLASS AT THE COLLEGE OF ENGINEERING.

P. N. No. 2258, Ed. D., 21st July 1914, runs as follows:-

In February, 1909, a Normal Class was established at the College of Science, now called the College of Engineering, Poona, as a tentative measure, for a period The main object of the experiment was to train selected students, who had passed through the three years' course at the College, as teachers for technical schools, and, by thus furnishing these institutions with properly trained teachers, to do away with the necessity of employing in that capacity men who are only workmen of a rather superior type and who, almost without exception, have never made a study of scientific methods and principles and of their application to any industry or profession. Since the institution of the class six students have been selected annually and have received an additional (i.e., fourth) year's training in the Normal Class of the College and a further year's training in an approved practical workshop in Bombay. During the additional year at College each student has received a scholarship of Rs. 40 per mensem, and during the year in Bombay a monthly stipend of Rs. 25, the decrease in the second year being due to the fact that wages are earned for practical work done in the workshops.

2. Shortly before the expiry of the five years' period, Government received a report on the experiment from the Director of Public Instruction, who, besides

giving his own views, forwarded those of Mr. W. J. Ingham, the Instructor of the Normal Class, Mr. N. B. Macmillan, Professor of Mechanical Engineering, and Mr. H. N. Allen, Principal of the College. All these officers hold that the class has been highly successful. Out of the 18 students who have passed through the class, one is already earning Rs. 150 rising to Rs. 200 a month, one Rs. 150, one Rs. 130, one Rs. 100, two Rs. 80, one Rs. 75 rising to Rs. 100, three Rs. 75, one Rs. 60, and seven, who at the time of report were still serving their apprenticeship in shops, from Rs. 30 to Rs. 60. The Director, however, remarks that the class has been successful only in the sense that most of the pupils who have passed through it have obtained a good start in life and are doing well, and he calls attention to the fact that only two of them have found employment as teachers, and one of these only temporarily, so that, so far as the principal ostensible object of the class is concerned, the designation of Normal Class has proved rather a misnomer. In this connection it may, however, be observed that even at the time of the establishment of the class it was noticed that the time which it was proposed to devote to instruction in methods of teaching was only a fourth of the total of the proposed hours of instruction, and that it would be more proper to describe the class as an advanced technical or rather technico-normal class. It was also anticipated that places would not be found for more than two of the six men turned out yearly, and it was practically recognized that the class would in reality be a part of the general provision made by Government for the encouragement of technical education in the Presidency. The actual experience . of the quinquennium during which the class was held shows, however, that its usefulness in the matter of providing technical schools with good teachers has fallen short of even these modest expectations. It is explained that this result is due to the fact that the local bodies which control technical and industrial institutions have a tendency to fill vacancies with their own nominees without reference to the Educational Department. But Government have recently suggested to the newly formed Committee of Direction for Technical Education, in whom the control of the lesser technical institutions of the Presidency is now vested, that they should insist on the appointments in technical schools being made with due regard to the available supply of specially qualified men, and it may therefore be expected that a greater number of such appointments will in future fall to men trained in the Normal Class.

3. With regard to the question of the retention of the class, while all are united in desiring to see the experiment continued, there is some divergence of opinion with regard to the form which it should in future take.

Professor Macmillan considers that the fault of much of the educational work in India is that a proper ground-work is not established, it being either too indefinite or stopping just short of a sufficiently high and firm starting level, and that, in the present case, the three years' course of the workshop classes at the College of Engineering stops short of fitting a boy with the necessary practical experience to make him at once useful to an employer and therefore self-support-He further observes that, with another year's training in the College workshops as a student of the Normal Class, a boy is better able to benefit by a term of apprenticeship in a large workshop, more especially because during this fourth year's course his initiative and sense of responsibility are developed in a way that it is not possible either in the previous three years in the College workshops or even in the fourth year if it is spent in an apprenticeship in an outside commercial workshop where little trouble is taken to teach the youth his work. In other words, the Normal Class with its extra year of instruction in the College workshops provides the boys with the necessary solid basis from which real progress can begin, so that when, on the completion of their fourth year, the boys enter on an apprenticeship in a commercial workshop, they are well able to fend for themselves. It is mainly for these reasons that Professor Macmillan has recommended the continuance of the Normal Class.

4. On the other hand, Principal Allen observes that although the cleverest students are yearly selected for the Normal Class, a number of those who have undergone only the ordinary three years' course in the College workshop classes and who do not therefore possess either the initial or the subsequent advantages of the former, are nevertheless, after a couple of years spent in works, doing very well. In this connection he invites attention to the recommendation contained in the report of Colonel Atkinson and Mr. Dawson on the best methods of bringing technical institutions into closer touch and more practical relations with the employers of labour in India, namely, that the courses in mechanical and electrical engineering should include a term of two years' apprenticeship in works. Having regard to these considerations he is disposed to favour a prolongation of the period of the apprenticeship rather than of the period of instruction in the College

workshops as recommended by Mr. Macmillan. He accordingly proposes that, as a means of applying the test of actual experience to the relative merits of the two alternative systems, side by side with the continuation of the Normal Class with its four-year course of instruction followed by one year's apprenticeship, the experiment should be instituted of apprenticing in recognized outside workshops, for a period of two years, six of the third-year students of the College workshop of approximately the same capacity as those admitted to the Normal Class.

- The Director of Public Instruction recommends that the Normal Class should be continued for some time longer, subject to the experiment proposed by Principal Allen, and Government have accepted his recommendation, and sanctioned the continuance of the class for a second period of five years. It is, however, held by all the officers concerned that the scholarships granted hitherto have been too large, and tend to give a boy an exaggerated idea of the value of his services, so that when, at the commencement of his professional career, he is offered the usual low rate of pay given by private firms to beginners, he is disappointed and dissatisfied. It has accordingly been decided that the six boys who put in their first year in the Normal Class shall receive scholarships of Rs. 20 per mensem, and the other six boys, who go straight to a workshop after their three years at College, monthly stipends of Rs. 15. This differentiation is made because the former will be able to earn nothing when studying in the Normal Class, while the latter will earn some remuneration in the Bombay workshops. During the second year both sets of boys will be working in Bombay with higher qualifications, and will therefore receive stipends of Rs. 10 only. In this way it will be possible to double the output of trained men without incurring additional expenditure.
- 6. It should be added that the Director of Public Instruction has also considered the opinion expressed in connection with the recommendation contained in the report of Colonel Atkinson and Mr. Dawson that the present term of one year's apprenticeship in workshops prescribed for students of the Normal Class should be extended, in the case of those who desire to become teachers, to a minimum of three years. The Director has come to the conclusion that, in view of the very small number who actually take up teaching, it is not necessary for the present to modify the conditions. He also remarks that in actual practice almost all of the past students continue to

serve in works for more than one year, having no other means of livelihood. Principal Allen and Professor Macmillan are of opinion that for teachers in ordinary elementary manual training schools one year of training in outside workshops is probably sufficient; that for teachers in schools possessing an engineering workshop two years should in general be enough; while for superintendents of such schools a period of three years or even more is desirable. Principal Allen also urges that every endeavour should be made to prevail upon the authorities who appoint teachers and superintendents of technical schools to insist on these qualifications. Government have accordingly desired the Committee of Direction for Technical Education to give effect to this recommendation and the principles on which it is based when exercising their power of requiring the appointment of properly qualified teachers in technical schools which receive Government grants-in-aid.

THE TRAINING OF SECONDARY TEACHERS.

P. N. No. 2363, Ed. D., 27th July 1914, runs as under:—

For some time past the Governor in Council has been anxiously considering how the out-turn of trained teachers for secondary schools can best be increased. Hitherto the only source of supply has been the Secondary Training College at Bombay. The Director of Public Instruction has pointed out that when it was established it was designed to train 34 men, 17 probationary teachers for Government schools, 5 teachers for aided schools and the Educational Departments of Native States, and 12 masters from Government schools in permanent employment. Out of the 34 places, 29 were thus reserved for the Educational Department, though it appears that, owing to the number of permanent masters in Government schools available for training being very small in comparison with the number of probationers waiting for training, as many as 27 probationers for Government schools were sent to the college in 1913 as against only 2 permanent employés of the Department. The Director remarks, however, that no account seems to have been taken of the fact that trained men are also required for the posts of Assistant Deputy Educational Inspectors and for appointments in the vernacular training colleges, and adds that, if these requirements are taken into consideration, the Department is in need of more men than the number at present allotted to it.

- 2. It appears that without additional staff and buildings it is impossible to train more than the present number of pupils. Government have, however, sanctioned a scheme involving a non-recurring expenditure of, roughly, Rs. 50,000 and a recurring expenditure of Rs. 5,750 whereby it will eventually be possible to raise the number to 40. The scheme includes the establishment of two special practising classes, admission to which will be free in order to induce boys to join them, and the provision of a demonstration theatre together with a room to accommodate the educational library and museum at present located in the Elphinstone Middle School. Government fully realise that while the changes at the Bombay College will undoubtedly make for greater efficiency of training, they will not increase the output of trained teachers to the extent which the demand for such men indicates as necessary. They therefore deem it desirable to consider the feasibility of establishing two new secondary training colleges, one for the Presidency proper and the other for Sind, and have asked the Director to submit concrete proposals for their consideration.
- It is obvious that, when the Bombay Training College is enlarged and the two new colleges are established, a much greater number of trained teachers will be available for employ in aided schools than at present. But quality is at least as important as quantity, and it is essential that good men should be attracted to the training colleges with a view to obtaining employment in aided schools. It is believed that at present the best type of men do not elect to adopt the honourable profession of teaching in non-Government institutions because its rewards are inadequate and because reasonable security of tenure is seldom guaranteed. Government greatly desire to see the employment of trained teachers in aided schools the rule rather than the exception, and are convinced that this can be obtained only by the general improvement of the conditions of service in With this object in view the Government of India's such institutions. recurring assignment of Rs. 60,000 for aided English-teaching and Anglovernacular schools, given with effect from 1912-1913, has been wholly assigned to these schools in the form of supplementary grants not exceeding one-third of the ordinary results grants, on the condition that two-thirds of these supplementary grants shall be spent on the improvement of teachers' salaries and the remainder on the special wants of the schools, and in the budget for 1914-1915 an additional provision of Rs. 75,000 has been made for bringing up the grants to such schools

to the one-third level on the condition that the position of the teachers is correspondingly improved. Moreover, the Director of Public Instruction has been asked to state whether it is desirable, in his opinion, to go yet further in the direction of granting financial assistance to these institutions, and the question of increased grants will be considered when his reply is before Government. It may also be stated that the question of establishing a provident fund for the teachers is under consideration. Should the scheme prove practicable, it would supply an additional incentive for good men to adopt the teaching profession as a life career.

SCHOOL FINAL EXAMINATION.

G. R. No. 2109, Ed. D., 6th July 1914, which was widely distributed among the Editors of newspapers and registered libraries, made public the report of the Director of Public Instruction on the School Final Examination held in November 1913, and Government's review thereof, which runs as follows:—

This is the second examination held in accordance with the revised curriculum sanctioned in Government Resolution No. 2251, dated the 21st November 1910. The number of candidates registered for the examination was 1,603 against 1,424 in the previous year. Out of the former number 23 did not appear. The number actually examined was therefore 1,580, of whom 759 passed, giving a percentage of 48 as against 43 of the previous year. The number of ex-students who appeared for the examination rose from 91 to 250.

- 2. The value of the strictures passed on the candidates' answer papers by the examiners in Maráthi, Gujaráti and Kánarese is largely discounted by the very high percentage of successes obtained in those languages. The percentage of successes in individual compulsory subjects is unexpectedly high, and the fact that the percentage of successful candidates was so low as 48 can be accounted for only on the assumption that of the candidates who failed to pass the examination a large proportion were either extremely well prepared in three of the four obligatory subjects or, at any rate, succeeded in obtaining very liberal marks in them.
- 3. The candidates who took advantage of the option given them of answering in vernacular instead of in English questions in History, Geography or their classical language numbered 46 against 13 in the preceding year.

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- 4. With reference to the observations of the Superintendent of the Dharwar Centre, Government agree with the Director of Public Instruction that the tendency should be rather towards the eventual assimilation of the examination with the Matriculation Examination than in the direction of differentiation, and they hope that proposals will shortly be forthcoming for placing the organization of these examinations on a more satisfactory basis. In the meanwhile the scheme, recently approved for the maintenance of records of the progress and conduct of the pupils and for the institution of a school-leaving certificate in connection with the School Final Examination, may be expected both to provide a fairer test of the candidates' attainments and to ensure the devotion of greater attention to their preparation for the examination.
- 5. With reference to the remarks made in the review of last year's report regarding the appearance for the examination from certain schools of a consider-
 - (1) John Elphinstone High School, Alibág.
 - (2) Gibb High School, Kumta.
 - (3) Sir S. A. High School, Murud.
 - (4) Bhor High School.
 - (5) Baroda High School.
 - (6) Bhadran High School.
 - (7) Beynon Smith High School, Belga m
 - (8) Nutan Maháráshtra Vidyálaya, Kolhápur.
 - (9) Hopeful Academy, Shikarpur.

able proportion of candidates who were insufficiently prepared, it is to be noted that the schools enumerated in the margin sent up six or more of their pupils, of whom less than 33 per cent. passed the test. In this respect the results of the examination this year show some improvement over those of last year.

The remarks of the Superintendent of the Dharwar Centre, to which reference is made in the 4th paragraph of the review, were as follows:—

"The examination has now been in existence for 10 years. It cannot be said that it has been a success. This, I consider, is not the fault of the examination which is in my opinion an excellent one, . . . The want of success is due partly to the failure of the public, owing to the superior attraction of the matriculation examination, to appreciate the examination, but chiefly, I consider, to the failure of the schools, and notably the Government schools, to prepare seriously for the examination. If the examination is to be given a fair chance, it is necessary that all the schools should have entirely separate classes from the IV standard upward and that the teaching should

be directed to giving effect to the spirit of the examination and the educational aims which it embodies."

The scheme for the institution of a school-leaving certificate in connection with the School Final Examination, which is also mentioned in the 4th paragraph of the review, was fully described in P. N. No. 1243, Ed. D., 6th April 1914, re-printed at page 121 of the Blue Book Quarterly, No. 2.

VISUAL INSTRUCTION IN SCHOOLS.

P. N. No. 2436, Ed. D., 4th August 1914, runs as follows:—

Modern educational theory holds that pictorial representations can bring home to children the reality of the subjects taught to them orally and by books in a quite unique manner. It is also obvious that the more accurate and life-like the representation, the more completely will its subject-matter be grasped. Government believe that a rehearsal of the measures already adopted in the educational institutions under their control to put this theory into practice may prove of interest to the public.

Nine years ago the Government of Bombay were asked by the Government of India whether they would be prepared to participate in a scheme originated by the Colonial Office to promote among the school children of the Empire a knowledge of countries other than their own by means of lectures illustrated with good lantern slides. The Government of Bombay decided, in the first instance, to purchase two sets of slides at a cost of Rs. 1,305. As special sets had to be prepared for India, these did not come to hand till the close of 1907. were tested in the Elphinstone High School and the Poona Training College for men. While on the whole the results were successful, the lectures and slides were found to require modification in some particulars. In 1910, the Honourable Mr. W. H. Sharp, Director of Public Instruction, who had long recognized the value of the lantern as a powerful auxiliary to the study of history, geography and science, suggested that every Government high school and training college should be provided with a good lantern costing Rs. 200, and that a collection of slides should be amassed, kept in his own office and lent out to schools and colleges as required. In the first year the Director undertook to order out a number of slides which he knew to be satisfactory, and in the second

personally to select the remainder while on leave in England. Mr. Sharp hoped that it would eventually be possible to extend the scheme to vernacular schools, and to give every Deputy Inspector a lantern to take on tour for the benefit of village children and their parents. He also thought that it might be practicable for educational officers to work in conjunction with touring officers of the agricultural and sanitary departments, so that illustrations might be given, not only of historical, geographical and other ordinary school subjects, but also of agricultural and sanitary facts and principles. The Director's proposals were approved by Government and a sum of Rs. 3,500 was provided in the budget of 1911, and a second sum of Rs. 5,000 in that of 1912.

- 3. When this first part of the scheme had been successfully carried out, the Director proceeded, in 1913, to make proposals to provide Deputy Inspectors and some of their assistants with lanterns and slides for the promotion of general as well as sanitary knowledge in primary schools in rural areas. Government accordingly sanctioned the expenditure of Rs. 20,000 and appointed a special officer to draw up lists of slides likely to be useful to local boards and to compose lectures suitable to each set. The lanterns and slides will shortly be arriving in India, and Mr. V. N. Ghate, Assistant Deputy Inspector of Poona, has been placed on special duty for a year in order to instruct the teaching and inspecting staff in their proper use. Government have also recently provided a sum of Rs. 6,450 for the purchase of duplicate sets of slides to illustrate six courses of lectures on imperial geography prepared under the auspices of the Visual Instruction Committee of the Colonial Office in London. It is intended that one set should circulate among the secondary schools, and the other be used by inspecting officers among the vernacular schools, the first set also being available for the latter purpose when not required elsewhere.
- 4. Lantern lectures cannot be of daily occurrence in every village school; in fact, each school can hope at most for one or two in a year. The Director, therefore, proposed to supplement them by providing every three local board schools with one set of two stereoscopes and a number of stereoscopic photographs. Such photographs give a far more vivid and correct idea of the reality than the ordinary flat picture. This proposal has been accepted by Government, and arrangements have accordingly been made with Messrs. Underwood and Underwood, the greatest producers of this class of photographs. A representative of

the firm has been through the departmental vernacular readers, and has selected a number of stereographs to illustrate them, and has had several new subjects photographed, especially in Sind. In this way a list of 250 stereographs has been prepared for vernacular schools; sets of 36 from this list will be supplied to local board schools and will be interchanged from time to time. Further, the firm is producing at its own expense a text-book for the use of the teachers in the four vernaculars, explanatory of the whole series. A second series of 250 photographs has been prepared for Government secondary schools, which will be supplied complete to each school. The amount provided for carrying out this scheme is one lakh of rupees.

5. Government entertain great hopes that the advance in visual instruction, of which the measures sketched above are an earnest, will go far to make the teaching in primary and secondary schools more practical and real and less mechanical than it has hitherto been.

MANUAL TRAINING IN SCHOOLS.

P. N. No. 2474, Ed. D., 7th August 1914, is as under:-

Two years ago Government came to the conclusion that there was room for an extension of facilities for manual training in the several vernacular training colleges, and also expressed the opinion that, if a complete course leading up to the issue of teaching certificates could be arranged at those colleges, there would ensue a corresponding multiplication of manual training classes in connection with the larger primary schools, and a general impulse would be given to the spread of this form of instruction. Accordingly the Director of Public Instruction was requested to submit, after consulting the Principal of the Victoria Jubilee Technical Institute, a report on the possibility of taking action on the above lines.

2. The Director's report made it clear that it was both desirable and practicable to institute a manual training class at each of the vernacular training colleges for men, and that the course should be based upon the system known as "Sloyd," the ultimate object being to attach woodwork classes to primary schools, not for industrial purposes, but for the betterment of general education. The

Director was also of opinion that a start should be made in opening manual training classes in the various high schools.

- 3. Government approved the Director's suggestions on the understanding that all the manual training to be given in the training colleges and high schools should be of the "Sloyd" type. This well known system is acknowledged to possess educational advantages not associated with the ordinary forms of manual training. The Director was therefore requested to submit definite proposals for opening a special "Sloyd" class at the Dharwar Training College under an expert instructor, and also to report what the cost would be of introducing the system in each Government high school and training college. Dharwar was selected as the centre of instruction as its training college already possessed suitable workshop accommodation.
- 4. As a result of the Director's inquiries, Government have obtained from the Mysore State, where the "Sloyd" system has been successfully practised for some years, the loan for a period of three years of the services of Mr. Srinivas Rao who was recently Supervisor of "Sloyd" at Bangalore. In that time it is intended that he should train two teachers from each Government secondary school and training institution, so that at the end of the three years there will be a considerable number of trained "Sloyd" teachers capable both of teaching pupils and of training new men as teachers in their turn. As soon as the first trained men are available "Sloyd" classes will be opened at all the five vernacular training colleges and at the Belgaum, Dhárwár, Bijápur, Sholápur and Satára high schools. At these schools there are no difficulties about sites for the necessary buildings. Classes will be opened in all the remaining high and middle schools as funds permit and the requisite facilities can be provided.
- 5. It may be mentioned that the estimated cost of the whole scheme is Rs. 4 lákhs initial and Rs. 20,000 recurring, while that part of the scheme which is to be put into effect at once involves an expenditure of over Rs. 1\frac{1}{8} lákhs initial and nearly Rs. 7,600 recurring. The Governor in Council believes that the money will be well spent on this scheme, as it will help to render the instruction in secondary and eventually in primary schools more practical and less academical than it has been hitherto and will stimulate the interest and powers of observation of the boys.

SCHOOL HYGIENE.

P. N. No. 2652, Ed. D., 26th August 1914, runs as follows:—

The Government of India, in their Resolution on educational policy, suggested that a thorough inquiry should be initiated into various aspects of school hygiene. Among other matters put forward for investigation were questions regarding the length of the school-day, the nature and extent of home-studies, and the effect upon health of the present system of working for formal examinations.

- 2. The Director of Public Instruction, after consulting numerous educational and medical officers, has recently reported to Government on the three subjects mentioned above. He is of opinion that the present school hours, subject to local and seasonal variations, are not under existing conditions susceptible of much improvement. They represent the result of the experience of 50 or 60 years, and experiments with them have been tried from time to time without leading to any substantial modifications. Indeed, an experiment has quite recently been carried out in West Khandesh, whereby in primary schools possessing only one master the pupils attended in two batches, one in the morning and the other in the afternoon. This arrangement, and another experiment designed to cut down school hours, proved very unpopular and had to be abandoned after a year's working. Parents resent any cutting down of school hours. What with the irregularity of masters, the irregularity of pupils, and the inroads upon the available time made by the hot weather and in some cases by plague, it is often difficult, as it is, to get any substantial amount of work done in the time that remains. The Director's final conclusion, in which Government concur, is that no change is possible except in the direction of limiting the periods assigned to individual lessons and of slightly increasing the number of holidays allowed in local board schools.
- 3. As regards the effect upon health of the present system of working for formal examinations, the Director holds that it is impossible to do away with all examinations. They provide an incentive to work and some test of ability. At present pupils are exposed to a formal public examination only at the conclusion of the vernacular or Anglo-vernacular course as the case may be. A system of periodical small examinations within the school, if worked judiciously, tends to

make work regular and evenly distributed, and thereby to do away with the evils attending a period of feverish pressure towards the end of the course.

4. The question of home-studies is a difficult one, if only by reason of the fondness displayed by parents of providing "private tuition" for their children. This adds to the length of the school-day, and at the same time tends to discourage attention to work done in class and self-reliance in the case of work done at home. This evil is essentially a matter which it is in the hands of the parents themselves to deal with, and Government hope that, now that it has been pointed out by the Director, it will in ordinary cases be avoided. But it is also possible for school masters to burden their pupils with an excess of home-work. To obviate this danger, the Director of Public Instruction, more than two years ago, issued a circular laying down the principles to be observed. He pointed out that home-work is essentially intended to encourage reading and thought on the part of the pupil, to supplement class-teaching, and to employ leisure time usefully. It should therefore never consist of mere routine work or cramming, or of work which can be performed for the pupil by a private tutor. It should not be excessive in quantity, or so difficult as to be discouraging to the average boy. In short, it should be such as to encourage self-reliance and to stimulate independent effort in the pupil. The Governor in Council trusts that this circular, which has met with general approval, will effectully remove any complaints that may exist on the score of overpressure from home-work. But to ensure this result it is necessary that the system should be worked judiciously and with the active co-operation of the parents, the latter assisting the teachers by supervising their children's preparation at home.

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METHODS FOR MAKING EDUCATION MORE PRACTICAL.

P. N. No. 2970, Ed. D., 29th September 1914, is as under:—

Government believe that a short summary of the methods adopted or contemplated for rendering education less formal and more practical than has hitherto been the case may prove interesting to the public.

2. The principle underlying Government's policy is that every pupil should be helped to realize the lessons taught by the oral or written word in the fullest

manner possible. To accomplish this, it is necessary to see that his intellectual conceptions are reinforced and, so to speak, made concrete by the ordinary conceptions of every-day life. In other words, his eye, with its physical vision, must be trained to strengthen his mental vision.

- 3. Two instances of this policy have recently been published in press notes one of which explained the coming introduction into this Presidency of the Sloyd system of manual training, while the other gave evidence of Government's interest in visual instruction, as manifested by allotments of nearly Rs. 1 lákh for the purchase of stereoscopes and stereoscopic pictures and of about Rs. 30,000 for developing the use of the magic lantern. Further, the Director of Public Instruction has recently pointed out that a very useful adjunct to lessons in geography and history is to be found in such illustrated papers as The Graphic, The Illustrated London News, or The Sphere, which are generally non-political. Government have accordingly sanctioned the purchase from public funds of instructive illustrated periodicals for the use of school libraries, subject to the distinct understanding that such literature is carefully selected by the Director.
- 4. These measures, however, are all of the nature of indoor work, but the Director, in a recent survey of the whole question, emphasizes the fact that they can be most usefully supplemented by similar measures outside the school. In the first place importance is attached to school gardens as a means of inculcating out-door observation. A year ago grants of Rs. 4,000 recurring and Rs. 5,000 non-recurring were made for the purpose of experimenting with school gardens. Hitherto it has been a matter of difficulty to find masters who are interested in natural history or gardening, and able to teach boys to observe, but with the introduction of nature study into the vernacular training colleges, and of simple science into the secondary schools, it is hoped that this state of affairs will gradually improve. The next step is the organization of excursions. In the case of primary schools the instructions for teachers issued as long ago as 1902 enjoin that object-lessons and lessons in geography should be made as practical as possible, visits being paid to fields, woods, ponds, rivers and places of historical or technical interest. More ambitious excursions have been carried out for some time past by parties from the vernacular training colleges. The Government arts colleges have been allowed Rs. 2,000 for excursions to places of historical interest, and Rs. 500 are also annually allotted to each Government high school.

5. But the real difficulty is to find among the teaching and inspecting staft men competent and willing to adopt and forward the new methods. The number of such men is, at present, unfortunately small, but Government have asked the Director of Public Instruction to report whether he would advocate any system of special rewards or allowances for the purpose of encouraging teachers and inspectors who possess the necessary aptitude to take up special work on any of the lines indicated. Government also view with interest the experiment of a "scout" system recently inaugurated at the Belgaum High School with a view to developing the practical and observational faculties of the pupils, and are pleased to hear that it has enlisted the interest of the masters. A report on the working of the system is to be submitted in due course.

MAHOMEDAN EDUCATION IN SIND.

P. N. No. 2982, Ed. D., 29th September 1914, runs as follows:—

In a pamphlet entitled "Mahomedan Education: Recent Developments in the Bombay Presidency" published in March last, reference was made to a proposal for encouraging secondary education among the Mahomedans of Sind by the institution of a large number of scholarships. The whole question has since been investigated, and a comprehensive scheme formulated, under the provisions of which 133 scholarships will eventually be awarded annually at a cost of Rs. 20,000. Each scholarship will run for four years, so that when the scheme is in full working order, there will be 532 scholarships to be enjoyed at an annual cost of Rs. 80,000. The scheme further contemplates large non-recurring grants for the extension and improvement of existing madressahs, hostels and similar buildings.

2. Government have concurred in the opinion expressed by the Commissioner in Sind, which is endorsed by the Director of Public Instruction, that the most effective and economical way of promoting secondary education in Sind is by a system of scholarships tenable at existing madressahs or at recognised Anglovernacular schools with hostels attached to them, and not by the creation of a number of new secondary schools specially intended for Mahomedans. The scheme submitted by the Commissioner in Sind has therefore received the general

approval of Government, but funds are not available to carry it out forthwith in its entirety. A recurring grant of Rs. 20,000 has, however, been allotted, with effect from the current year, for the initiation of the scheme, and the balance of the expenditure will be provided gradually as funds permit. Detailed proposals for the utilization of this allotment have already been called for.

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THE IMPERIAL RECURRING GRANT OF Rs. 1 LAKH.

P. N. No. 2987, Ed. D., 29th September 1914, is as under:—

In March last the Government of India intimated that a new recurring grant of Rs. 1 lákh had been made to the Bombay Presidency for the improvement of The Government of Bombay were authorized to disburse this sum at their discretion, and have already allotted Rs. 20,000 to the promotion of secondary education among Mahomedans in Sind by a system* of scholarships tenable at Madressahs or recognized Anglo-vernacular schools having hostels attached to them. A sum of Rs. 5,000 has also been earmarked for meeting a portion of the recurring cost of introducing the Sloyd system† of manual training. Another sum of Rs. 5,000 has been kept in reserve for meeting any urgent needs that may come to light during the course of the year. The remaining Rs. 70,000 have been allotted to two of the most pressing requirements of primary education, namely, the improvement of the pay of trained teachers, and the provision of additional teachers in understaffed schools. A sum of Rs. 1 lákh recurring is provided for the same two purposes in the current year's budget from provincial revenues. Accordingly Rs. 50,000 from both the imperial and the provincial grants, or Rs. 1 lákh in all, have been allotted for giving to trained teachers pay according to the face-value of their certificates and promotion according to the Code, while the remaining Rs. 20,000 of the imperial and Rs. 50,000 of the provincial grant, that is, Rs. 70,000 in all, are to be utilized in providing additional teachers in understaffed schools. It must, of course, be understood that all the sums mentioned above are annual recurring grants.

^{*} Vide Press Note No. 2982, Educational Department, dated the 29th September, 1914.

[†] Vide Press Note No. 2474, dated the 7th August, 1914.

Hitherto grants for improving the pay of trained teachers have been distributed to District Local Boards only, and it has been suggested that Municipalities should now be allowed to participate in them. After careful consideration of the proposal, Government have arrived at the conclusion that it is necessary to uphold, wherever possible, the principle that a local body should bear at least half of the gross expenditure on primary education within its area. It is true that this principle has been relaxed in the case of the Local Boards, but this was from sheer necessity, those bodies having an inelastic revenue wherewith to meet a rapidly expanding expenditure. In the case of Municipalities in the great majority of which these financial conditions do not exist, Government, in November, 1912, raised its educational grants to the full half of the then existing gross municipal expenditure on primary education. It is probable that there are numerous instances where, owing to the subsequent growth of such expenditure, the grants so fixed now fall below that proportion. Government are therefore ready to allow part of the new allotment to be granted to Municipalities, but on the usual condition that the total grant to any Municipality on account of primary education shall not exceed the maximum limit of one-half of its gross expenditure on that object. The result is that a Municipality whose expenditure still only equals the Government grant will have to pay one-half of any new expenditure it incurs on improving the pay of its teachers, while those Municipalities which have already increased their expenditure will pay less than one-half of any fresh expenditure of the same nature. The Governor in Council trusts that this concession will serve as an inducement to Municipalities to devote funds to improving the pay of their educational staffs.

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MORAL TRAINING CONSULTATIVE COMMITTEE.

P. N. No. 2995, Ed. D., 30th September 1914, runs as follows:-

It is considered that the publication of the following minutes of a meeting of the Consultative Committee in connexion with Moral Education, appointed under the orders contained in Government Resolution, Educational Department, No. 1329, dated the 16th April, 1914, will be of public interest. The question of

^{*} See Blue Book Quarterly, No. 2, pp. 125 and 126.

taking action on the suggestions put forward at the meeting will be considered in due course:—

- 1. In the unavoidable absence of the Hon'ble Mr. W. D. Sheppard, the chair was taken by the Director of Public Instruction, who explained briefly the circumstances leading to the institution of the Committee.
- 2. Mrs. Anderson read a paper on "The Essential Aim of Moral Instruction." Attention was drawn to the importance of creating a good moral atmosphere in a school, out of which the moral lessons could grow, instead of being imposed on an alien environment; such atmosphere to be created partly by the teachers, partly by the elder pupils, partly by the school-life, discipline, games.

In the discussion which followed, attention was also drawn to the necessity of developing hostel life, and self-government under prefects; the possible value of a system of "scouts" for Indian boys and teachers; and to the system followed in some parts of India by which each master has to visit regularly, and act as tutor to, a certain number of the boys who would otherwise be unsupervised.

3. Miss Corkery proposed that in view of the difficulty of obtaining teachers qualified to impart moral instruction in primary schools, peripatetic instructors should be appointed.

Mrs. Anderson was strongly of opinion that such instructor should not deal with the children, to whom he would be a stranger, but only with the teachers.

It was pointed out that it was already the function of the inspecting staff to go from village to village to stimulate the teachers, and that there was nothing to prevent them from endeavouring to create an interest in methods of moral instruction.

Mr. H. N. Apte suggested the institution of a model boarding school, with children from a very tender age, to be attached if possible to a training college, so that the methods of moral training might be studied from the beginning.

The Hon'ble Moulvi Rafiuddin suggested that the department should lend skilled instructors to orphanages or other institutions, and subsidize the production of a book of moral extracts from the Koran, and moral teaching, even though the latter were given on a religious basis.

- 4. Shri Mahabhagwat read a paper on "The Adaptation of Moral Instruction to Indian Needs," urging that it must have a religious basis.
- 5. Mr. Bhabha suggested that for the assistance of primary teachers stories easier than those of Mr. Enthoven should be published; also songs on moral subjects, and prayers.

Mrs. Anderson suggested biographies of well-known men and women.

6. A telegram from Mr. Welinkar was read, suggesting that two demonstration lessons should be given yearly in Bombay and two in Poona, with prizes; that essays should be invited on the best way of combining moral and religious education, with special reference to religious conditions in this Presidency, the best essay being published; and that classes should be taught to sing the poems of Maráthi and Gujaráti poets.

The meeting then terminated.

Excise.

REDUCTION IN THE NUMBER OF COUNTRY LIQUOR SHOPS.

P. N. No. 7339, R. D., 7th August 1914, runs as under:—

The Governor in Council has much pleasure in announcing that the Commissioner of Excise, on careful consideration of the recommendations made by the Collectors after consulting their Advisory Committees, where such Committees have been appointed, has found it possible to sanction the closure of 119 shops from 1st April 1914 in the Presidency proper. This figure does not include the toddy spirit shops in Bombay Town and Island, the closure of which has already been notified. It may also be mentioned that, with a view to encouraging the consumption of weak in place of strong spirit, 236 of the existing shops have been licensed for the exclusive sale of the former.

Finance.

BUDGET OF THE GOVERNMENT OF BOMBAY FOR THE YEAR 1914-1915.

The figures (in thousands of rupees) of the budget as finally passed stand as follows:—

			i	1913-	1914.	1914-1915.
				Budget.	Revised.	Budget.
Opening balance	•••	;	•••	1,65,05	1,79,75	1,82,01
Revenue		•••	•••	7,35,59	7,70,73	7,58,92
Expenditure	• • •	•••	***	7,87,14	7,68,47	8,23,30
Closing balance	•••	•••	•••	1,16,50	1,82,01	1,17,63

Details of provincial revenue and expenditure by major heads for the years 1912-1913, 1913-1914 and 1914-1915 are exhibited in the following statement:—

Number of Account Head.	Major H	eads of Reve	enue.	!	Accounts, 1912-1913.	Budget, 1913-1914.	Revised, 1913-1914.	Budget, 1914-1915
ı	Land Revenue	Provincial s	hare		1,89,02 95,87	2,09,32 96,39	2,17,82 96,52	2,09,48 96,81
		Fixed allots ments.	ment and a	djust•	1,02,55	27,33	27,48	28,54
IV	Stamps	•••	•••		41,03	41,50	43,75	43,85
V	Excise	•••	•••	•••	2,12,27	2,13,00	2,22,00	2,27,00
VIII	Assessed Taxes	•••	•••	•••	28,74	28,45	32,50	30,65
'X	Forest		•••	•••	49,92	41,50	48,50	45,50
x	Registration	•••	•••	•••	7,82	8,00	8,10	8,20
XII	Interest	•••			10,12	14,04	15,15	14,58
XVI-A	Law and Justice—Co	ourts of Law	•••	٠.	7,32	7,15	7,80	7,60
XVI-B	Do. —Ja	ils,		•••	3,05	2,50	2,75	3,05
XVII	Police	***	***	•••	2,46	2,35	2,63	2,36
XVIII	Ports and Pilotage	•••	•••	•••	1,02	1,00	1,07	1,09
XIX	Education	•••	•••	•••	5,31	5,34	5,44	5,21
xx	Medical	•••	***	•••	3,25	2,55	2,55	2,60
XXI	Scientific and other	Minor Depar	tments	,•••	1,19	1,25	1,30	1,32
XXII	Receipts in aid of su	perannuation			3,64	3,80	3,70	3,90
xxIII	Stationery and Print	ing	•••	•••	1,28	1,15	1,20	1,22
xxv	Miscellaneous	•••	•••		2,04	72	76	76
XXIX	Irrigation-Portion	of Land R	evenue du	e to	11.56	13,18	13,18	13,02
XXIX	Irrigation. Irrigation—Major W				6,84	7,26	8,15	8,05
XXX	Irrigation - Minor W			· i	1,83	1,83	1.76	1,74
	Works Department	Civil Depar			to	8	12	12
IXXX	Civil Works	Public Worl			7,58	5,90	6,50	2,27
			-	į				
			Tota	ı	7,95,8z	7.35.59	7,70,73	7,58,92
		Oper	ning Balance	•	1,08,92	1,68,05	1,79,75	1,82,01
			Grand total	ı	9,04,73	9,03,64	9,50,48	9,40,93

Number of Account Head.	Major Heads of	Expenditure			Accounts, 1912-1913.	Budget, 1913-1914.	Revised, 1913-1914.	Budget, 1914-1915
1	Refunds and Drawbacks	•••		•	5,95	4,97	7,34	5,67
2	Assignments and Com- §	ash	•••	•••	12,47	14,15	14,94	14,22
-	pensations. (A	lienations	***	•••	83,00	83,40	83,52	83,88
3	Land Revenue § C	ash	***	***	76,54	75,04	75,17	82,15
- 1		lienations	•••	•••	7,70	7,91	7,83	7,78
6	Stamps	***	***	•••	1,19	1,19	1,23	1,23
7	Excise		•••	•••	10,80	11,26	10,92	11,81
10	Assessed Taxes	•••	•••	•••	бо:	72	72	85
11	Forest		***	•••	26,93	26,40	25,40	25,68
12	Registration	***	***		3,72	3,67	3,69	3,92
13	Interest on Ordinary Debt	•••	***		7,97	8,41	8,48	7,83
18	General Administration	2.00	***		17,91	18,79	19.76	18,80
19-A	Law and Justice-Courts of L	aw	***		56,69	58,72	56,84	57,49
19-B	Do. —Jails		***	•••	12,01	11,50	12,98	12,36
20	Police 5 C	ash	•••		97,16	96,48	95,83	1,01,80
	{ _A	lienations	•••	•••	5,17	5,08	• 5,17	5,15
21	Ports and Pilotage	***	***	•••	65	2,83	1,29	2,88
23	Education	•••	***	***	61.35	95,25	76,60	1,02,76
24	Medical	***	***	•••	23,50	48,96	27,70	49,05
25	Political	•••	***	•••	4,21	5,46	4,83	5,48
26	Scientific and other Minor De	partments	•••		10,26	13,37	11,65	14,29
29	Superannuation Allowances a	nd Pensions	***	•••	33.48	35,00	36,00	37.75
30	Stationery and Printing	***		•••	13.59	12,47	13,64	15,01
32	Miscellaneous	•••	***	***	6,36	4,95	5,37	7,18
36	Reduction or Avoidance of De	ebt	•••	•••	13,70	13,70	13,70	13,70
40	Subsidized Companies—Land		***			3	•••	5
42	Irrigation—Major Works { V	Vorking Expe	enses	***	8,13	7,50	8,89	7,72
7-	11. Zarion 11. Zjor 11. 3. Zjor	nterest on De	:bt		10,37	11,11	10,66	11,52
43	Irrigation—Minor Works	ivil Departme	ent	•••	5	20	6	10
43	and Navigation.	iblic Works	Department	t	15,67	16,00	16,36	16,50
14	Civil Works 5 C	ivil Departm	ent		14,24	8,72	14,90	8,69
14		ublic Works	Department	:	83,61	83,90	97,00	90,00
			Total		7,24,98	7,87,14	7,68,47	8,23,30
	•	Closin	g Balance	••••	1.79,75	1,16,50	1,82,01	1,17,63
		G	rand total		9,04,73	9,03,64	9,50,48	9,40,93

Irrigation.

REVIEW BY THE GOVERNMENT OF INDIA.

Descriptive accounts of the irrigation works in the Presidency proper and Sind were printed on pages 56 to 65 of the last issue of the Quarterly (No. 2). A "Review of Irrigation in India in 1912-13" by the Government of India is now republished below:—

No. 1091—1108-I., dated Simla, the 28th July 1914.

CIVIL WORKS.

Irrigation.

Classification of irrigation works.

Classification of irrigation works.

Classes, viz., major and minor works. Major works are sub-divided into—

- (a) Productive public works, the capital of which is usually provided from borrowed money.
- (b) Protective works, designed as a protection against famine, the capital of which is provided from current revenues, and is usually met from the annual grant under Famine Relief and Insurance.

Capital and revenue accounts are kept for all major works.

Minor works are constructed from funds provided from the current revenues of India, and, broadly speaking, consist of irrigation systems which are not sufficiently important to treat as major works. Some of them are old works constructed by the former rulers of this country, and extended or restored by the British Government; some are works which have been constructed by the British Government; others, again, are village works originally provided by private or communal effort, the control of which the State has been obliged to assume owing to disputes between the parties interested or their inability to maintain the efficiency of the works.

Capital and revenue accounts are maintained for the more important minor works, but for those on which the capital outlay has not exceeded half a lakh of rupees, revenue accounts only are, as a rule, maintained. There is a third class of minor works, consisting for the most part of small tanks, for which neither

capital nor revenue accounts are kept. These exist principally in the Madras Presidency.

- Productive public works are expected within ten years after the probable date of their completion to yield sufficient revenue to Productive Public Works. pay their working expenses and the annual interest calculated at 4 per cent. on the capital invested. No project is now sanctioned as a productive public work unless it can be shown beyond reasonable doubt that when fully developed it will fulfil these conditions. This standard was not attained in the case of the earlier irrigation projects and thus it has happened that several large irrigation works which were financed from borrowed capital, are not remunerative. There are 13 such works, viz., two in Bihar and Orissa and two in Bengal, seven in the Deccan and Gujarat and two in Madras. are still retained on the list of productive works, but expenditure against their capital account is now charged against the current revenues of India. accumulated losses on these 13 works have slightly exceeded the sum of 11 crores. But though they have proved financial failures in the ordinary commercial sense, they have been indirectly of great value in securing large areas of cultivation against the vicissitudes of the seasons.
- 3. The remaining works in operation, 43 in number, satisfy productive conditions. These works collectively paid during the year 11.76 per cent. on their capital outlay; while after paying interest charges, the surplus revenue, which they had contributed to the general revenues of the country up to the end of 1912-13, amounted to over 43 crores of rupees against 35 crores, the capital invested on them. The financial results, the area irrigated, and the mileage in operation for all productive public works in operation are shown separately by provinces in Statement I.*
- 4. During the year under review the total area irrigated by all the productive public works, including branches in Native States of the Punjab, amounted to 16,147,799 acres. Towards this total the Punjab canals contributed nearly $7\frac{1}{2}$ million acres, Madras $3\frac{1}{2}$, the United Provinces $2\frac{1}{2}$, and Sind 1 million acres.

In Bihar and Orissa an area of 930,000 acres was attained. The return on capital is highest in the Punjab, where the canals yielded 16:48 per cent. The next province in this respect is Madras, where a return of 14:05 per cent. was realised, excluding the Karnool and Barur systems referred to in paragraph 2, expenditure on which is charged to Revenue. In the United Provinces and Sind the returns realised were 6:83 per cent. and 4:50 per cent. respectively. Details regarding other provinces and administrations will be found in Statement I. The return on productive works as a whole was 9:53 per cent. on the capital outlay.

- 5. The importance of productive works may be gauged roughly by the value of the crops which are produced by their agency. In the year under review the estimated value of the crops irrigated by works of this class amounted to 67 crores of rupees, or about 20 crores more than the capital expenditure incurred on them.
 - 6. There were in operation in the year under review 30 protective works which together irrigated a total of 403,200 acres. The most important works are the Ramtek reservoir in the Central Provinces, the Betwa and Ken canals in the United Provinces, the Rushikulya in Madras, and the Nira and Godavari systems in the Bombay Presidency. A number of small but interesting tank works are to be found in the Central Provinces. They were sanctioned as experimental works, in accordance with the recommendations of the Irrigation Commission, in order to test how far the people were willing to resort to irrigation for the maturing of their crops and what water rates they were prepared to pay. The results obtained are gratifying and show that the people are beginning to realise the great advantages of irrigation.
 - 7. There were 109 works so classed in 1912-13, the majority of which are Minor Works. Works for in Bombay and Madras. Ten are purely navigation which capital and revenue accounts works. The net revenue paid by works of this category amounted to Rs. 30,01,539 (excluding navigation canals) or a return of 761 per cent. on the capital outlay, against 7.71 per cent. in the previous year. Nearly all the minor works in Sind return exceptionally high percentages; but as some large projects with which it is intended to

amalgamate many existing works are under consideration, their transfer to the major works class has been postponed for the present.

Excluding the area shown under Burma, viz., 480,923 acres, which is not under actual irrigation, but represents the area of cultivation on lands reclaimed by river flood embankments, the area irrigated by minor irrigation works during 1912-13 was 1,521,029 acres against 1,344,675 acres in the previous year.

Statement III* gives particulars of individual works.

- 8. There are numerous works which maintain only revenue accounts. They are credited with a share of the land revenue depending on their maintenance and are debited with all expenditure incurred on construction, extension, improvements and maintenance. During the year reviewed these works irrigated an area of $2\frac{1}{2}$ million acres and returned a net revenue of Rs. 34,89,458.
- 9. As explained in the opening paragraph of this review, practically all the works of the class which have neither capital nor revenue accounts are kept.

 Works for which neither capital accounts are situated in the Madras Presidency. They consist of some 37,000 tanks and irrigation channels mainly the former, the improvements and repairs of which are executed by the Public Works Department, or, in the case of the smaller works, by civil officers. The areas irrigated by works of this class in 1912-13 aggregated 3,421,917 acres. The area irrigated in 1911-12 was 3,230,191 acres.
- In the Punjab practically no rain fell during the early months of both kharif and rabi crops. The canal supplies were adequate during the kharif, but the absence of rainfall combined with the very low river supplies from October to February resulted in a smaller area being irrigated on several canals during the rabi than in the previous year. There was, however, satisfactory rainfall during the latter months of each season, and this was of considerable benefit to the crops. The absence of insect pests, frosts, floods and other adverse conditions

during the year was marked, and enabled an unusually high proportion of the crops sown to mature satisfactorily. The total area irrigated by works of all classes including those of Native States was 8,429,381 acres, of which 8,052,910 acres matured as against 7,548,515 and 6,971,556 acres, respectively, the average of the triennium ending 1911-12.

The increase is due mainly to the extra area brought under irrigation by the Upper Chenab canal and to sufficient volumes being available in the rivers for the inundation canals during the hot weather. The results are very satisfactory, and the area irrigated would have been even larger had not the very low river supplies during the early months of the rabi resulted in a reduced area being sown in that harvest.

The Lower Chenab canal continues-to show a record of remarkable progress. It served 2,240,203 acres and earned a gross revenue of Rs. 1463 lákhs. The net revenue realised from this canal was equivalent to 39.18 per cent. on the capital outlay.

There is a noticeable improvement in the return realised from the Lower Jhelum canal, the net revenue on which system has gone up by almost 90 per cent. This is due principally to an enhancement of land revenue and malikana.

During the year excellent progress was made with the triple project. The Upper Chenab canal which was opened at the beginning of the year gave most satisfactory results during the first year of its working, the area irrigated being 116,162 acres against 40,000 anticipated in the project forecast. The Lower Bari Doab was opened just after the close of the year reviewed and does not therefore appear among the works in operation. Neither the Upper Chenab canal nor the Lower Bari Doab canal can work to full advantage until the Upper Jhelum canal has been completed, as they cannot get a cold weather supply until the surplus water of the Jhelum river can be made available to augment the supplies of the Chenab river on which the Upper Chenab and Lower Bari Doab systems are dependent. Every effort is therefore being made to complete the Upper Jhelum canal as soon as possible. It was hoped to open the canal during October 1914, but owing to serious damage from floods suffered by the head works at Mangla in April last this hope will not be realised, and it is feared that

the system will not be in operation before the beginning of 1915. Further surveys in connection with the Sutlej valley project for the utilisation of the surplus water of the Sutlej river were found necessary and were completed during the year.

11. In the United Provinces both seasons of the year were unusually dry and the demand for canal irrigation was intense.

The monsoon set in late, about the middle of July, but the rainfall which was plentiful was unevenly distributed, most of it having been received in the latter half of July and August. Heavy rain at the end of September kept the early rabi demand low and enabled a very large area to be sown without canal irrigation. The winter rains failed and the demand from December till the middle of February was everywhere intense till it was reduced by rain in mid-February. In both seasons the supply was inadequate when demand ruled high. On the Ganges canal during kharif though maximum gauges were run on the Solani aqueduct it was impossible to allot supplies according to requirements. The supply in the Jumna at Delhi was exceptionally low throughout and in July it fell to 64 cusecs which is the minimum discharge ever recorded.

The total area irrigated was 290,000 acres above the average of the three preceding years: the increase was due to the dry nature of the seasons. This area would have been much greater had it been possible to open the Ganges canal earlier. Work on the temporary bunds at Bhimgoda which train the river into the supply channel could not, on account of meteorological conditions, be started till the first week in October and thus the canal was opened much later than usual.

The total assessments of the year amounted to nearly 113 läkhs of rupees or 12 läkhs more than in 1911-12.

12. In Madras the rainfall of both monsoons was above the average and the net cropped area in the Presidency during the year under review was 39 million acres which exceeded the previous year's figures by $1\frac{3}{4}$ millions. Owing to the favourable character of the season, the area irrigated under nearly every system showed an increase on that of the previous year and on the average of the previous triennium.

- 13. In Sind the rainfall is usually negligible and cultivators are therefore obliged to depend almost entirely upon canal irrigation. The canals, being of the inundation class, are in turn dependent upon the height and duration of the floods in the Indus during the irrigating season. The inundation of 1912 was unfavourable, being late in arrival and ending earlier than usual. The fair irrigating level of 13 feet at Bukkur was recorded for 31 days as compared with an average of 40 days in the previous 10 years. The fair inundation level at Kotri was maintained for 59 days which is the average period in the previous 10 years. This year the rainfall was about the average, but as it was well distributed it did much good to the crops. The rabi water-supply in the great Jamrao canal was sufficient to allow of extensive rabi sowings and to give the final waterings to the kharif cotton crop. Taking Sind as a whole, the area under irrigation and gross assessed revenue during the year show an increase of 299,803 acres and 5,25,728 rupees, respectively, as compared with the figures for the previous year.
- 14. In Bombay (Deccan and Gujarát) the irrigation works in operation are limited in scope compared with those of other provinces. The rainfall in Gujarát during the year was better than the average of the past 30 years and there was a good supply of water from the Hathmati river. The surplus from the canal served to fill the Bokh reservoir, and by very careful management a large area of rice which was threatened by the early cessation of rain in the Khari tract was saved. The four new tanks in Kaira filled, and irrigated over 7,000 acres against only about 600 acres of the previous year.

There was a considerable rise in the area under irrigation and gross revenue assessed on works in the Central Division mostly due to the extension of irrigation on the Godavari and Pravara canals, but partly also to the greater demand for water owing to scanty monsoon rainfall. Some eastern tanks received a welcome late supply of water in November which helped for the rabi irrigation. There was copious rainfall in the Southern Division and the irrigation was, on the whole, good though slightly less than the average.

Good progress was made during the period reviewed with the Godavari and Pravara canals, two large works of the protective class. A good start was also made with the Nira Right Bank canal project, which on completion will be the largest protective irrigation system in India.

15. The canal systems in Bengal, the most important of which are the Midnapore, the Hijili Tidal canal, the Circular and Eastern and the Madaripur Bhil systems are used principally for navigation purposes. The Midnapore canal is also utilised for irrigation.

The total area irrigated by the latter was 80,958 acres, a result which is practically the same as that attained during the previous year. The financial results of this work do not fulfil productive conditions, the revenues being just sufficient to meet the working expenses. The estimated value of crops raised on the area irrigated by it amounted to Rs. $34\frac{1}{2}$ lakhs.

- 16. In Bihar and Orissa the Sone and Orissa canals of the productive class are used both for irrigation and navigation. The area irrigated during the year was 930,014 acres showing an increase of 145,456 acres compared with the area irrigated during the preceding year. The increase occurred on the Sone canals and was partly due to scanty rainfall of the year and the premature cessation of the monsoon. The financial results of these works do not fulfil productive conditions, but the estimated value of crops raised on the area irrigated by them amounted to over 3½ crores of rupees, a sum which is a little less than two-thirds of the total capital cost of the works.
- 17. In Burma the rainfall of the year was on the whole sufficient and well distributed, the exceptions being in the Shwebo and Yamethin Districts where minor works in consequence showed poor results. No floods of any magnitude occurred during the year and there was therefore no serious damage to works or destruction of crops. The year was also free from outbreaks of cattle disease. Under these conditions, to which should be added the high prices obtaining for paddy, the expansion of the cultivated area followed as a matter of course and the year was a prosperous one for irrigation generally. The area irrigated by productive works amounted to 257,749 acres as compared with 205,843 acres in the previous year.
- 18. In the Central Provinces the rainfall was normal and well distributed in Chhatisgarh, but scanty in the western districts, where in consequence the demand for canal supplies was keen, the area under irrigation being double that of the year previous. In these Provinces the development of canal irrigated rabi crops, other than sugarcane and garden crops, is proceeding but slowly.

- 19. The rainfall in the North-West Frontier Province, though only about half the normal, exceeded that of the previous year. During the early rabi, September to end of January, there was practically no rainfall, and the demand for canal water was very keen. The supplies in the rivers at the same time were low, and the rainfall in February and March was consequently of great benefit to the crops. The agricultural and other conditions of the year were favourable. The irrigated area was slightly in excess of the average of previous years.
 - 20. The following table summarises the results of irrigation works for all India during 1912-13 in comparison with those of the two previous years:—

Results of irrigation works in operation in India.

Class of work.	Capital out- lay to end of the year on works in operation.	Gross revenue during the year.	Net revenue during the year.	Percentage of net revenue on capital outlay to end of year.	Net profit during the year; i.e. net revenue less interest charges.	Area irrigated.
,	Rs.	Rs.	Rs.	Per cent.	Rs.	Acres.
I.—Productive	47,03,47,274	6.43,53,975	4,48,33,565	9:53	2,96,85,579	16,147,799
il.—Protective	6,04,36,601	12,43,758	4,50,302	0.42	15,09,876	403,200
III.—Minor Works for which Capital and Revenue Ac- counts are kept (including works under construction).	6,48,29,224	52,63,049	28,49,392	4*39		2,001,952
IV.—Minor Works for which only Revenue Accounts are kept		68,01,346	34,89,458	·	••••	2,540,317
V.—Works for which neither Capital nor Revenue Ac- counts are kept		1,06,81,405	60,75,315			3,421,917
Total 1912-13	59,56,13,099	8,83,43,533	5 76 98,032	(a) 8.08		24,515,185
Total 1911-12	55,84,69 511	7,97,09.658	5,05,11,524	(a) 7 53		23 287,054
Total 1910-11	53,06,04,071	7,66,71,953	4,68,34,346	(a) 7 17		22,519,090

⁽a) Percentage calculated on works of classes I, II and III.

The total area irrigated was $24\frac{1}{2}$ million acres, while the value of the crops raised is roughly estimated at Rs. 83 crores.

21. The subjoined table exhibits the outlay incurred by the State during
Outlay in 1912-13. the year 1912-13 on all classes of irrigation works:—

	_		,		Capital outlay (direct charges).	Minor additions, maintenance, and working expenses (direct charges).
	Works unde	r construct	ion.		Rs.	Rs,
Productive	•		•••		1,64,60,023	
Protective	***	***	***		24,17,879	
Minor	•	•••	···		5,38,088	
			Total		1,94,15,990	
	Works in	operation.			· · · · · · · · · · · · · · · · · · ·	
Productive	•••	•••	•••		48,05,923	1,80,13,108
Protective	•••	•••	***		3 5,80 9 60	7,54,911
Minor	•••	•••	*14		3,39,141	23,21,796
•		• .	Total		87,26,024	2,10,89,815
Works under cla	asses IV and	v	•••			79,54,861
			Grand Total		2,81,42,014	2,90,44,676

Comparison of total cropped area in various provinces with area irrigated.

Comparison of total cropped area ernment irrigation systems, with the total area under cultivation in the several provinces, is given below:—

Province.	Net area cropped.	Area irrigated by Government irrigation works.	Percentage of irrigated area to total cropped area.	irrigation	Estimated value of crops raised on areas receiving State irrigation, in lakhs of rupees.
	Acres,	Acres.	Per cent.		
Burma	13,856,000	1,275,000	9.2	. 205	524
Bengal	25,955,000	108,000	0'4	227	59
Bihar and Orissa	8,006,000	971,000	12.1	662	347
United Provinces of Agra and Oudh.	35,460,000	2,698,000	7.6	1,184	1,438
Ajmer-Merwara	356,000	24,000	6.8	35	11
Punjab	22,684,000	8,368,000	34.6	1,625	3,071
North-West Frontier	2,549,000	246,000	9.6	63	84
Sind	3,991,000	3,065,000	76·8 ·	316	821
Bombay Deccan	22,906,000	355,000	1.2	438	123
Central Provinces (excluding Berar).	17,969,000	78,000	0.5	88	14
Madras	39,120,000	7,321,000	18.7	1,081	1,831
Baluchistan	Not known.	6,000	***	32	2
Total	192,852,000	24,515,000	124	5,956	8,325

23. The statement below contains a list of the irrigation systems in the Irrigation works completed since several provinces and administrations in India which were completed in or since the year 1900-01:—

Province.	Name and class of	work.	ļ	Total direct cost to end of 1912-13.	Irrigable area.	Principal crops that can be produced.
				Rs.	Acres.	
ſ	Kadwa river works	Productive	ا	9,71,741	32,723	Wheat, sugarcane and groundnuts.
Bombay	Chankapur tank project	Protective	!	16,71,077	15,000	Wheat and gram.
)	Pathri tank project	Minor		6,27,825	2,500	Millets.
. U	4 small tank projects	Do		8,65,416	6,325	Wheat, rice and gram.
(Jamrao canal	Productive	•••	81,47,933	300,000	Cotton, millets and
Sind	Nasrat canal	Do.		18,30,064	104,100	Cotton, millets and oilseeds.
	Dad canal	Do.	•••	24,20,982	145,400	Do.
. (2 small canais	Minor	•••	4,63,957	53,757	Rice and millets.
Bengal	Dhaka canal	Protective		5,54,835	6,387	Rice.
f i	Ken canal	Do.	•••	49,77,584	120,000	Rice, wheat and
United Provinces.	Dhasan canal	Do.		44,12,347	57.000	Wheat and gram.
' j	Pahuj and Garhmau canals.	Do.	•••	7,94,401	17,200	Wheat, gram and rice.
Burma {	Mandalay canal	Productive		52,16,006	59,115	Rice.
Builba {	Shwebo canal	Do.	•••	57,25,024	151,734	Do.
Central Provinces	12 small tank projects	Protective		21,48,236	34,634	Do,
North-West Fron- tier Province.	Paharpur canal	Productive	•••	9,05,444	41,588	Wheat and millets.
		Total	•••	4,17,32,872	1,147 463	

^{24.} Statements I and II* appended to this review leave out of account the Works sanctioned or under conproductive and protective works that are now in course struction. Sanctioned works of construction except the few that have reached such an advanced stage of construction as to have begun irrigation. In the two Not reprinted.

succeeding statements particulars are given of such works, as well as of the more important projects which are under investigation.

Province.	Name and class	of work.	Estimated cost, direct and indirect.	Expendi- ture to end of the year 1912-13, direct and indirect.	Irrigable area in acres.	Districts benefited.	Principal crops that will be produced.
			Rs.	Rs.			
(Lower Jhelum canal.	Productive.	1,89.63,988	1,59,65,622	766 ,182	Gujrat, Jhang and Shahpur	Wheat, cotton and oilseeds.
Puniab (* Upper Chenab canal.	Do	3,73,57,024	2,95,31,355	648,368	Sialkot, Gujranwala Lahore and Montgomery.	
oalub (Upper Jhelum canal	Do	4,39,96,559	3.13,97,898	344,960	Gujarat	Wheat, cotton and oilseeds.
l	t Lower Bari Doab canal.	Do	2,23,28,402	1,66,13,251	877,908	Montgomery and Multan	Wheat, maize cotton and grain.
IW. P. Province.	Upper Swat River canal.	Do	1,99,24,287	1,16,60,901	381,562	Peshawar	Wheat, barley and oats.
Jnited Pro-	Permanent Head Works Upper Ganges canal.	Do	33,78,324	Not yet commenced.	86,166	Saharanpur, Muzaffarnagar Meerut, Bulandshahar Aligarh, Muttra, Agra Etah and Mainpuri.	, and cotton.
(Ghaggar canal	Protective.	35,04,454	2,61,946	66,000	Central up-lands of Mirza pur-	. Rice and wheat.
(Weinganga canal	Productive.	38,03,204	4,62,296	78,9 6 5	Balaghat and Bhandara	Rice.
	Mahanadi	. Do	99,30,217	7.09,237	360,000	Raipur	. Do.
	Tandula	Protective	99,98,807	22,82,040	263,412	Drug	. Do.
1	Chorkhamara tank project.	Do	8,65,484	19,832	20,000	Bhandara	Do.
Central Pro-	Badalkhassa tank project.	Do	6,57,288	8,391	18,376	Bhandara	Do.
	Naleshwar tank project.	Do	6,32,542	75,443	12,000	Chanda	. Do.
	* Asola Mendha canal.	Productive.	17,97,578	13,51,010	60,000	Chanda	Rice and wheat.
(* Ramtek reservoir.	Protective	29,07,858	28,42,665	48,000	Nagpur and Bhandara	. Do,
,	Mopad reservoir	Do	21,51,000	6,23,670	12,500	Nellore	Rice.
fadras	* Divi pumping scheme.	Productive.	19,98,000	18,64,495	50,000	Kistna 🥳	Do.
<i></i>	* Nagavalli reservoir.	Do	18,16,300	15,72,156	23,814	Vizagapatam 4.	Do. ·

Province.	Name and class	of work.	Estimated cost, direct and indirect.	Expenditure to end of the year 1912-13, direct and indirect.	Irrigable area in acres.	Districts benefited.	Principal crops that will be produced.
	ļ		Rs.	Rs.		·	
	Nira Right Bank canal,	Protective .	2,57,72,499	6,06,480	231,000	Poona, Satara, Phaltan State and Sholapur,	Jowar, wheat, bajri, rice, groundnuts, gram and sugar- cane.
Bembay Dec-	Pravara River	Do	76,10,826	27,21,520	60,379	Ahmednagar	Gram and jowar.
can.	canal. 'Godavari canal	Do	95,61,044	85,04,751	175,600	Nasik and Ahmednagar	Bajri and wheat.
₹	Budhihal tank	Do	14,54,611	5,08,274	6,226	Sholapur	Sugarcane and wheat.
Bombay Sind	*Mahiwah canal	Productive.	15,17,356	14,37,374	65,950	Shikarpur	Wheat and millets.
Bihar and Orissa	*Tribeni canal	Protective .	75,27,302	68,09.779	106,000	Сһатрагап	Rice.
i	'Môn canals	Productive.	54,31,022	53,93,667	68,000	Minbu	Do.
Burma	Ye-u canal	Do	50,54,752	16,67,651	108,294	Shwebo	Do.
ŧ,	Twante	Do	72,80,973	16,00,292	***	Hanthawaddy	A navigation work.
							
		Total	25,72,21,701	14,64,91,996	4,939,662		

^{*} In operation.

Besides the above, a number of irrigation works of lesser importance are in course of execution, the aggregate cost of which will amount to Rs. 102 lakhs.

Province.	Name and probable classificat of work.	Estimated or approximate direct cost in lakhs of rupees.	Irrigable area in acres.	Districts benefited.	Principal crops that will be produced,	
	Cauvery reservoir Product	370	473,000	Tanjore)	
	Kistua reservoir pro-	800	735,000	Kistna and Guntur		
Madras	Lower Bhavani Do.	109	109,200	Coimbatore	Rice.	
	Velgode project Do.	28	61,000	Kurpool		
	12 smaller schemes Mainly tective		355,000	Ganjam, Nellore, Kurnool, Coimbatore, Anantapur and Salem.	J	
Bombay	Gokak canal extension Protect project.	ive 183	132,000	Belgaum, Bijapur and the Native State: of Kolhapur, Mudhol, Jamkhandi, Sangli and Kurundwad.	and oil seeds.	

Province.	Name and probable c	assification	Estimated or aproxi- mate direct cost in lakhs of rupees.	Irrigable area n acres.	Districts benefited.	Principal crops that will be produced.
Sind	Robri canal, Sukkur Barrage and widening Eastern Nara Supply- channel.	Productive	762	2,324,000	The whole Left Bank Division comprising three Revenue districts, viz., Nawabshah, Hyderabad and Thar and Parkar.	Cotton, wheat and rice.
(Sultanwah, Begari canal.	Do	16	177,700	Sukkur and Upper Sind Frontier.	Rice, jowari, bajri wheat and oil seeds
Bengel	Damodar canal	Do,	36	150,000	Burdwan	Rice.
Bihar and Orissa.	Extension of the Tri- beni canal.	Protective	10	25,000	Champaran	De.
United Provinces.	Belan canal	Do	15	30,500	Khairagarh Pargana, Allah- abad district.	Rice and wheat.
United Provinces and Punjab.	Sarda-Ganges-Jumna feeders projects.	Productive	646	1,524,000	In the United Provinces :—	-
					Rampur State, Pilibhit, Shahjahanpur, Hardoi, Bareilly, Moradabad, Budaun, Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Muthra, Agra, Etah, Mainpuri, Farukhabad, Etawah, Cawapore, Fatehpore and Allahabad.	and kharif crops grown in the United Provinces.
					In the Punjab:— Gurgaon, Karnal, Delhi, Rohtak Hissar, Patiala, and Jhind States.	
Punjeb	Sutlej Valley project	Do	875	30,00,000	Lahore, Ferozepore, Mont- gomery, Multan, Bikaneer and Bahawalpur States.	Wheat, gram, jowari and cotton.
Burma	Remodelling the Kinda canal.	Do	15	85,000	Kyaukse	Rice.
Central Pro-	Pangoli Nalla tank pro- ject.	Protective	16	33,000	Bhandara	Do.
Vinces.	Deena Nadi tank project.	Do	14 to 25	45,260	Chanda	Do.
(Anamber reservoir project.	Productive	38	80,000	Loralai	Wheat and barley.
	Torwal reservoir project.	Do	18	44,000	Loralai	Do.
Baluchistan ,	Gamboli reservoi: project.	Do	60	218,000	Sibi	Do.
	Zhob project Barshore reservois	Do	65 17	202,000 24,000	Zhob Quetta Peshin	Do. Wheat.
•	project.	Total4	,437 to 4,448	9,827,660	,	

Capital outlay in decade ending 1912-13.

25. In the following statement is shown the capital outlay incurred on irrigation works during the decade 1903-04—1912-13:—

Province or Administration.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13,	Total.
	Rs.	Rs.	Rs.	Rs.	Rs,	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bombay	17,63,165	8,80,398	7,73,029	7,05,986	15,23,692	20,16,804	27,72,38 3	24,79,153	27,00,526	28,37,327	1,84,52,463
Madras	14,79,980	16,32,794	18,68,586	24,69,512	15,43,792	13,53.243	11,50,966	9,34,252	5,82,289	7,59,593	1.37,75,007
Bengal	8,76,191	7,46,197	10,75,643	11,61.814	12,13,985	11,97,681	17,84,404	12,00,685	10,44,717	1,00,960	•1,04,02, <i>2</i> 77
Bihar and Orissa.					•			***		7,13,504	°7,13,504
Punjab	24,40,561	18,73,413	45,46,918	72,88,678	86,64,531	1,02,57,971	1,10,56,057	1,26,63,781	1,60,44,967	1,28,26,643	8,76,63,520
United Provinces.	20,63,958	22,12,043	30,61,087	36,43,342	33,12,516	24,75,562	19,84,273	21,21,137	20,61,315	22,17,210	2,51,52,443
Burma	13,65,830	11,72,887	13,07,632	12,76,074	11,75,858	16,18,944	12,24,280	12,15,875	20,01,044	26,54,375	1,50,12,799
3 Aluchistan	36,592	21,261	10,828	20,019	28,991	2,34,162	2,44,874	3,26,315	2,44,621	2,83,950	14,51,613
Rajputana	50,499	27,432	74,824	80,735	59,038	7,289	6,031	25,418	841	7,909	3,40,016
North-West Fron- tier Province	24,778	1,21,027	4,93,211	4,73,378	6,20,233	13,13,930	l 16,81,198	21,45,656	30,38,842	30,58,256	1,29,70,509
Central Provinces and Berar	4,00,135	6,22,638	5,50,426	7,55,696	10,18,187	14,34,997	14,18,129	10,06,324	18,62,690	26,82,287	1,17,51,509
Total	1,05,01,689	93,10,090	1,37,62,184	1,78,75,234	1,91,60,823	2,19,10,583	2,33,22,595	2,41,18,596	2.95,81,852	2,81,82,014	19,76,85,660

^{*} Figures for Bihar and Orissa included under Bengal up to the year 1911-12.

Local Self-government.

URAN WATER SUPPLY.

P. N. No. 5649, G. D., 18th July 1914, is as follows:—

In Government Resolution No. 3778, dated the 20th June 1911, it was announced that a scheme for the supply of water to the town of Uran and the salt tract (Kharapat) villages of the Uran Peta was under preparation and that on its receipt final orders regarding its execution would be passed.

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The scheme is now ready. It provides for the supply of water to Uran, Mora, the eleven Kharapat villages which stand most in need of water, and the employés on the Uran salt works. It is estimated to cost Rs. 5,00,000. Towards this sum Khán Bahádur H. M. Bhivandivala has offered to contribute one lákh, while the Uran Municipality and the Kolába District Local Board have each promised a contribution of Rs. 25,000. Of the Rs. 50,000 promised from public contributions, subscriptions amounting to only Rs. 28,850 have actually been recorded, the remaining Rs. 21,150 not being forthcoming. As the employes of the Salt Department will benefit by the water-supply, that department has agreed to contribute Rs. 40,000. These several contributions amount in all to Rs. 2,18,850, so that there still remains a sum of Rs. 2,81,150 to be provided. Moreover, the Uran Municipality have expréssed their inability to bear the maintenance charges in connection with the scheme, which are estimated at Rs. 6,500 per annum. The Commissioner has therefore been requested to draw up and submit, if necessary after consulting the municipality and the local officers concerned, definite proposals for financing the scheme including the necessary provision for future maintenance. This question of the financial arrangements is now engaging the attention of the Commissioner and the local officers. Until a satisfactory solution of the difficulty can be found, the execution of the scheme cannot be proceeded with.

Miscellaneous.

THE BOMBAY DEVELOPMENT COMMITTEE.

P. N. No. 5699, G. D., 21st July 1914, made the following announcement:—

It is notified for general information that the report of the Bombay Development Committee, 1914, together with all the evidence, oral and written, tendered to the Committee, maps and appendices, is available for sale at the price of Rs. 5-8-0. Copies of the report only can also be obtained for 8 annas.

Both publications can be purchased at the Book Depôt attached to the Government Central Press, Bombay, or from any of the regular agents for the sale of Government publications.

EXAMINATIONS OF STOKERS BY THE BOMBAY SMOKE-NUISANCES COMMISSION.

P. N. No. 5575, G. D., 16th July 1914, runs as follows:—

The Bombay Smoke-Nuisances Commission have prepared, and Government have sanctioned, a scheme for the issue of certificates of competency to stokers after examination. The scheme, which is purely voluntary, provides for a monthly examination for certificates of two grades, the lower being that of "ordinary stoker," and the higher that of "tindal stoker." Candidates for examination in the lower grade must be not less than 18 years of age, and must produce satisfactory proofs of general good character and of at least six months' approved service as stoker or assistant stoker. Candidates for tindal stokers' certificates must be at least 20 years of age and must produce satisfactory proof of at least one year's approved service as a stoker with an ordinary stoker's certificate. The examinations for both certificates will be oral and practical only, and each candidate will be charged a fee of Rs. 5 for the lower grade and of Rs. 8 for the higher grade examination. The examination regulations have been published on pages 817 to 821 of the Government Gazette, Part I, dated 16th April 1914, and forms of application for examination can be obtained free of cost from the office of the Commission at 15, Henshaw Building, Bank Street, Fort.

- 2. In order to encourage stokers to offer themselves for examination, the Chief Inspector will give short popular lectures to owners, engineers and others in charge of furnaces, on the best methods of using fuel when applied to industrial purposes so as to secure economical and smokeless results, and will issue printed instructions on the subject in English and vernacular. The Inspectors will also assist in training stokers who intend to take the examination.
- 3. The Commission realize that though millowners are generally anxious to abate smoke they are handicapped by inefficient firemen. Now that the Commission have taken steps to supply trained men, Government hope that owners will readily take advantage of the scheme by inducing their employes to prepare themselves for the examination.

THE LICENSING OF MOFUSSIL THEATRES.

P. N. No. 5109, J. D., 14th July 1914, made public a set of draft rules for licensing and controlling theatres and other places of public amusement in the districts of the Presidency proper. The rules have been published in the Bombay Government Gazette in English and the vernaculars, have been laid on the Editors' Table, and have been forwarded to all District Magistrates with a request that they should be given due publicity. Suggestions and criticisms have been invited, but as the period for submitting them will have expired before the issue of the present number of the Quarterly, it is not considered necessary to re-publish a set of draft rules which may receive modification.

THE SAFETY OF-LIFTS.

P. N. No. C. W.-10296, P. W. D., 16th September 1914, runs as follows:-

Since the introduction of electric power the number of lifts in the Bombay Presidency has considerably increased and the rate of increase will undoubtedly be much more rapid in the future. In Bombay the principal hotels and offices, the larger shops and most of the recently constructed flats and several private houses are now fitted with lifts. Most of the owners of these lifts have, in all probability, had no technical training and they may allow lifts to be installed which are defective in the matter of safety appliances. Even if these appliances are not defective in the first instance they may become inoperative after long disuse and may fail to act when the suspending ropes break or other accident occurs. The lift attendants usually know little or nothing either of machinery or electricity and the safety devices and appliances, which are partly mechanical and partly electrical, are not cared for by them as they should be. In the case of electric lifts, which form a large percentage of those in operation in Bombay, there is an initial inspection by the Government Electrical Inspector under rule 14 of the rules under the Indian Electricity Act of 1910 in cases where the pressure of supply exceeds 250 volts. The duty of the Electrical Inspector, however, is limited under the Act to ensuring the safety of the public from shock by contact or otherwise with high pressure wires and he is, at present, not concerned with the safety devices or the working of the lift. Immunity

from accidents in the past is possibly due to the fact that most of the lifts are comparatively new and this has, perhaps, made owners careless as to their responsibilities. One or two serious accidents, one of which was fatal, have already come to the notice of Government. As the lifts become older the risk of accident will increase considerably and unless owners take steps to have them properly and systematically inspected to prevent such accidents it is likely, in the event of an accident involving third parties, that heavy liabilities will be incurred. These accidents are bound to occur if proper precautions are not taken. The general public have at present no means of judging for themselves whether a lift is safe or not and those who use them rely on the owners keeping them in safe working order. Unless they do this satisfactorily accidents will increase in number as time goes on and loss of life will occur.

Enquiries made of several Life and Accident Insurance Companies have shown—

- (a) that a large proportion of the lifts in Bombay are uninsured;
- (b) that there are several Insurance Companies and agencies in

 The Commercial Union Assurance Co., Ltd.

 The Yorkshire Insurance Co., Apollo Street.

 Messrs. King, King & Co., Agents for the Railway

 Passengers Assurance Co.

 The General Accident, Fire and Life Assurance Corporation, Ltd., Hornby Road.

 Bombay (some of which are mentioned in the margin), that are prepared to insure and do arrange for the insurance

of lists against all risks provided satisfactory periodical inspection reports from an approved firm are submitted. (The owner of the lift has generally to arrange for these inspections and to pay for them);

(c) that some lift owners, while not insuring their lifts, employ the firm which originally installed the lift to inspect it at fixed periods;

and

(d) that the fact that there are Insurance Companies in Bombay and elsewhere who are prepared to insure lifts is not sufficiently known.

The Governor in Council has considered the matter very carefully and, while not wishing to resort to legislation to ensure the safety of lifts, is anxious that lift owners should realise the great responsbilities they have in this connection and take suitable steps to ensure their lifts being perfectly safe for use. It seems that this can best be done through Insurance Companies which undertake this business as they require that the lifts insured by them shall be inspected regularly by their own or other competent Inspector. To extend and facilitate the work of inspection and thus safeguard the public from accidents as far as possible Government are prepared to lend the services of their Electrical Inspectors for inspe ting lifts to such Insurance Companies or owners as require their services on the following scale of fees:—

- (i) For each inspection of one lift in the island of Bombay ... Rs. 7-8-0;
- (ii) For each inspection of one lift in any place outside Bombay Rs. 25 per day plus double first class return fare from Bombay, the number of days being reckoned at one for every 250 miles travelled by rail.

The above would apply mutatis mutandis to Sind where the head-quarters of the Government Electrical Inspector (now being appointed) are at Karáchi. It is of course to be understood that Government do not undertake to be responsible for the safety of the lifts but only lend their Inspectors for the fees prescribed above.

The Governor in Council trusts that lift owners will give this matter their close attention and take the necessary steps to safeguard, as far as possible, the public who use their lifts by availing themselves of the offer now made.

Pilgrims.

REPORT ON THE 1913-14 SEASON.

The following Resolution, No. 5604, G. D., 17th July 1914, was issued by the Government of Bombay on the report of the Protector of Pilgrims, Moulvi Abdulla Ahmed, Esquire, J.P., on the outgoing pilgrim season of 1913 and the returning season of 1913-1914:—

The total number of pilgrims who embarked from Bombay for the Hij last year was 15,319 against 15,464 in the previous year. Out of these, 12,361 are reported to have returned to India.

- 2. It is satisfactory to note that at the instance of the President of the Bombay Haj Committee, local Haj Committees were organized in several districts and that subscriptions to the Indigent Pilgrims Relief Fund were received from these provincial committees and from local Mahomedan anjumáns. The amount thus collected does not appear, however, to have been very substantial.
- 3. Government are disposed to concur in the view expressed by the Commissioner of Police that the proposal put forward by the Protector of Pilgrims for the appointment of travelling supervisors or inspectors to accompany the pilgrims on the sea voyage is not a practicable one. The general improvement in the pilgrim service between Bombay and Jeddah, of which there appear to be certain indications, may be expected to put an end to complaints of the nature referred to.
- 4. The arrangements for the visaing of pilgrims' passports and the collection of the visa fees are under consideration.
- 5. The question of the supply of drinking water to pilgrims on board pilgrim vessels is already receiving the attention of Government, and the Government of India have been asked to increase the minimum daily quantity prescribed by the rules for each pilgrim from one gallon to one gallon and a half.
- 6. The acknowledgments of Government should be conveyed to Mr. Edwardes, President of the Háj Committee, to Mr. Dada Mia Khandwani for his generosity in bringing back free of all cost in one of his steamers a large number of pauper pilgrims, and finally to the Protector himself for his exertions in the interests of the pilgrims.

IMPROVEMENTS IN THE PILGRIM TRAFFIC.

P. N. No. 6075, G. D., 1st August 1914, runs as follows:—

It will be remembered that in April, 1913, the Government of Bombay suggested to the Government of India that by adopting a system of compulsory

return tickets and certain other measures a great improvement in the conditions of the pilgrim traffic might be achieved, to the benefit both of Government and the pilgrims themselves. The Government of India were of opinion that these suggestions merited careful consideration, and circulated them to all Local Governments for opinion. Meanwhile the Government of Bombay obtained the opinions of all important Mahomedan anjumáns, associations and communities, and of leading Mahomedan gentlemen, and in addition held an informal conference with certain leaders of the community. The most striking point that emerged from the large body of opinion collected from all parts of the Presidency was the apparent absence of any general or emphatic opposition to the principle of the compulsory return ticket system. There was, however, very considerable opposition to the scheme as put forward, and although the points of objection had reference for the most part to matters of detail which might have been met, to a considerable extent, by a modification of the scheme, the Government of Bombay decided to re-consider the whole question in the light of the opinions elicited and to determine whether their object could not be achieved by other means.

- 2. Accordingly the Government of Bombay again addressed the Government of India in April 1914 with alternative proposals. The object of the proposals are threefold, namely:—
 - (i) Greater efficiency in the actual organization of the pilgrimage at the port of departure.
 - (ii) The improvement of the conditions under which the voyage from India to the Hedjaz and back is performed.
 - (iii) The establishment of improved facilities for securing the return of Indian pilgrims from Jeddah.
- 3. For the achievement of the first object it is proposed that the Pilgrim Department at Bombay shall be re-organized under a special Deputy Commissioner of Police. The new Department will discharge, as far as possible, all the functions connected with the arrangement for the embarkation and transport of pilgrims which are at present divided between the Police and the Customs authorities. The existing Bombay Haj Committee will act as a board of advice to the Deputy Commissioner. It is also suggested that Provincial Haj Committees, assisted, when necessary, by local sub-committees, should be constituted for each

province in India on the lines of the Bombay Committee, and that such Provincial Committees should be in close communication with the Bombay Committee for the purpose of keeping the latter informed as to the number and dates of departure of pilgrims leaving from their respective areas.

- 4. It may here be mentioned that the Government of India have addressed all local Governments on the Government of Bombay's present proposals, and, while deferring the passing of orders on some of the points contained therein, have nevertheless expressed general approval of certain main recommendations. Thus they have expressed their agreement with the view that the early organization of local Haj Committees is imperative, and have asked local Governments to treat the matter as urgent. They have also expressed their belief that in those provinces where the number of Hajis is relatively large, it would be well if the committees were provided with paid secretaries, and, subject to the sanction of His Majesty's Secretary of State, have promised to consider any reasonable proposal for assistance from Imperial funds towards their pay.
- 5. The proposals of the Government of Bombay with a view to improving the conditions of the actual voyage entail the amendment of the Pilgrim Ships Act, the Protection of Pilgrims Act, and the rules under the former enactment in the following directions:—
 - (a) The prescription of a higher minimum of space for pilgrims on board ship. This question has come up and will be settled automatically in connection with the deliberations of the Life Boats Committee,
 - (b) The raising of the minimum of tonnage for pilgrim ships from 500 to 2,000, and eventually 2,500 tons. The present minimum was fixed nearly 20 years ago, and the development of shipping in that period justifies an increase. The great majority of pilgrim ships already have a tonnage of 2,000 or do not fall far short of that figure. The Government of India, however, consider that a minimum tonnage of 1,800, to be raised to 2,000 after three years, will be a sufficient increase for the present.
 - (c) The fixing of a contract time-limit for the voyage from the port of departure to Aden, excess over which will render the shipping company H 438—18

liable to the forfeiture of a deposit previously exacted. The present Pilgrim Ships Rules as regards speed are as antiquated as those on size. Ships have to be certified as "capable" of steaming so many knots, but in practice are often found to be capable of doing so for a few hours only. In the opinion of the Government of India the amendment to the Act will be necessary before effect can be given to this proposal, but in the meantime the number of knots which ships must be "capable" of steaming is to be raised above the present figure, which is 8 only.

- (d) The strengthening of the provisions with regard to the notification of the date of sailing, and the imposition on the shipping companies of a definite obligation to despatch their ships on the day notified. The present state of law enables shipping companies to advertize with impunity sailings to which they know they cannot possibly adhere and rates of passage money which they have no intention of accepting if, by thus inducing a rush of applications, they are enabled subsequently to raise them. The proposed amendment will do away with this evil and will remove a source of intense harassment and annoyance to the pilgrims who are unnecessarily detained at the port of departure.
- (e) The introduction of improvements in certain matters affecting the health and convenience of the pilgrims.
- 6. The Government of India make it clear that the proposed amendments in the rules under the Pilgrim Ships Act will in the ordinary course be published for criticism before they are finally issued, while the Bill to amend the Protection of Pilgrims Act will be subject to further discussion when introduced into the Bombay Legislative Council.
- 7. The proposals designed to improve the facilities for securing the return of Indian pilgrims from Jeddah may briefly be summarized as follows:—
 - (a) The constitution at that port of a British Indian Agency of the Bombay Haj Committee worked in conjunction with the British Consul.
 - (b) The organization of a Repatriation Fund composed of subscriptions collected from the Mahomedan community in all parts of India and of an

Imperial non-recurring grant not exceeding one lakh of rupees equal to the total amount thus collected.

- (c) The administration of this fund by the Bombay Haj Committee, the allotments made from time to time from its proceeds being disbursed by the Agency at Jeddah under the supervision of the British Consul.
- (d) The imposition on the shipping companies of an obligation to issue, on demand by pilgrims, return tickets at a cost representing an excess not more than 25 per cent. over the cost of a single ticket, such return tickets carrying a guarantee of the refund of the excess in the event, which would be certified by the Haj Committee, of the death of the holder or the non-utilization of the return half.
- 8. The reasons for the above proposals can best be explained by the following quotation from the Bombay Government's letter to the Government of India:—
 - "Under present conditions the Consul at Jeddah is the only effective agent for watching over the interests and welfare of pilgrims disembarking and re-embarking. He does what is possible to secure for them fair treatments when once they are ashore and to facilitate their departure. But in the numerous cases which annually occur of pilgrims reaching Jeddah in a destitute condition on the return journey he is practically unable to do more than represent their case, as last year, to the Government of India or of Bombay. He has no general fund at his disposal for their repatriation.

"It was this aspect of the case which drove the Government of Bombay, in the interests of the credit of the Musalmans of the Indian Empire, to propose a system of compulsory return tickets; and it is this problem for which I am now to propose an alternative solution.

"It is believed that certain charitable Musalmans occasionally proceed to Jeddah partly, if not mainly, for the purpose of helping indigent pilgrims, not only with funds, but also with advice and direction. Such unorganized charity can of itself do but little, but it seems to point out a direction in which proper organization can convert casual relief into a systematic

alleviation of a growing scandal. With this end in view the Governor in Council proposes that there should be established, at Jeddah, a British Indian Agency affiliated to (or rather emanating from) the Bombay Haj Committee, and working in conjunction with the British Consul, for the express purpose of effecting the repatriation annually of indigent pilgrims at the close of the pilgrim season. The Musalman community in Bombay recognize the grave discredit, which is reflected on all Indian Musalmáns by the recurring scandal. They have shown, however, that there are difficulties in the way of, and strong opposition to, a system of return tickets. There is reason to believe that they realize (and are willing to help in discharging) the responsibility of the community for co-operating with Government in devising and financing measures of relief. Funds, or rather a fund, will be necessary to render efficient the working of the proposed British Indian Agency; and His Excellency in Council desires to suggest, for the consideration of the Government of India, that such fund shall be formed by a non-recurring grant from Imperial revenues not to exceed, at present, rupees one lákh, conditional upon the Musalmán community throughout India raising at least an equal sum. It may reasonably be hoped that the community will be able to raise a sum very largely in excess of a lakh; but even assuming, for a moment, that it failed to respond generously, a Repatriation Fund of two lakhs, yielding an income of Rs. 8,000 approximately, would to a very large extent solve the problem. This fund would be administered primarily by the Háj Committee in Bombay, whose annual grant, varying according to the necessities of the case, would be disbursed by the Jeddah British Indian Agency under the control of the British Consul. It is possible that the Bombay Haj Committee acting through the proposed Pilgrim Department could successfully arrange each year with steamship companies for the carriage of destitute pilgrims at special rates; but it is in any event quite certain that an organization of the character described, working in conjunction with a local committee in Jeddah controlled by the British Consul, and possessed of a nucleus fund of the character described, would be in a strong position to end the present unsatisfactory condition of affairs; and I am to express the hope that the Government of India will view the matter favourably and see their way to make a grant of one lakh of

rupees towards the fund, on the condition that the Musalman community collect at least one lakh of rupees within a reasonable period.

- "I am to add that the Governor in Council has not overlooked the probability that, as soon as it is known that a Repatriation Fund exists, many pilgrims who could really afford the return ticket will represent themselves as being indigent. It is, however, hoped that the Consul, by associating with himself certain of the respectable Indians, whether permanently or only temporarily resident in Jeddah, will be able to acquire a knowledge of the circumstances of such persons, so as to be in position to resist such claims when not genuine. At all events, the Governor in Council thinks the experiment to be well worth a trial, and has ascertained that, pending the discovery of a better method, the Bombay leaders of the Musalmán community concur in this view."
- 9. The Government of India have announced that, subject to the approval of the Secretary of State, they are disposed to agree, to a non-recurring grant of one lakh of rupees being made from Imperial revenues to the Bombay Haj Committee towards the proposed Repatriation Fund, provided that the Musalman community throughout India raises at least an equal sum within a reasonable period.
- been printed at length in the Bombay Government Gasette, Part I, page 1549, dated the 16th July 1914. The proposals have already been discussed with prominent leaders of the Mahomedan community in the Bombay Presidency and, except in a few particulars, meet with general acceptance. The Government of Bombay have caused this summary to be prepared so that the proposals may become widely known among the public in general and Mahomedan anjumáns and associations in particular.

THE EMBARKATION OF PILGRIMS AT BOMBAY.

P. N. No. 7279, G. D., 14th September 1914, runs as follows:—

In view of certain statements which have been made on the subject the Government of Bombay consider it desirable that the Mahomedan public should be made acquainted with the exact facts in connection with the medical examination which pilgrims to the Hedjaz undergo before they embark at Bombay.

The medical examination is necessary both by reason of international obligations and for the protection of the pilgrims themselves. Even passengers by the mail steamers, European as well as Indian, are medically examined before being permitted to embark. Medical examination and disinfection are of service to the pilgrims, because as a result of these precautions it is unlikely that any one suffering from a contagious disease will be able to go on board a pilgrim vessel. If one such person succeeded in embarking, the Turkish authorities would not allow his fellow-pilgrims to disembark at the journey's end until many days were passed, and all danger of the disease spreading was over.

When the pilgrims arrive at the bunder, they are accommodated in waiting sheds. From there they pass with their kit to the examination shed, where they themselves are examined by the doctor and their kit is disinfected.

It has been suggested that pilgrims should be medically examined in the waiting sheds. This is not possible because the sheds are not suited for the disinfection of their kit. The existing disinfection shed cannot be extended for want of space, but the Port Health Officer is submitting proposals to Government for the demolition of the present shed and the erection of a new shed on the Modi Bunder Estate which will serve both the old and the new docks. It will, it is hoped, possess the further advantage that the waiting and examination sheds will all be in one building, so that pilgrims will only have to pass from one room to another.

When the pilgrims have been passed by the doctor they have to proceed any distance between 200 yards and three-quarters of a mile to the particular wharf out of 33 wharves from which their ship will start. It is, therefore, necessary to adopt some means of identifying them when, after traversing this distance, they arrive at the embarkation barrier; otherwise impostors might rush in before them and prevent bona fide pilgrims going aboard. For this reason the medical staff stamps each pilgrim's ticket with a seal. This precaution, however, was long ago found to be insufficient, as impostors procured dummy tickets and forged the seal.

It was therefore thought advisable to place a stamp on the back of the left hand of each pilgrim who voluntarily agreed to this course. Later it became necessary to ask pilgrims to receive two stamps on their skin, because impostors learnt to forge the stamp by pricking their hands. Now, however, the Port Health Officer has devised a more complicated stamp which cannot easily be counterfeited, and only one impression on the back of the hand will be necessary. Saloon pilgrims receive numbered and stamped passes and the skin impression is dispensed with in their case.

Government wish to emphasize the fact that in every case the rubber-stamp skin impression is entirely voluntary. This method of identification is adopted simply to save the pilgrims time and trouble. It enables the authorities at the embarkation barrier to see at once who are entitled to go aboard, and, as a consequence, the embarkation of a whole boat-load of pilgrims, which formerly was a long and tedious process, now seldom lasts an hour. Pilgrims who can show the stamp on their hands are admitted on board first of all. The remainder have to be re-mustered for identification by their brokers and for the elimination of impostors before they may embark. It is therefore obviously to the advantage of pilgrims to have the stamp impressed on their hands as well as on their tickets, but those who prefer not to submit to this are merely put to the inconvenience of having to wait a little longer before they are allowed to go on board. This system of rubber impressions has been in force for the past fifteen years and, so far as Government are aware, has never been objected to by the pilgrims.

PLAGUE AT BASRA.

G. R. No. 5626, G. D., 18th July 1914, conveyed, through the officers concerned and the public press, a warning to pilgrims and other passengers intending to proceed to Basra of the outbreak of plague there.

* * * *

Public Health and Sanitation.

NEW SANITARY ENGINEERING DISTRICTS.

The following P. W. D. Notification, No. E.-7622, was issued on 8th July 1914:—

His Excellency the Governor in Council is pleased to order the formation of two temporary Executive Districts for the Sanitary Branch of the Public Works Department for the preparation of projects and for the execution and control of works in the Presidency proper. The works in Sind will still be under the direct control of the Sanitary Engineer to Government.

- 2. The two new districts will be classified as Provincial, and be styled—
- (1) the Southern Sanitary District, having its head-quarters at Belgaum, and including the civil districts of Kolaba, Poona, Ahmednagar and all the civil districts to the south of these; and
- (2) the Northern Sanitary District, having its head-quarters at Ahmedabad, and including all the civil districts to the north of (1).
- 3. The Sanitary Engineer to Government, who has the status of a Superintending Engineer, will direct and control all the operations of the two Executive Engineers to be placed in charge of these districts, and, as Administrative Head of the Sanitary Branch of the Public Works Department, he will continue to be responsible for the selection and also for the soundness and correctness of all the projects submitted to the Sanitary Board.
 - 4. The duties of the Sanitary Executive Engineers will be as follows:-
 - (a) to inspect all works of water-supply and sanitation in operation in the area under their control;
 - (b) to survey for and prepare new projects;
 - (c) to have charge of the construction of projects.
- 5. The two districts will be formed from the dates on which the officers nominated to hold charge of them assume their respective duties.
- 6. Mr. P. N. Natesh Ayyar, L.C.E., is appointed, as a temporary measure, as Executive Engineer in charge of the Southern Sanitary District.

* * * *

ST. GEORGE'S HOSPITAL NURSING HOME.

- G. R. No. 5540, G. D., 14th July 1914, announces that under rule 2 of the rules for the management of the St. George's Hospital Nursing Home, the Governor in Council has authorized the following medical men to attend and treat patients in the Home:—
 - 1. Lieut.-Colonel L. F. Childe.
 - 2. Lieut,-Colonel A. Street.
 - 3. Lieut.-Colonel S. H. Burnett.
 - 4. Lieut.-Colonel T. Jackson.
 - 5. Lieut.-Colonel S. C. Evans.
 - 6. Major T. S. Novis.
 - 7. Major G. McPherson.
 - 8. Captain I. Davenport Jones.
 - g. Dr. Field, G. I. P. Railway.
 - 10. Dr. S. A. Powell, Police Surgeon.
 - 11. Dr. W. Nunan, Imperial Mansions, Cuffe Parade.
 - 12. Dr. Jackson, B. B. & C. I. Railway.
 - 13. I. M. S. Officers in military employ in Bombay.
 - 14. R. A. M. C. Officers on duty in Bombay.
 - 15. Naval Medical Officers on duty in Bombay.

Medical Officers in Government service who are debarred from private practice by the terms of their appointments are not included in this list. Lieutenant-Colonels Childe and Jackson and Dr. Powell are available for consulting practice only.

* * * *

ST. GEORGE'S HOSPITAL NURSING HOME RULES. .

- P. N. No. 6266, G. D., 8th August 1914, published the following rules:—
- 1. St. George's Nursing Home shall be located in such ward or wards of St. George's Hospital as Government may direct and will be under the general control of the Surgeon Superintendent of the hospital; subject to such control the Lady Superintendent of the nursing staff will be in charge of the nursing arrangements in the Home.
 - H 438-19

- 2. Government will from time to time publish a list of medical men authorized to attend and treat patients in the Home.
- 3. The Home will be available for European and Anglo-Indian patients only.
- 4. Permission to enter the Home can be obtained only from the Resident Surgeon of St. George's Hospital, or, in his absence, from his Deputy, on presentation of a letter of application from one of the medical men on the authorized list. Patients from the mofussil seeking direct admission to the Home will be required to produce a letter of application from the local Civil Surgeon.
- 5. The letter of application must specify the nature of the case of illness for which accommodation is required. No case of infectious disease can be admitted to the Home without the special sanction of the Surgeon Superintendent of St. George's Hospital.
- 6. Should an infectious disease develop in any patient after admission the question of the patient's retention in the Home shall be decided by the Surgeon Superintendent of St. George's Hospital, and his decision shall be final.
- 7. All persons admitted to the Home must conform to the rules and regulations made for its management. In any case of non-compliance with the rules, the Surgeon Superintendent of St. George's Hospital may require the patient to leave the Home after 24 hours' notice.
- 8. While in the Home, patients will be under the sole care and treatment of the medical man of their selection. They will not be entitled to gratuitous treatment by any member of the St. George's Hospital medical staff.
- 9. The charge per diem will be Rs. 15 per patient. Patients in the Home will be supplied with all necessary furniture, bedding, etc., food and ordinary nursing. Private linen will be washed at the patients' expense. No medicines or medical or surgical appliances will ordinarily be supplied. No stimulants will be supplied. When special nurses are required, they must be paid for separately, and will be obtained from the private nursing staff of St. George's Hospital when available.

- 10. No reduction in the daily charge will be made on the ground that food is supplied from outside.
- 11. Operating surgeons will have to use their own instruments. Facilities will be available for the sterilization of instruments, and the operation room of St. George's Hospital will be available by arrangement with the Surgeon Superintendent of St. George's Hospital.
- 12. Private servants will be allowed only with the permission of the Lady Superintendent of the nursing staff.
- 13. Arrangements for the administration of anæsthetics must be made by the medical man in charge of the case.
- 14. The Home will not undertake any responsibility for the payment of fees to medical men. This is a matter which must be arranged entirely between the patients and their medical attendants.
- 15. The charges for accommodation, etc., in the Home will include the day of admission and the day of discharge. One week's payment in advance, or a satisfactory reference, may be demanded by the Surgeon Superintendent of St. George's Hospital.
- 16. The management will not be responsible for the safety of money or valuables belonging to the patients. On admission such money and valuables should be made over to the Steward, St. George's Hospital, for safe keeping and a receipt obtained. Sums of money in excess of Rs. 20 must be made over to Agents.
- 17. Visitors will be admitted, with the permission of the medical man in charge of the case, during the visiting hours of St. George's Hospital, vis., 5-30 to 6-30 p.m. In urgent cases visitors will be allowed to visit at any time.
- 18. All patients must be in bed by 9-30 p.m., and on no account are they to sit or sleep in the verandahs after that hour.
- 19 Patients wanting leave to go out must obtain the permission of their medical man.
- 20. Smoking is prohibited except in the verandahs, but bedridden patients will be allowed to smoke with the permission of the Nursing Sister.

21. The hours of meals are—

 Chhota haziri
 ...
 ...
 7 a. m.

 Breakfast
 ...
 ...
 9-30 a. m.

 Dinner
 ...
 ...
 1-45 p. m

 Supper
 ...
 7 p. m

22. All complaints against servants must be made to the Nursing Sister. On no account may patients deal with offences.

War.

THE IMPERIAL INDIAN RELIEF FUND.

His Excellency the Governor has addressed the following letter to the Editors of newspapers in the Bombay Presidency regarding the Relief Fund:—

Bombay, 4th September 1914.

Dear Sir,

It has been brought to my notice from various sources during the last few days that there are many people who are somewhat doubtful as to the objects and reasons for the collection of funds of the Bombay Branch of the Imperial Indian Relief Fund, and it is with a view to clearing up these doubts that I trust you will be good enough to insert this letter in your columns.

A very clear explanation, issued from Simla, of the main object and the general organization of the fund has been very fully given in the issue of the Times of India of September 3rd, but it will suffice in this letter to give two short extracts from that statement in order to give the two principal purposes we have in view. They are as follows:—The primary object of the fund is to relieve distress among the families of those who have gone to the front and to assist the widows and orphans of those who die in service. In utilizing the amounts collected no distinction will be drawn between officer and private, European and Indian, combatant and non-combatant. The test will be absence on active service and straitened circumstances among the family

The second object of the fund is the relief of acute local distress among the poorer classes of the people,

caused directly by the war and through no fault of their own. It is not the intention to make good any losses suffered by the prosperous or comparatively well-to-do, who, like all other subjects of the empire, must bear their share of the Imperial burden. Nor is it the intention that the fund should maintain in idleness labourers whom the war has thrown out of employment if they are in a position to find other employment elsewhere but make no effort to do so. In short, the assistance from the fund is intended to be given only to the poor classes of the civil population, who, through the effects of the war and no lack of effort on their own part, are in actual want of the necessities of life.

There was at first a general desire expressed to expend some of our funds in the provision of hospital or ambulance requirements for our troops, but now that we know that our soldiers, both Indian and English, are leaving these shores to fight for the empire in Europe, it is essential in the opinion of the Administrative Committee that we should for the present conserve our resources in order to be in a position to give relief for these two main purposes for which the fund is being raised, but this in no way prevents, if our subscription list is sufficiently large, our allocating funds for any other useful purpose which may be suggested in the future.

May I take this opportunity of thanking the citizens of the Presidency for their patriotic response to our appeal, and assure them that any sum, however small, will be gladly received for this good cause?

Believe me, Yours sincerely.
WILLINGDON.

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LIST OF ABBREVIATIONS.						
N. B.—The following	abbreviation	s are used in the Quarterly:—				
G. R. = Government Res	olution.	J. D. = Judicial Department.				
P. N. = Press Note.		L. D. = Legal Department.				
Bc. D. = Bcclesinstical Department.		M. D. = Marine Department.				
Ed. D. = Educational Department. F. D. = Financial Department.		P. D. = Political Department. P. W. D. = Public Works Department.				
G. D. = General Departm		R. D. = Revenue Department.				
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Blue Book Quarterly.

A Review of the Publications of the Government of Bombay.

No. 4.

JANUARY 1915.

PRICE 4 ANNAS.

PART I.

Agriculture.

SEASON AND CROP REPORT OF THE BOMBAY PRESIDENCY FOR THE YEAR 1913-14.—Foolscap folio, 7 pp. letter-press and 15 pp. statistical tables (Government Book Depôt, Bombay)—price 5 annas or 6d.

The report is reviewed in the following G. R. No. 12715, R. D., 18th December, 1914:--

On the whole the rainfall during the year 1913 in the Presidency proper was adequate and seasonable for agricultural operations. In Sholapur and parts of Sátára and Bijápur districts it was however in defect, and the crops suffered considerably in consequence. Elsewhere the kharif rains were good and in fact exceeded the average in Gujarát and the Deccan at some stations. The rabi rains on the other hand were disappointing. Though sufficient for sowing operations, the standing crops—especially in light soil—suffered for lack of moisture and the outturn except in Khandesh, Ahmednagar and the western tracts of Poona and Sátára districts was generally somewhat below normal. Sind the kharif rains were extraordinarily heavy in the southern districts, and added in some places to the damage which was caused by breaches in the canals. In upper Sind, owing to the early fall of the river, irrigation was restricted with the result that the outturn of crops was reduced in places. But the total cropped area of the season in the Province exceeded the average and that of the preceding year by 21 and 8'4 per cent., respectively.

As compared with the year 1912-13,—when in comparison with the unfavourable season of 1911-12 there was a large increase of 25 lákhs of acres in the total cropped area in the Presidency proper,—that area in the year now under review showed a slight decrease of 1'21 lákh of acres or 0'5 per cent. The total figure of 244'9 lákhs of acres is, however, very little short of the average. Of

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this the portion under food crops was about 1.5 per cent. below the preceding year and 3.5 per cent. short of the average, while the area under non-food crops showed increases of 3 per cent. over the preceding year and of 13.6 per cent. over the average. Thus the tendency to substitute non-food for food crops, which, as a result of the scarcity of 1911-12 and the experience thus gained by the cultivators, was checked in the succeeding year, has again shown itself, and points to the lesson of 1911-12 having soon been forgotten in the districts of the Presidency. In Sind, however, while the areas under cotton and oil-seeds increased by 15.7 and 72.2 per cent. respectively over the previous year, the total food cropped area still exceeded that of the preceding year by 3 per cent. and the average by 18 per cent.

- 3. Of the non-food crops, the principal increases in the Presidency proper were under cotton and tobacco, while in Sind cotton and oil-seeds were most extensively grown. The area under cotton in the Presidency proper increased by 1 61 lákh of acres or 32 per cent. over the normal and in Sind by 45,000 acres or 15.7 per cent. over the preceding year. Except in Bijápur and Belgaum, where the season was unfavourable, the acreage under cotton was extended in all the districts of the Presidency and of Sind. The outturn varied from 104 per cent. of the normal in West Khándesh to 25 per cent. of the normal in Sholapur, the estimate elsewhere ranging from 50 to 93 per cent. of the The total outturn exceeded that of the previous year by about 7 per cent. Prices, however, were lower than the average especially in the case of the short-stapled Khándesh varieties. As compared with preceding year Dhárwár cotton maintained its price and showed even a slight advance on that year, but Broach and Khándesh both fell. prices was most marked during the latter half of the year and the outbreak of war after its close has created a crisis in the cotton market, the ultimate outcome of which it is impossible to foretell. The matter is receiving the most careful and anxious attention of Government and it is hoped that some action whereby the cultivators will in some degree be protected from the very serious losses with which they are threatened, may eventually be found to be feasible. The market for oil-seeds is also seriously affected by the war conditions at present prevailing and prices have fallen heavily. As yet it is too early to guess how conditions may shape themselves in regard to the market for this commodity.
- 4. Except in the Poona, Sátára, Belgaum and Bijápur districts where, owing to the unfavourable rains, irrigation was employed to a larger extent than usual, the area under irrigated crops elsewhere in the Presidency proper was

restricted, the area under Government canals falling by 2'2 per cent. and that under private canals and wells by 11'8 per cent. and 11'1 per cent., respectively. This was the natural result of the favourable seasonal conditions which except in the four districts above mentioned generally prevailed. In Sind the irrigated area rose by 5'2 per cent. as compared with the previous year, the extension being due to the favourable inundation of the year.

5. Prices of the staple food-grains generally ruled slightly lower than in the preceding year, but were still considerably over the average. The fall in the price of cotton occurring as it did fairly late in the year did not seriously affect the cultivators as a class as it is the general practice for them to sell their crops early in the season. In spite of the dislocation of the markets which has occurred since the close of the year, the agricultural outlook as a whole in the Bombay Presidency does not appear to be unfavourable. Owing to a succession of fairly good seasons coupled with exceptionally high prices the position of the agriculturists has been extraordinarily favourable during recent years, and there is every reason to believe that they will be able to withstand the trial which they have now to undergo and will emerge from it successfully. The cultivation of commercial crops such as cotton will probably be checked, and food crops the prices of which show little or no tendency to fall will be substituted for them. current season promises to be a season of good crops throughout the Presidency and though prices may fall and profits may be reduced the cultivator probably stands to lose less owing to the war than most other classes of the community.

THE FODDER PROBLEM IN THE BOMBAY PRESIDENCY.—Royal 8vo, 23 pp. (Government Book Depôt, Bombay)—price 2 annas.

The nature of this publication is sufficiently indicated in the following P. N. No: 12312, R. D., 10th December, 1914:—

The Government of Bombay have just issued a pamphlet entitled "The Fodder Problem in the Bombay Presidency." The question is treated from two main points of view. The economic utilization of existing fodder supplies first comes under discussion. The most important subjects reviewed in this section are the collection and transport of grass in times of scarcity, the possibilities of fodder storage, the practice and advantages of ensilage and other methods of

preserving fodder. In the second part of the pamphlet some account is given of the efforts of the Agricultural Department to discover and popularise new sources and forms of fodder. The valuable qualities of cotton seed hulls (husks from which the oil has been extracted) as a cattle food and of prickly-pear as an emergency fodder have been proved by experiment, while continuous progress is being made in the establishment of better types of grass by means of scientific selection and in testing the food values of all possible forms of fodder.

The pamphlet can be obtained from any of the usual agents for the sale of Government publications at a price of two annas. The Governor in Council hopes that its publication will serve to focus attention on the important question of fodder supplies and will in itself afford proof of the earnestness with which the Agricultural Department is dealing with the problem.

COMMON SALT AND ITS USE AS MANURE IN THE KONKAN DIVISION, being Bulletin No. 59 of 1914 of the Department of Agriculture, Bombay.—Super-royal 8vo, 19 pp. (Government Book Depôt, Bombay) —price 3 annas or 3d.

This bulletin was written by Mr. V. H. Gonehalli, M.A., Extra Deputy Director of Agriculture, Konkan Division, and records the results of his enquiries into the use of common salt for agricultural purposes. Mr. Gonehalli shows that the application of salt is beneficial to mango and cocoanut trees, and to a certain extent to rice. Government has arranged for the issue of denaturalised salt at a cheap rate to agriculturists of the Konkan districts for manuring purposes.

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NOTE ON INDIAN SUGAR INDUSTRY AND MODERN METHODS OF SUGAR MANUFACTURE, being Bulletin No. 60 of 1914 of the Department of Agriculture, Bombay.—Super-royal 8vo, 113 pp. (Government Book Depôt, Bombay)—price 12 annas or 1s. 2d.

SUGARCANE, ITS CULTIVATION, AND GUL MANUFACTURE, being Bulletin No. 61 of 1914 of the Department of Agriculture.—Super-royal 8vo, 41 pp. (Government Book Depot, Bombay)—price 5 annas or 6d.

THE VALUE OF CASTRATION OF DECCAN BULLOCKS, being Bulletin No. 62 of 1914 of the Department of Agriculture.—Super-royal 8vo. 6 pp. and 2 photographs (Government Book Depôt, Bombay)—price 3 annas or 3d.

SUBSTITUTES FOR RA'B, being Bulletin No. 63 of 1914 of the Department of Agriculture.—Super-royal 8vo, 19 pp. (Government Book Depôt, Bombay)—price 3 annas or 3d.

The last three bulletins are by Professor J. B. Knight of the Agricultural College, Poona, while the first was written by Mr. G. N. Sahasrabudhe, lately a State technical scholar. Reviews of these four publications are reserved for the next number of the *Quarterly*.

Commerce and Industry.

ANNUAL FACTORY REPORT OF THE PRESIDENCY OF BOMBAY, 1913.—Foolscap folio, 9 pp. letter-press and 24 pp. statistical tables (Government Book Depôt, Bombay)—price 5 annas or 6d.

The report has been reviewed in the following G. R. No. 8051, G. D., 8th October, 1914:—

The administration of the Factory Department during the year under review was marked by no event of special importance except the appointment of a fourth Inspector with effect from the 28th March, 1913.

2. The total number of factories regulated by the Act during the year

• Year.				Operatives.
1913		•••		265,975
1912	•••	•••	•••	259,845
				
				6,130

under report was 743, being 56 in excess of the number for the year immediately preceding. This increase in the number of factories is, no doubt, partly responsible for the increase of over 6,000* in the

number of operatives employed during the year.

- 3. Government note with satisfaction that there has been a considerable reduction as compared with the preceding year in the number of factories which remained uninspected by a whole-time inspector. With one exception, moreover, these factories were seasonal only. Government share the Collector's regret that no inspections by District Magistrates in the mofussil were recorded, and commend to the notice of those officers the remarks made by Mr. Simcox in paragraph 2 of his letter.
- 4. The requirements of the Act in respect of sanitation appear on the whole to have been satisfactorily attended to. Only in one case in Bombay was it found

necessary to institute a prosecution for breach of section 9 (a) of the Act. The arrangements for the ventilation of factories continue to be defective, and no general improvement in this direction is to be expected until the measures which may be recommended by the Special Committee which is dealing with the question have come into operation. The expert referred to in the last year's review has expressed his inability to come to India, but has promised to give his advice on the submission to him of data showing the effect of humidity on the constitution of the operatives. The collection of these data is at present in progress. Government hope, however, that, pending the introduction of legislation on the subject, attention to individual cases will lead to an improvement, at any rate in the worst cases of bad ventilation.

- 5. There is little or no variation from the standards of recent years in the wages of the different classes of operatives who receive fixed monthly wages. As in the interval the new Act has had the effect of reducing the hours of work, it follows that there has, in practical effect, been a rise of wages. The same may be said of the wages of the piece-workers whose actual earnings, thanks to a general re-adjustment of rates, have remained unaffected by the reduction in hours and the consequent diminution of output. Strikes of a minor character originating in disputes regarding this re-adjustment of wages in individual cases occurred during the year, but were settled amicably, the employers in most cases conceding the demands of the hands in view of the scarcity of labour.
- 6. Nine prosecutions in all were instituted during the year, one each in Dhulia, Ahmedabad, and Poona, and six in Bombay, for the illegal employment of women and children. It appears that the frequent issue of orders was necessary to enforce the adoption of the register required under the Act, particularly those relating to the employment of children, and in several cases prosecutions were successfully undertaken. Government have received the report of the Special Committee appointed to report on the question of the education of children employed in factories. The principal recommendation put forward that the hours of work prescribed for half-timers should be divided into two periods with a substantial interval between them, an arrangement which would facilitate their attendance at schools, is under consideration.
- 7. The fencing of machinery was generally well maintained, though it was found necessary to institute legal proceedings for neglect in this respect in thirteen cases in Bombay, two in Ahmedabad and one in Sholapur. As accidents are

reported to have occurred owing to contact with the beaters of scutchers through the dust chamber doors, the question of amending the rules so as to provide for the automatic locking of the doors is now under the consideration of Government. The total number of fatal accidents reported during the year was 43—the highest figure on record—against a decennial average of 26.4, but the diminution observable in the previous year in the number of cases of serious injury continued during the year under report, the actual number being only 63 against a decennial average of 125. The proportion of persons killed or injured to the total number of operatives is 59 against 61 in the previous year, the latter percentage being at the time the lowest on record during the decade.

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REPORT ON THE TRADE AND NAVIGATION OF ADEN FOR THE OFFICIAL YEAR 1913-14.—Double Crown 4to, 20 pp. letter-press and 221 pp. statistical tables (Government Book Depôt, Bombay)—price Rs. 2-4-0 or 3s. 6d.

This publication comprises both the report itself and the detailed trade and navigation statistics on which the report is based.

The total value of the private sea-borne and land trade of Aden decreased by £630,888 to £8,526,611. Last year's record figure was in part due to the Italian blockade of the Red Sea ports during the Italo-Turkish war. When the blockade ended, much of the trade which had been diverted to Aden returned to its former course. The decrease in the trade of Aden was therefore to be expected. Nevertheless its volume was larger than in any previous year except the last.

The number of vessels entering and clearing the port fell slightly, but their total tonnage increased by about $6\frac{1}{2}$ per cent. The United Kingdom's shipping interest in the Aden trade increased from 12.77 to 13.74 per cent., but the share of India and Burma fell from 20.33 to 19.29. It is interesting to note in the present juncture that the number of German and Austrian vessels entering the port increased from 162 to 180 and from 132 to 151 respectively.

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REPORT ON THE OIL-PRESSING INDUSTRY OF THE BOMBAY PRESIDENCY.—
Foolscap folio, 31 pp. letter-press and 50 pp. appendices and tables (Government Book Depôt, Bombay)—price 14 annas or 1s. 4d.

G. R. No. 10462, G. D., 28th December, 1914, explains the origin of the report and reviews its contents as follows:—

In their Resolution No. 4518, dated the 12th July, 1912, Government decided to institute a survey of the oil-pressing industry of the Bombay Presidency on the lines laid down in connexion with the surveys already undertaken of the handloom weaving and leather industries. They accordingly selected for the purpose Mr. Yeshvant Ganesh Pandit, who has had considerable experience of this industry both in the United States of America and in India.

- Mr. Pandit was employed for a term of six months with effect from the 1st October, 1912. He was asked to visit all the chief centres of the oil-pressing industry in the Presidency inclusive of Sind, whether conducted in factories on an extensive scale or carried on by the indigenous methods in vogue with the country telis. He was also directed to make a thorough investigation of the methods and conditions of the industry in both these aspects and to submit a comprehensive report thereon. In dealing with the indigenous industry he was desired to indicate the special difficulties with which it has to contend and the practical measures which, in the light of his investigation, he would recommend for its development and improvement. The economic condition of the workers was also to form a part of his enquiry, and information was desired regarding the various kinds of oil-seeds employed in the industry, the nature, uses and distribution of the products, the differences, if any, in the methods applied to the treatment of the different kinds of oil-seeds, the extent to which mechanical power is being used in connexion with the indigenous form of oil-mill and the possibility of further development in this direction, and, generally, the lines of development which the indigenous industry may be expected to take and the extent to which its operations can be supplemented by factory methods. Finally, in connexion with the large scale industry, a special subject of investigation was to be the causes which had militated in the past against the successful establishment in the Presidency of mills for the extraction of oil from cotton-seed.
- 3. Mr. Pandit has made an extensive tour throughout the Presidency, in the course of which he has visited all the principal centres and areas of the oil-pressing industry and has collected much useful information bearing on the subject of his investigation. The acknowledgments of Government are due to him for the interesting and instructive report in which he has stated the results of his survey of the industry and has presented his conclusions and the recommendations based thereupon. Although, for the most part, these recommendations are not such as to afford to Government any basis of direct action or intervention, but are rather of a nature to prove useful as a guide to persons directly

interested in the industry, Government consider that the labour which has been expended on this investigation and the preparation of the report thereon will have effected an object of the highest utility if the result is to attract the serious attention of the capitalist in India to the wide field of development and the great potentialities which await the establishment in this country of factories for the extraction of oil equipped and organized on thoroughly sound modern lines. Mr. Pandit's conclusions with regard to the possibilities of development in connexion with the extraction of oil from cotton-seed are of special interest, and Government desire to commend them to the notice of all those who are interested in the subject.

- 4. In his first chapter and by means of the statistical appendices thereto Mr. Pandit draws attention to the extent to which Western India is a producer of oil-seeds of various kinds, the total area under oil-seed crops in the Presidency in the year 1912 being nearly 4,00,000 acres. The rate of production, he has ground for believing, is capable of yet further development by the adoption of more scientific agricultural methods. The greater bulk, however, of the outturn of this vast area of cultivation is exported to other countries, whereas the extensive imports of vegetable oils from such countries, the value of which in 1912-13 amounted to nearly six lakhs, show that, if the necessary facilities were forthcoming, large quantities of the seed could be utilized to great advantage for the local manufacture of oil.
- 5. Chapter III of the report is devoted to an enumeration of the several kinds of oil-seed crops produced in the Presidency and the local areas in which they are respectively grown, and to a detailed statement of the products and byproducts of each kind of seed and the uses to which they are put. also furnished with regard to the relative oil-producing qualities of the various kinds of oil-seeds when grown in different localities. The principal by-product is oil-cake, and in this connexion the important fact is brought to light that, owing to prejudice and a mistaken notion as to the inferiority of its nutritive and fertilizing properties, the oil-cake turned out by factories is universally rejected locally in favour of that produced by indigenous processes, and is consequently exported abroad to the extent of some 218,000 cwts. annually. Seeing how great the need of oil-cake is in an agricultural country such as India, both as an article of consumption for cattle and for manuring purposes, the neglect to take any advantage locally of what is already a not inconsiderable, and will be a steadily expanding, source of supply, amounts to a serious economic error, which it is of

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the utmost importance to rectify, all the more so as the rejection for local consumption of one of the principal by-products of the seed must re-act unfavourably on the general development of the oil-pressing industry in the country. It is contended that the comparatively low proportion of residual oil in the factory article does not in any degree detract from its efficacy for the purposes for which it is required, since anything above 7 or 8 per cent. of oil in the cake is superfluous and therefore wasted. Mr. Pandit suggests that the Agricultural Department should make special efforts to overcome this local prejudice against machine-made oil-cake by means of demonstrations on its model farms. He also recommends the purchase and distribution to agriculturists of oil-cake by agricultural co-operative societies. These recommendations will be considered by the Agricultural Department.

- 6. Chapters IV and V treat of the several methods in operation in the Presidency for the extraction of oil from seed, and the different properties and uses of the oils so extracted. These processes range from the indigenous ghanis worked by animal power to the latest form of American "Expeller" plant. It is estimated that there are some 6,300 indigenous ghanis in use throughout the Presidency, the average individual crushing capacity of which is 60 lbs. per day. But an improved ghani rotated by an oil-engine is coming into fairly extensive use, its present numerical ratio to the country ghani being estimated to be as one to ten. The crushing capacity of this rotary power ghani is 500 lbs. per diem, but the heavy repair charges incidental to this machine bring up the working expenses to a comparatively high figure, and it is doubtful whether its economical superiority is such as to make it probable that it will encroach largely on the field occupied by the indigenous article or maintain its ground in the face of the advance of large scale machinery. The hydraulic presses now in actual use in the Presidency, of which a descriptive enumeration is given in Chapter II of the report, are estimated to be capable of a total daily maximum output of 100 tons of seed crushed, while the corresponding figure for the "Expeller" plants, which are in operation in Bombay City and at Karachi, Ahmedabad, Surat, Bijapur, Belgaum and Kolhapur, chiefly in connexion with sesamum and ground nut, is put down at 25 tons per diem. The total daily output of the ghanis, both indigenous and improved, is roughly estimated at 155 tons, so that this crude process of manufacture still plays a predominant part in the industry as a whole.
- 7. A comparison is instituted between the several processes of oil extraction in their economic aspect. Mr. Pandit calculates that on the average it costs the

teli working an indigenous ghani about Rs. 24-12-0 to crush a ton of seed, a proceeding which, moreover, occupies some 22 days, while the hydraulic plant will in a single day deal with that quantity at a cost of Rs. 15. The cost in the case of the "Expeller" plant he reckons at only Rs. 8-9-0, though the factors on which this calculation is based are not stated. The teli's counterbalancing advantage over the factory owner lies in the fact that he has both his purchasing and his selling markets at his very door, and that these markets are practically assured to him. He has, as a rule, no freight, storage, depreciation or advertising charges to pay, and he enjoys the certainty of being able to dispose with a minimum of trouble and at remunerative rates of the whole of his principal byproduct. Mr. Pandit is no doubt right in anticipating that even in areas of large seed production the teli will hold his own wherever the conditions in regard to a constant supply of labour, a steady demand for the produce of the factory, and facilities for cheap transport are not distinctly in favour of the factory. Presumably instances of such centres are Ahmednagar, Bijapur and Hubli where, it is reported, the telis are running as many as 40 to 50 ghanis in association, exporting the oil to Bombay. In localities where oil-seed cultivation is comparatively sparse or the means of transport are defective, the future of the indigenous industry is assured for many years to come. At the same time it appears from another passage of the report that the economic condition of the workers is, generally speaking, far from satisfactory. The remuneration which by unremitting toil and industry they are able to secure is insufficient, in present-day conditions of high prices and inflated rents, to enable them to maintain a fair standard of living and to avoid becoming heavily involved in debt.

8. Mr. Pandit has written an instructive chapter dealing with the important question of the extraction of oil from cotton-seed. In it he traces the individual causes of the failure of the several attempts which have been made to establish mills for the manufacture of cotton-seed oil in this Presidency. Causes which were common to all, appear to have been insufficiently expert and enterprising management, unsuitable plant of inadequate capacity, and inability to utilize to the fullest advantage the numerous by-products which the crushing of cotton-seed gives out. The report describes in detail the products and by-products derived from the seed and the industrial uses to which they can respectively be put. In particular the oil, when extracted from seed in good condition and when properly refined, is susceptible of a great variety of uses, one of the most important of which is the manufacture of soap. India, like the United States, is

favourably placed in this respect, namely, that she has her supply of cotton-seed close at hand, so that the raw material is not exposed to that deterioration from long storage or transport which is an obstacle to the production of the highest grade edible oil, the manufacture of which in India would be a most profitable Mr. Pandit makes a noteworthy suggestion in connexion with this branch of the oil-pressing industry. He observes that the cotton ginning factories are generally equipped with horse-power considerably in excess of their normal requirements, and he suggests that, having the cotton-seed ready to hand, the ginners should utilize this surplus power for running seed-crushing plant. This would enable them to turn out considerable quantities of crude oil without any appreciable addition to the running expenses of their mills. But for the complete success of such an enterprise it is essential that central refinery works on an adequate scale should be established close at hand, either by the formation of associations of ginners on the lines of the Central Oil-seed Crushers' Associations of America, or failing this, as a separate concern by some capitalist working in co-operation with the ginners. Mr. Pandit points out that in America the Associations referred to also undertake the work of a bureau of publicity for advertising the merits of the products and by-products of the seeds crushed, and place at the disposal of their members tank cars for the storage and transport of crude and refined oil, thereby saving freight charges and loss by leakage and absorption. Unquestionably, co-operation on these lines would admit of the establishment, on successful and profitable terms, of an industry which individual effort, unless backed up by very large capital, could hardly hope to set going.

9. Mr. Pandit rightly deprecates the extent to which nitrogenous products in the shape of oil-seeds and oil-cakes are being drained out of the country, but the remedy proposed by him in the acknowledged absence of any probability of an embargo being imposed on such exports, namely, the taxing, ostensibly for fiscal but practically for protective purposes, of imports of oil, both crude and refined, is not one upon which the Governor in Council is able to pronounce authoritatively. A proposal which appears to be of more immediate practical utility is that municipalities should be encouraged to treat newly-established oil mills with special consideration in the matter of local taxation and to provide them with good road communications. These suggestions should be communicated to municipal bodies within whose local limits factories have been or are likely to be established. It is evidently to their advantage that such enterprises should be encouraged and that a nascent industry should be afforded such assistance and facilities as may be

possible with due regard to the other interests of the community. With reference to the proposal that the railway companies should be approached with a view to the granting of concessionary freight rates for oil-seeds and their products, it is not possible for the local Government to take general action at present. They would be prepared, however, to consider the advisability of representing to the proper authorities any individual case in which it might be established that the existing rates were pressing with undue severity on the industry established in a particular centre.

- With regard to the workers engaged in the indigenous industry, it must be admitted that, in the apparent absence of any possibility of development which would enable their processes to show an economic superiority over the methods of modern machinery, their gradual extinction is probably only a matter of time. No doubt the hardship incidental to this inevitable evolution will be mitigated by the absorption of a considerable proportion of the workers into the large scale industry, where their traditional experience and hereditary aptitude are likely to prove useful and where their earnings are likely to be at least as high as they are at present. In the meanwhile, the only direction in which their lot appears to be susceptible of improvement is by the formation of co-operative credit societies and unions. The existence in numerous centres of comparatively well-to-do telis who give evidence of considerable powers of business organization and a certain measure of financial capacity is a circumstance which is favourable to the establishment and successful working of such associations. The primary objects of the latter would be the advancing of loans to members to enable them to take advantage of favourable fluctuations of the market for the purchase of stocks of seed, and, in the case of unions, the provision of central storage depôts at which small purchasers could at little cost deposit their stocks pending actual consumption. The suggestion that Government should actively participate in the direction of such associations is not one that can be accepted, but these associations would, like other similar bodies, come under the general control and supervision of the Director of Co-operative Societies to whose special attention the above recommendations will be brought.
- 11. With regard to the large scale industry the report concludes with a number of useful and practical hints addressed to capitalists and factory owners which are derived from Mr. Pandit's experience of the organization and working of seed crushing factories in America. Particular stress is laid on the possibility, already referred to, of producing in India the best edible oil from cotton-seed, and

of utilizing the refuse oil, which is left over in the process of refinement, for the manufacture of soap. Government commend to the attention of those concerned the advice given for the avoidance of the errors, chiefly in the direction of false economy, which have characterized past enterprises and materially contributed to their failure.

- 12. The Oriental Translator to Government should be requested to translate this Resolution into Gujarati, Marathi and Kanarese and to forward the translations to the Manager, Government Central Press, who will print them and keep a sufficient number of copies in stock to meet the indents of district officers. All Collectors in the Presidency proper should be requested to take steps to give wide publicity to the Resolution.
- 13. Copies of the report should be kept for sale at the Government Book Depôt.

Co-operation.

ANNUAL REPORT ON THE WORKING OF CO-OPERATIVE SOCIETIES IN THE BOMBAY PRESIDENCY INCLUDING SIND FOR THE YEAR ENDING MARCH 31ST, 1914.—Foolscap folio, 29 pp. letter-press including Government review and 45 pp. statistical tables (Government Book Depôt, Bombay)—price 10 annas or 11d.

The following G. R. No. 10334, R. D., 28th October, 1914, reviews the report:

The year 1913-14 marks a period of further rapid progress in the development of the co-operative movement among the agricultural and industrial classes of the Presidency. No less than 212 new societies of all kinds were registered during the year; the total membership rose from 46,221 to 66,704, and the working capital from Rs. 48,47,763 to Rs. 66,13,135. These increases are eminently satisfactory. But in estimating the progress of the movement, mere additions to the total number of societies, their membership and working capital, are of little value unless they are accompanied by a steady growth in their financial stability, improvement in their methods of management, and a corresponding increase in public interest and confidence in their potentialities. That these essentials are by no means lacking, the report now under review affords ample evidence. The fact that the societies, from the Central Bank down to the humblest village society, weathered with success the financial crisis of the year is striking proof of the soundness of the movement,

which is further exemplified by the increase in deposits in most of the limited societies, and by the transfer in some cases of sums withdrawn from the Banks during the crisis to the credit of Co-operative Societies. The few failures that have to be recorded are due as much to ignorance as to any other cause, and have, with one unfortunate exception, so far been attended with practically no loss to members or depositors.

- 2. While there has been a large increase in the number of agricultural societies-159 in all, they have again proved their capacity to do without Government assistance in the shape of loans, which now form only $6\frac{1}{8}$ per cent. of the total working capital as compared with 9 per cent. last year and 20 per cent. in 1910. At the same time deposits of members and non-members show a satisfactory increase from 27 per cent. to 31 per cent. of the total working capital, and large loans were received from central financing institutions. These facts afford satisfactory evidence of the growth of public confidence in the financial stability of these societies, and of the benefit which the rayat derives from the access to the general money market afforded to him by his membership of a society. The Governor in Council has read with great interest the Registrar's remarks in paragraphs 32-37 of the report regarding co-operative purchase and distribution among agriculturists. The difficulties to be faced in this connection are undoubtedly formidable, but there cannot be the least doubt that the organisation on a co-operative basis of the purchase of agricultural requirements and the sale of agricultural produce is of very great importance to the welfare of the rayat. The beginnings of the purchase and distributive societies which are mentioned in these paragraphs, though small, are none the less hopeful, and under the special guidance of a keen and energetic officer like Mr. Gonehalli—who since the close of the year has been temporarily appointed as Assistant Registrar—more rapid progress in their development may be expected.
- 3. Among the Central Societies, the operations of the Bombay Central Co-operative Bank are growing steadily, especially in the financing of the sugarcane growers under the Nira Canal, for which purpose the greater part of its loans were advanced. The beneficial effect which the Nira Canal Societies derive from the access to the money market afforded to them by the Bank is exemplified by their steady progress during the year and the rise in their deposits both from members and non-members. In other directions, however, the growth of Central Societies is not proceeding as rapidly as might be desired. At present, except for the Registrar and his official staff, there is practically no intermediate agency between the Central Bank and the village society, and it is obvious that,

unless some non-official agency is supplied in the shape of Unions and District Banks which can bring the village society into touch with the Central Bank and afford the latter the essentially necessary guarantee based on individual knowledge of the financial position of applicant societies for loans, the movement is in danger of becoming cramped and over-officialised. The difficulties attending the creation of this intermediate agency have been clearly set forth by the Registrar in paragraph 15 of the report. The question is one which will doubtless be considered by the Imperial Committee which has recently been appointed to consider the question of co-operative developments in India, and which will commence its investigations shortly. It would, therefore, be premature to discuss or suggest the means of solving what is probably one of the most vital problems of the co-operative movement as far as it affects the agricultural community.

4. As regards other forms of co-operation, the progress achieved by the B. B. & C. I. Railway and G. I. P. Railway employés' societies has hitherto been eminently satisfactory, and they should serve as excellent examples of the benefits of co-operation to large bodies of employés under other public bodies and private companies. Unfortunately progress in the formation of societies among mill-hands and labourers in large industrial centres such as Bombay and Ahmedabad has hitherto been slow. The Governor in Council fully realizes the vital importance to the welfare of these classes of a spread of the knowledge and practice of co-operative principles, and the beneficial effect which their widespread adoption is certain to have in moulding on sound lines the development of urban and industrial conditions. In the opinion of the Governor in Council the initiative in spreading the movement among their employés should preferably come from the mill-owners and other large employers of labour who can assist it in many ways not open to Government. Of the success of such initiative the activities of the societies established among the hands employed at Ráo Sáheb Malji's mill at Broach and among those employed at the Gokák Mills afford excellent examples. But even where the employers fail to take the lead, substantial progress can be made, as is proved by the success of the redemption societies established on lines devised by Mr. Devdhar. The increase in the number of societies among members of the hand-loom weaving industry-for the continued prosperity of which the spread of co-operation is essential—is very gratifying, and the appointment of a central yarn broker in Bombay and the establishment of seven weaving schools under the control of the Registrar should assist the members in their competitive struggle with the output of the power-loom. It is a matter for regret that the

demonstrations held during the year of the advantages of the fly-shuttle loom have not on the whole been as successful in spreading the adoption of improved methods among this class of the community as might have been hoped, but, in view of the backwardness and poverty of the hand-loom weaving classes generally, progress in this direction must inevitably be slow.

5. In Sind the gradual progress of the co-operative movement has been sustained in the period under review. The year opened with eleven Co-operative Societies established in the Province, to which six new societies were added during the year. Owing to the lack of business training among the Zamindárs, the establishment and conduct of the affairs of agricultural societies in Sind are attended with especial difficulties, which can be surmounted only as the members learn by experience the necessity of care in the management of their affairs and of strictness in the recovery of outstanding loans.

Education.

PRESIDENCY FOR THE YEAR 1913-14.—Foolscap folio, 54 pp. letter-press and 28 pp. appendices (Government Book Depôt, Bombay)—price 12 annas or 1s. 2d.

G. R. No. 3893, Ed. D., 5th December, 1914, which reviews this report, runs as follows:—

The total number of institutions of all kinds in the Bombay Presidency rose during the year under review from 17,120 to 17,914, General results. with an increase from 987,685 to 1,029,017 in the number of persons receiving instruction in them. Numerical progress is naturally most conspicuous in the case of the primary schools, the number of which rose by nearly seven hundred to a total of 14,061, the attendance at them aggregating 847,706 as against 814,409 in the previous year. The number of secondary schools rose from 588 to 607, and the attendance from 80,144 to 84,547. As regards the financial results of the year, it is observed that out of the increase of six lakhs in the total expenditure on public instruction incurred from all sources, provincial revenues contributed nearly two lakhs, municipal funds half a lakh, school and college fees three lakhs, and private institutions and Native States rather more than a lakh each. On the other hand, the expenditure incurred by local boards declined by two lakhs, chiefly owing to a reduction in the outlay on school buildings. Of the total provincial expenditure for the year amounting to 70% lakhs,

a sum of 30½ lakhs, exclusive of the charges on account of direction and inspection, was devoted to the maintenance of primary schools, the increase over the preceding year's expenditure on this object being about three and a half lakhs.

2. Several events of interest have contributed to render the year memorable from the point of view of collegiate education. The Collegiate education. University enjoyed the benefit of visits from such distinguished educationists as Sir Alfred Hopkinson, Professor Ramsay Muir and Professor Smithells, and that body is now considering the report of the first named which embodies a series of important recommendations and suggestions affecting every branch of its activities. A satisfactory settlement has been arrived at in regard to the question of the utilization of the recurring imperial grant for the development of the University as a teaching body, and a beginning has been made -with the programme thus formulated by the deputation abroad of a graduate for the study of library administration and by the institution of a scheme of University lectures. In other directions also, as the Governor in Council is aware, the University has given proof of an enlightened and progressive spirit in the development of its policy, more especially in regard to the revision, where necessary, of its curricula. His Excellency in Council desires to acknowledge the value of the University's co-operation with him in the scheme of the Royal Institute of Science, which has taken the form of a contribution of one lakh towards the initial cost of the buildings. A feature of the year which is less a cause for satisfaction is the apparent lowering of the standard for the Matriculation examination, which resulted in the passing of nearly double the number of candidates compared with the previous year. The consequent unprecedented influx of first year students, a large proportion of whom cannot be regarded as properly prepared for higher education, has taxed the accommodation of the affiliated colleges to the utmost, the attendance at these institutions having risen at a bound by nearly 20 per cent. It is to be apprehended that the difficulties which arise from this situation will be further aggravated in the future by a considerable increase in the proportion of students admitted to the second year's course, unless, contrary to the experience of the year under review, the college authorities show a determination to maintain the same standard in their conduct of the examination which regulates these admissions as was set when that examination was under the direct control of the University. For these difficulties the establishment of new collegiate institutions, even if the early adoption of such a measure were practicable, would provide a mere

temporary palliative and would fail altogether to strike at the root of the problem. In the estimation of His Excellency the Governor in Council their true solution is to be found in the gradual elevation of the general plane of collegiate education, and the first step towards the attainment of this end should be the raising of the standard of the Matriculation examination, the object in view being the eventual transfer to the school curriculum of what now forms the initial stage of the collegiate course. Government have recently accepted a suggestion made by the University for the appointment of a jointly representative committee to deal comprehensively with the question of both the Matriculation and the School Final examinations, and they await the result of this committee's deliberations with full confidence that the true interests of higher education will receive a real impetus along sound lines.

- 3. With regard to professional colleges the only notable development during the year was the opening of the College of Commerce.

 There was a large demand for admission and the institution entered on its career in encouraging conditions, but, as the Director observes, the possession of suitable buildings with the necessary adjuncts in the shape of a hostel and a play-ground are essential to its complete success. The question of their provision is engaging the attention of Government.
- The Director traces the progress made up to date towards the completion of the programme of improvement and development secondary laid down for secondary education in this Presidency. education. The principal achievements of the year are the completion of a new high school for East Khandesh, the provision of quarters at the secondary training college for the Vice-Principal and 20 out of the 34 students, the further allotment of a recurring sum of Rs. 26,000 for the raising of the pay of assistant masters, the appointment of an inspector of science teaching to be followed by the establishment of a properly equipped laboratory in every high school, and the sanctioning of the appointment of an inspector of drawing which is an essential feature of a scheme for the reorganization of the teaching of drawing throughout the Presidency. The scheme for the medical inspection of school children has recently received the sanction of the Secretary of State and will, it is hoped, shortly be brought into operation. Much attention has been paid to the development of visual instruction; every high school is now equipped with a lantern and slides, while nearly a lakh of rupees

has been sanctioned for the distribution of stereoscopes and stereoscopic pictures to both secondary and primary schools.

The total direct expenditure on secondary schools during the year amounted to 36½ lakhs, an advance of more than three lakhs on last year's disbursements.

The Governor in Council has read with interest the detailed account given in the report of the progress during the year Government high schools. of the twenty Government high schools for boys. The record is on the whole a satisfactory one, but it is evident that frequent changes of staff have in some degree militated against steady advance, and it is hoped that every effort will be made to ensure greater continuity in future in this respect. With regard to hostels it seems that the servant difficulty has in several cases obtruded itself and that the comparatively high cost of living in the hostels has tended to discourage resort to them. Rather than that the utility of these institutions, on the establishment of which heavy expenditure has been incurred, should be impaired by their failure to secure a full complement of residents, the Governor in Council would be prepared to consider proposals for meeting these difficulties by the grant of reasonable pecuniary concessions. against these setbacks there has been substantial improvement and development in several new directions. The allotment to every high school of a sum of money for the conduct of excursions is an innovation which cannot fail to exercise a broadening effect on the pupils' minds. A definite beginning has been made with the imparting of moral instruction, while arrangements for the introduction of manual training and the proper organization of science teaching are well in The holding of a special class of instruction for masters under Mr. Wren should serve to put the teaching of physical exercises on sounder basis. Measures have been instituted for bringing headmasters and inspecting officers into closer touch and sympathy with the work and aims of the Secondary Training College. Thanks to the praiseworthy co-operation of a number of high officers the school prize-distributions have in most cases been elevated into something more inspiring and less prosaic than such functions were apt to be in the past. Especially to be commended is the introduction of Mr. Miller's scout system in the Belgaum High School which appears to have had an extraordinary effect in arousing the enthusiasm of boys and masters alike. Finally, the Governor in Council desires to record his appreciation of the highly meritorious services rendered by two retiring headmasters, Khan Bahadur Contractor of the

Elphinstone High School, and Rao Bahadur Jathar of the Dharwar High School, both of them representatives of the best type of Indian headmaster.

- Some of the aided high schools, the total number of pupils at which rose in the course of the year from sixteen to eighteen Aided high schools. thousand, appear to have done excellent work, the reports regarding certain of these schools in Sind being especially encouraging. Unfortunately the constantly increasing and spreading demand for English education is a direct inducement to the establishment of proprietary schools which, in order to afford a margin of profit, are run at a minimum cost with inadequate and ill-paid staffs. These schools receive no grants as they do not conform to the requirements of the department, a circumstance which in many cases is both the cause and the result of their deficiencies in personnel and equipment. As regards European schools, it is satisfactory to note that the recent imperial grants are acknowledged as having been of great value in enabling them to obtain better teachers. There has also been considerable activity in the direction of improving the physical conditions in which their work is carried on, the building grants for the year amounting to a lakh and a half with an addition of Rs. 13,000 for equipment grants.
- Turning to primary education, 462 new local board schools were opened during the year. The total number of such schools Primary education: general conwhich have been brought into existence since the policy of rapidly extending the facilities for elementary instruction was systematically pursued has thus been raised to 2,381. A large proportion of these schools are in the Central Division, where no fewer than 39 per cent. of the existing primary schools have been established within the last five years. In such circumstances it is not a matter for surprise that the demand for competent teachers should have largely outrun the supply, and that the results, as manifested in the staffing of new schools by unqualified masters, should evoke some unfavourable comment. But it should be recognized at the same time that to have deferred the creation of new schools until teachers of the desired quality were actually forthcoming for them would have meant the indefinite postponement of all effective advance in the direction of breaking down the illiteracy of the rural population. Gradually, as by the spread of education in the more backward tracts the difficulty of obtaining local material and the consequent necessity of importing teachers from outside disappear, equilibrium between supply and demand will tend to be established. In the meanwhile the Governor in Council fully recognizes the

desirability of further improving the prospects of untrained teachers in the Presidency proper, but he considers that the question must for the present be subordinated to the more pressing one of satisfying the legitimate claims of trained teachers and thus holding out the strongest inducements to teachers to elevate themselves from the ranks of the untrained. Towards effecting this an additional sum of a lakh and a half was spent during the year, the total expenditure on this object being thus brought up to over six lakhs.

- 8. The practical effects of the enforcement of the recent decision to Full primary schools and rural concentrate the teaching of the higher primary standards schools. In the larger schools are manifesting themselves in the elimination of these standards from a large number of schools in which they had hitherto been maintained but very scantily supported. The Governor in Council trusts that the fact that in the Northern Division alone has there been any demand for scholarships to enable boys to proceed from rural to full primary schools is not to be regarded as an indication that elsewhere the new policy is tending to discourage the taking of the higher standards. If there is any ground for suspecting such a tendency it would be desirable to put the matter to the proof by a comparative scrutiny of the attendance in the higher standards of the schools in a determined area. There are signs that the new lower standards are somewhat overloaded, but this is a point in regard to which further experience must be acquired before a definite conclusion can be formed.
- 9. The question of the housing and equipping of primary schools continues to engage attention, and free grants amounting to Primary school buildings. nearly seven lakhs in the case of local boards and to a lakh and a half in the case of municipalities were allotted during the year in connexion with those objects. Publicity has already been given to the remarkable movement in the East Khandesh district for the collection of funds for building school houses, but the Governor in Council desires to call attention to the action now being taken in that district by the formation of taluka associations for controlling the work of construction and organizing the collection of further funds. He trusts that so beneficial a movement will find imitators in other parts of the Presidency where systematic action of this nature would go far towards solving the difficult problem of school accommodation. No progress seems to have been made in the direction of evolving a type design for a rudimentary and comparatively inexpensive form of school building. It is hoped that the matter will be kept in view.

- Appreciable advance has been made in connexion with female education, the increase during the year in the number of female Education of girls. scholars in institutions of all kinds being ten thousand, or roughly at the rate of six per cent. The Director, referring to the spreading, but still sporadic, demand for secondary education for girls in outlying localities away from educational centres, suggests that the difficulty of meeting it might to some extent be overcome if municipalities were to attach teachers of English to their primary schools for girls. The Governor in Council agrees that such a proposal would not be open to the objections which can generally be urged against the introduction of English into vernacular schools. The municipalities of Satara and Sholapur appear already to have adopted this suggestion. appointment of an inspectress for Urdu schools in the Central Division has resulted in a considerable addition to the number of such schools, and concurrently there has been established a Government Central Urdu school for girls at Poona which has been the subject of special attention.
 - 11. His Excellency in Council has now before him the numerous recommendations of the Mahomedan education committee, Education of Mahomedana and is also giving consideration to the question of the utilization of Mr. Mahomed Yusuf Ismail's donation of eight lakhs for the promotion of higher education among Mahomedans. He gathers from the report that a serious obstacle to progress, so far as the teaching in Urdu schools is concerned, is the lamentable ignorance of that language displayed by the teachers. The Urdu training class recently instituted at Ahmedabad was a partial failure from this cause, nearly half the number of students admitted to it being found unfit to go through the course. To meet the difficulty of finding qualified Urdu teachers, it will probably be found necessary to establish central schools on the lines of the one at Tankaria in Gujarat. In the Northern Division candidates were for the first time allowed to take the vernacular final examination in Urdu instead of the local vernacular, but only three out of 143 Mahomedan candidates availed themselves of this concession. It has been decided to extend the concession to the other divisions, but unless it obtains more favour in them than in Gujarat, the experiment may have to be discontinued.
 - Training of teachers.

 Training of teachers.

increasing demand for trained teachers, there is, as the Hon'ble Mr. Sharp points out, a danger that some of these colleges will outgrow the dimensions compatible with the imparting of practical, as distinguished from theoretical, instruction. The proposal, therefore, that any further important extension of facilities for the training of teachers should take the form of the establishment of an additional vernacular training college for men appears to the Governor in Council to be a prudent one. It is gratifying to note the success which, thanks largely to the tact and ability of the two persons to whom its conduct was entrusted, attended the experiment of utilizing diplomates of Secondary Training College for holding classes of instruction in teaching for the masters of the aided high schools in Poona and for supervising their actual teaching in the schools.

In connexion with the work of the vernacular training colleges reference may appropriately be made to the services rendered by their Vice-Principals in examining and reporting on books proposed for use in schools. In particular Mr. P. R. Godbole, of the Poona College, deserves special credit for the great mass of literature reviewed by him in this manner.

- Administration been considerable, including a special deputy for Urdu schools in the Central Division, an inspectress of Urdu girls' schools in the same division, two additional deputies for Sind, a special deputy with two assistants for Mulla schools in that province, and two additional assistants, one for Bombay and the other for Karachi. Besides these inspecting appointments, the clerical establishments of deputies were strengthened throughout.
- reviewing the progress made in the disposal of the imperial grants. The fact that, in the course of the three years 1911-12 to 1913-14, out of grants aggregating 73 lakhs, 29 lakhs were actually spent and 35 lakhs were pledged, leaving only 9 lakhs still to be allocated, affords an indication of the heavy burden of work which the disposal of these grants has imposed on the Department during this period and the promptitude and energy with which it has acquitted itself of the task. The Governor in Council takes this opportunity of placing on record his high appreciation of

the constructive and organizing capacity, the financial ability, and the industry and thoroughness of which the Hon'ble Mr. Sharp has given proof in planning out and controlling the expenditure of these immense sums of money, allotted as they were to a great variety of objects, several of which were of an entirely novel character requiring careful preparation and the improvisation of new methods and new agencies.

15. The acknowledgments of Government are due to the Department as a whole for another year's successful and progressive administration. In particular, His Excellency in Council is aware of the very great strain which the extraordinary expansion of every branch of education in this Presidency has imposed on the inspectors, and he is cordially appreciative of the loyal manner in which they have responded to the call made upon them. He trusts that certain proposals, which have recently been sanctioned, will afford them much needed relief.

SUPPLEMENT TO THE DIRECTOR OF PUBLIC INSTRUCTION'S ANNUAL REPORT FOR 1913-14.—Foolscap folio, 61 pp. (Government Book Depôt, Bombay)—price 8 annas or 9d.

The supplement, which is purely statistical, is published separately from the report itself, as the information contained in it is not likely to prove of much interest to the ordinary reader.

Excise.

REPORTS ON THE ADMINISTRATION OF THE EXCISE DEPARTMENT (ABKARI AND OPIUM) IN THE BOMBAY PRESIDENCY, SIND AND ADEN FOR THE FINANCIAL YEAR 1913-1914.—Foolscap folio, 51 pp. letter-press including Government review and 61 pp. statistical tables (Government Book Depôt, Bombay)—price Rs. 3-6-0 or 5s.

The publication is reviewed in the following G. R. No. 12100, R. D., 5th December, 1914:—

The returns for the year under report show that the decrease from year to year in the consumption of country spirit which has been recorded in the reports of the past three years is still in progress. In Bombay City there has H 841-4

been a rise in consumption of 29,142 proof gallons and in rural areas of 12,751 proof gallons, but this increase has been more than counterbalanced by a decrease of 44,263 gallons in head-quarter towns and in towns of a population of 10,000 and over, the net decrease for the Presidency proper as a whole being 2,368 proof gallons. The decreases that have occurred are reported to be due mainly to the raising of the still-head duty and maximum selling price, as for example in the towns of Belgaum and Bhusaval and in the districts of Sholapur, Ratnágiri, Thána and Kolába, and it is satisfactory to find that the measures which Government may legitimately take to restrict excessive drinking are producing their due effect. Though more liquor was consumed in Bombay City than in the previous year, the figure is still less than the average of the previous five years. The increases that have occurred in districts in the mofussil are attributed to the effect of the good harvest of the year, to the congregation of labour on large public and other works, to an increase in the number of marriages, and in the districts of Kaira and Panch Maháls to the activities of the Excise staff in suppressing illicit distillation which is still rife in these areas. In most districts which show an increase the figures for the year under report can be matched or are exceeded by figures recorded in the past. In the district of Dhárwár however an almost continuous rise appears to be in progress. In 1907-08 the consumption of country spirit in this district was at the rate of 2 o drams per head with a previous five years' average of 26 drams per head: the rate has now risen to 5.7 drams per head with 4.5 drams per head as the average of the previous five years. The Commissioner should be requested to investigate more fully the circumstances which have produced this marked change.

2. The results obtained from the experiment made in the Broach district with the object of supplanting the use of 25° U. P. liquor by the weaker 60° U. P. have been so encouraging that it is being extended to all the other districts except Kaira where an experiment on similar lines is already in operation. The still-head duty was raised in the towns of Belgaum and Bhusával, in five tálukas of Surat, in the coast tálukas of Kánara and throughout the districts of Sholápur, Ratnágiri, Thána and Kolába. In Gujarát much more might be done in this direction if the administration were not hampered by the failure of the authorities in the Native State territories on our border to co-operate in the improvements which Government are desirous of introducing. Government trust that the Commissioner will be able in the near future to secure a good working arrangement.

- 3. An appreciable reduction in the number of shops for the retail sale of country spirit was effected at the commencement of the year under report. The Thána district heads the list with a reduction of 27 out of a total decrease for the Presidency proper of 70 shops. In the majority of cases the shops were closed on the recommendation of the Collectors based on the policy of Government of abolishing shops which there is any reasonable ground for believing are superfluous. From the figures in appendix B it is seen that the Advisory Committees were active and that in most cases their recommendations were adopted.
- 4. In connection with the regulation of the consumption of toddy the most marked feature of the year was an increase in the number of licenses for domestic consumption, chiefly in the Surat district, where the Kaliparáj population took advantage of the concession granted by Government. It is satisfactory to observe that the people in the Panch' Maháls have now accommodated themselves to the restrictions which it was deemed advisable to impose on the consumption of raw toddy. The receipts under the head of toddy increased by Rs. 67,074, of which roughly half a lákh was under license fees and the balance under tree tax.
- 5. Under the head of foreign liquor no separate record has been kept for Bombay City of the quantity sold to the public for consumption and sold to other licensees. In the mofussil figures the only point of note is an increase in the consumption of fermented liquors, due to larger sales under canteen licenses and also to an increase in the demand for beer among the general population. The number of licenses for the retail sale of foreign liquor was reduced by eight, chiefly owing to the closing of certain shops which were deemed unnecessary or undesirable.
- 6. The decrease in the consumption of country spirit has not been accompanied by any significant increase in the consumption of other intoxicants. The use of *charas* is now on the road to complete extinction. The measures taken for the suppression of cocaine smuggling have had an appreciable effect. Several large seizures have been made, and it is a matter of great satisfaction to Government that the Commissioner is able to report that the decline of 56 per cent. in cases detected in Bombay is due to an actual decline in the hawking of the drug. Outside Bombay City the cocaine habit is believed to have taken a hold only in the cities of Ahmedabad and Surat, and in these places, in spite of the

great difficulties that attend the detection of this underhand traffic, the Department has attained a considerable measure of success in bringing some of the principal dealers to justice. A small increase in the retail sale of ganja is set off by a decrease under bhang, on which the duty was raised at the beginning of the year. The consumption of opium in the Presidency proper fell by 7.8 per cent., the main contributing causes being an increase in the selling price and a lowering of the maximum limit of possession from three to one tola. This decrease in consumption was accompanied by a rise in revenue of Rs. 3,40,000.

- 7. During the year the separate shop system was substituted for the monopoly farm of opium in Surat. It has since been extended to the remaining districts in Gujarát and is now universal for the Presidency. This system, together with the arrangement for obtaining all supplies from the Government factories and at a fixed price, has enabled Government to apply a higher and more uniform rate of taxation on opium, resulting in a substantial increase in revenue, a benefit which has been shared by the Native States which draw their supplies from Government depôts.
- 8. The decrease in the number of offences against the ábkári laws is the result of the decrease in the cocaine traffic alluded to above. Leaving out of account the figures for Bombay City, there has been a rise of 301 in the number of detected cases falling almost entirely under the head of illicit distillation. As this result is due not to any unusual prevalence of this form of offence but to the success of the preventive measures taken by the Department, more particularly in the districts of Kaira and Thána, Government agree with the Commissioner that it is an eminently satisfactory feature of the year's work.
- 9. A slight decrease is recorded in the return of cases of drunkenness dealt with by Magistrates. In this connection Government note with satisfaction that the Commissioner is instituting special measures for the detection of cases of permitting drunkenness on licensed premises.
- 10. The report for the Province of Sind discloses a slight increase in the consumption of country spirit and foreign spirits and a large sale of foreign fermented liquors. The retail sale of bháng was larger than in the previous year, but it is evident that considerable illicit supplies of this drug and of gánja are still obtainable. The use of charas, it is gratifying to find, is being ousted under the almost prohibitive taxation imposed at the beginning of the year. The consumption of opium declined under an increase of duty. The Department was

able to effect a substantial reduction in the number of retail shops, the return being less by 6 country spirit, 22 opium and 49 intoxicating drugs shops.

- and Poona the reports bear testimony to the effect of various local movements organised to promote abstention from liquor. Though these are apt to be sporadic, they are welcome as healthy signs of moral development. The movement in Sukkur deserves special notice, as it is reported to have contributed to a decrease in the consumption of liquor in this district for the second year in succession.
- 12. The administration of the Department in Aden during the year has been satisfactory.
- 13. The gross revenue of the year amounted to Rs. 2,23,37,201, representing an increase of Rs. 10,28,639 over the previous year. The total net revenue after allowing for the refunds to Native States under opium was Rs. 2,10,62,235, a rise on the year of nearly $8\frac{1}{3}$ lákhs.
- 14. The Governor in Council is pleased to record his appreciation of the work done by the Department during the year throughout the Presidency.

Miscellaneous.

REPORT OF THE COLA'BA FIRE COMMITTEE.—Foolscap folio, 23 pp. (Government Book Depôt, Bombay)—price 8 annas or 9d.

This Committee was appointed in April, 1914, to enquire into the causes of the outbreaks of fire on the Cotton Green and to consider and recommend what preventive and protective measures should be adopted to guard against such outbreaks in future. Paragraph 11 of the report summarises the Committee's suggestions for preventive and precautionary action as follows:—

- (i) The removal of the Cotton Green from Colaba to some more spacious, better arranged, better drained and more remote site.
- (ii) The restriction of the height of cotton stacks, with proper alleys, lanes or roads between the various stacks and jathas.
 - (iii) The storage of cotton in godowns which are properly built.
- (iv) The organization and maintenance by the cotton merchants and insurance companies jointly of a better staff for guarding the Green.

- (v) The provision of an adequate number of hydrants and full pressure of water throughout the 24 hours.
- (vi) Efforts by insurance companies to safeguard as closely as possible their own interests after a fire has occurred.
- (vii) The institution of a tribunal or court of enquiry of the nature referred to in the preceding paragraph.
- G. R. No. 8523, G. D., 23rd October, 1914, reviews the report in the following terms:—

His Excellency the Governor in Council desires to express his acknow-ledgments to the Chairman and Members of the Committee, both collectively and individually, for their labours in connexion with this enquiry and for the interesting and useful report in which they have presented their conclusions. Special recognition is due to the assistance rendered by Captain Higham, Dr. Mann and Mr. Turner in undertaking a series of experiments and observations with regard to the combustible character of baled cotton.

- 2. The Governor in Council has no hesitation in accepting the conclusion arrived at by the Committee that the unprecedented series of cotton fires which occurred in the course of last hot weather was due to wilful and fraudulent incendiarism, the motive for which is to be found in the exceptional conditions which characterized the cotton market during that season. It is not altogether a matter for surprise that, in the absence of a definite clue, the Committee should have found itself unable to determine upon which of the several classes which stood to benefit by the destruction of large stocks of cotton the culpability for these conflagrations lay. This failure, regrettable as it is from the point of view of the vindication of public and commercial morality, has not precluded the Committee from advancing a number of useful and practical recommendations. The adoption of these recommendations is well calculated, Government think, to prevent the perpetration of similar acts of incendiarism in the future and thereby to save the cotton trade of the city from being subjected to the disability of excessive insurance rates or even exposed to the danger of total dislocation by the refusal of the insurance offices to accept risks under any conditions.
- 3. With regard to the provision of temporary accommodation pending the completion of the Sewri Reclamation, Government are aware that the Port Trust are making arrangements, at a cost of approximately three lakhs, to lay out a suitable storage ground near the reclamation. This, in conjunction with the

existing Cotton Green, will admit of even a large crop being stored in conditions which will not reproduce the dangerous features which characterized the storing of last year's crop.

- 4. It is understood that the insurance companies have already taken action, by the imposition of almost prohibitive rates where these precautions are not observed, to compel the restriction of the height of stacks of bales and the provision of a liberal allowance of free space between adjoining stacks. The provision of the additional storage area referred to above will facilitate the adoption of these very necessary safeguards.
- 5. Government specially commend to the notice of the Chamber of Commerce, the Indian Merchants' Chamber and Bureau, the Cotton Trades Association and the Bombay Fire Insurance Association the recommendations of the Committee to the effect that the cotton merchants and the insurance companies should combine to organize and maintain an efficient and trustworthy staff for the protection of the cotton stocks in which they are interested, and that the latter bodies should in future take more effective steps to defend their interests against extortionate or fraudulent claims. They have no doubt that the further recommendation of the Committee as to the provision of an adequate number of hydrants and the maintenance of a full pressure of water in connexion with the areas where cotton is stacked will occupy the attention of the Municipality when the completion of the duplication of the Tansa main renders this improvement practicable.
- 6. The Committee's final recommendation relates to the constitution of a special authority legally empowered to conduct enquiries into all fires occurring in Bombay which involve injury or loss of property. Government are not in a position at the present moment to pass orders with regard to this important proposal, but it will receive their careful consideration.

Police.

POLICE REPORT ON THE BOMBAY PRESIDENCY INCLUDING SIND AND RAILWAYS FOR THE YEAR 1913.—Foolscap folio, 41 pages letter-press and 19 pages appendices (Government Book Depôt, Bombay)—price 8 annas or 9d.

The report on the police of Bombay Town and Island has been noticed on pages 208 to 211 of the last issue of the Quarterly (No. 3). The report now

under notice deals with all the remaining police of the Presidency, and has been reviewed in the following G. R. No. 6899, J. D., 24th September, 1914:—

For reasons into which it is unnecessary to enter here, the figures of crime and offences of all sorts in the Bombay Presidency exhibit, as a general rule, a tendency to rise steadily from year to year. The figures of 1912, however, owing to an unfavourable season for agriculture and to other temporary causes, were so abnormally in excess of those of 1911 as to make a reaction in 1913 almost inevitable. Under many he ads the decline is so great that it is of more interest to compare the statistics of 1913 with those of 1911, itself a year slightly above the average in criminality, than with those of 1912.

- 2. The total number of cognizable and non-cognizable offences in 1913 was 115,136, as against 115,423 in 1911 and 120,100 in 1912. The total number of complaints cognizable by and reported to the police, and cases taken up by them on their own initiative, was 36,950, as against 35,721 in 1911 and 41,342 in 1912. The year under review thus exhibits a decline to the extent of 4,392 cases as compared with its immediate predecessor. Of this decrease, 2,550 cases must be attributed to Sind, and 85 per cent. of these, again, to the abolition of the faulty system of registration introduced on the Sind Railways in 1912. Putting this latter factor aside, there still remains a decrease of over 2,000 cases reported in the whole Presidency upon the figures of 1912, but an increase of 1,229 upon those of 1911.
- 3. When, however, false and mistaken cases and cases under miscellaneous Acts are both excluded, the figures of 1913 are hardly so satisfactory. True cognizable cases under the Penal Code amounted to 25,033, as against 25,837 in the previous year, giving a decrease of 804 cases only. In 1911 the number was as low as 21,413.
- 4. The number of true murder cases, 345, stands between the figures of 1911 and 1912, i. e., 321 and 359, respectively, true dacoities were more numerous even than in 1912, the numbers being 159 and 147, respectively. Burglaries, on the other hand, declined from 7,443 to 7,329, which, however, was much in excess of the figure for 1911.
- 5. Opinions are unanimous that there was substantial decline in criminality in 1913, due partly to a favourable season and partly to the activity of the police in various directions, but especially against criminal tribes. The smallness of the decline in the register of true crime must be attributed partly to the

progressive increase in the number of police stations, and partly, again, to the increased readiness of station officers to register crime.

- 6. A gradual but appreciable increase is reported in the use by station officers of their power to refuse investigation. The Governor in Council agrees with the Inspector-General of Police that this is a desirable development. Malicious complaints declined, but not proportionately to the total of cases for disposal. There, were 153 convictions during the year for the offence of making a false complaint, as against 179 in 1912. There is evidence that misplaced leniency continues to be shown by magistrates in passing sentences for this offence, which is none the less outrageous or dangerous because it is of common occurrence. The Governor in Council finds it necessary once more to invite the attention of magistrates to their power of fining complainants under section 250, Criminal Procedure Code. The number of cases in which that power was used, instead of increasing, as was to be wished, declined from 216 in 1912 to 199 in 1913.
- 7. The ratio of undetected cases to true crime of all classes disposed of was lower than it has been in any year since 1906. In the case of Penal Code cases, the percentage fell from 39.2 to 38.1 in the Presidency proper, and from 58.59 to 54.64 in Sind. The ratios of 1911 were practically the same as those of 1912. The improvement shown in the year under review is therefore cause for congratulation.
- 8. The influx into the Bombay Presidency of wandering criminal gangs expelled from His Highness the Nizam's dominions continued, though not to so great an extent as in 1912. Mang Garudis and Kanjarbhats expelled from His Highness's territory committed depredations both in Sholapur and in West Khandesh. Vigorous and successful action was, however, taken against criminal tribes by the police in many districts. In Sholapur a successful campaign was organised against the Kaikadis, and a gang of them was brought to trial and In Poona a large gang of Bhamptas was similarly dealt with. Dharwar a gang of Korchas from Bellary district, in the Madras Presidency, was broken up by the police. In Belgaum district gangs of Berads were broken The measures taken for the reformation of the Chapparbands and Ghantichors have so far been distinctly successful. Various tribes were notified under the Criminal Tribes Act during the year. Arrangements for the more systematic working of the Act on uniform lines throughout the Presidency are still under consideration. In Sind there has been a recrudescence in the last two years of

murders committed by the notorious Hurs. In 1913 no less than nine murders were committed by them in one taluka alone. The policy of strict control under the Criminal Tribes Act which has been adopted by the Commissioner is amply justified, and effective measures will be required for some time to come in order to diminish the intimidation exercised by this murderous sect over the surrounding population. The question of modifying or supplementing the measures hitherto adopted with a view to making them more effective is engaging the serious consideration of the Governor in Council.

- 9. Out of a total of 1,049 cases returned as serious, the scenes of 684 were visited by gazetted police officers. This is a distinct improvement upon the performance of the previous year, and the improvement is most marked where it was most clearly called for, *i. e.*, in Sind. The same remarks apply also to inspections of police stations and outposts. The Commissioners of the Northern and Southern Divisions should be requested to comment in their future reports on the sufficiency or otherwise of the inspection work done by Superintendents and their Assistants.
- 10. The number of police stations was increased during the year by 14. while the number of outposts was reduced by 21. Punishments continue to decrease in number, while rewards have increased. The Inspector-General observes that supervision becomes more effective each year, and his inference is probably correct, that recent statistics of punishment prove a distinct and continued improvement to have taken place in the conduct of the force. percentage of literate officers and men now stands at 55.2. The difficulty of obtaining satisfactory recruits continues to be remarked upon. The number of vacancies at the close of the year was 424, of which 203 were in Sind. The Governor in Council fully recognises the need of large grants for police buildings, the inadequacy of which is unfortunately reacting both upon the health of the force and upon recruiting. As the Inspector-General remarks, an extra allotment of Rs. 2,36,102 from the Provincial balance was sanctioned by the Government of India in the course of the year for certain major police works, and the Governor in Council will endeavour to devote substantial sums to this head in each of the next few years.
- year's work. The armed police showed a further improvement in musketry. The record for the year of Police Training School at Násik is satisfactory. The School unfortunately received five students whose failure was a foregone conclu-

sion, not from want of application, but from sheer want of intellectual capacity. The general average of the students is, however, stated to have been very fair, and the Principal's report that many of them showed great promise of becoming good sub-inspectors is gratifying. The Principal's proposals for the encouragement of Maráthi shorthand in the School will, it is understood, be submitted to the Inspector-General of Police.

- 12. The Governor in Council notices with interest the Inspector-General's opinion that the establishment of more magisterial courts, and of a separate Sessions Court in every Collectorate, would tend to increase the readiness of witnesses to come forward. The question of increasing the number of District and Sessions Courts in the Presidency has already engaged the attention of His Excellency in Council.
- 13. The opinions of the Inspector-General, the Commissioners, and the District Magistrates leave little room for doubt but that the moral standard of the police and the quality of their work have steadily improved in the last few years. Their work in the year under review has met with general approbation from those best qualified to judge of it, and shows excellent letective results. The behaviour of the police during the Bhil rising in Sunth State, and the manner in which the railway strike was met in May and June 1913, are deserving of special commendation. It is matter for regret that the Inspector-General of Police is unable to report any adequate response to these encouraging signs of improvement in the direction of a greater alacrity on the part of the public to render support and assistance. In proportion, however, as the advance effected by the recent re-organization both in methods and in efficiency becomes more generally appreciated it is to be hoped that a corresponding stimulus will be imparted to co-operation on the part of the people. Meanwhile, it is satisfactory to recognize in this comprehensive record of activity during the past year strong testimony that a vigorous and growing spirit of progress with enlightened zeal is steadily pervading all departments of police administration.
- 14. The Governor in Council is pleased to convey to all ranks of the police force his recognition of their loyal and strenuous efforts and to endorse the commendations passed by the Inspector-General of Police on the work of the individual officers specially selected for mention. He desires once more to acknowledge the example of strenuous devotion to duty which has been set by Mr. Kennedy to the officers and men under his control. The work of Mr. Souter in Sind has been characterised in circumstances of unusual difficulty by a high

standard of energy and initiative, and the Inspector-General has again had occasion to bring to notice the able and judicious administration by Mr. Beatty of the Southern Range. The Criminal Investigation Department has successfully continued its delicate and highly responsible duties under the skilful direction of Mr. Guider, and the Governor in Council is gratified to observe that work of special excellence has been performed by a large number of officers among the Superintendents, Assistant Superintendents and Deputy Superintendents throughout the Presidency and Sind.

Public Health and Sanitation.

ANNUAL REPORT ON THE CIVIL HOSPITALS AND DISPENSARIES UNDER THE GOVERNMENT OF BOMBAY FOR THE YEAR 1913.—Foolscap folio, 8 pp. letter-press and 85 pp. statistical appendices (Government Book Depôt, Bombay)—price 14 annas or 1s. 4d.

This report deals not only with the year 1913, but with the triennial period ending with that year. It has been reviewed in G. R. No. 7736, G. D., 30th September, 1914, which runs as follows:—

The total number of medical institutions available for public use in the Bombay Presidency rose from 698 on the 1st January, 1911, the opening day of the triennium under review, to 742 on the 31st December, 1913, its closing day. These figures, however, are inclusive of some three hundred private non-aided institutions, a considerable proportion of which are of an ephemeral character. The number of State, State-aided and railway institutions rose between the above dates from 397 to 419, the increase of 22 including one civil hospital and 11 local fund and municipal dispensaries. The number of beds in these institutions rose from 5,888 to 6,518.

2. During the last preceding triennium the average of the number of patients treated in any one year was 22,38,279, the corresponding figure for the triennium under review being 23,01,989, an increase of 62,810. The extent to which women and children resort to medical institutions has recently developed in a remarkable manner. Taking into account State and State-aided institutions of all kinds there has been an increase during the triennium of 18 and 20 per cent. in the attendance of in-door patients among women and children, respectively, and of 5 per cent. in the case of out-door patients. The rates of increase stated

in the report, which leaves out of account institutions specially intended for women, are even more remarkable.

3. Malaria continues to be by far the most prolific cause of admission to hospital, accounting for nearly one-sixth of the total number of admissions. The recorded figures, moreover, do not include over a lakh of cases treated by the itinerant medical officers deputed to specially malarious tracts. Quinine "treatments" to the value of half-a-lakh were issued to the public in the course of the first two years of the triennial period; their popularity as a prophylactic is rapidly extending.

The anticipation of an increase in tubercular cases, indicated in the last triennial review, has unfortunately been verified, the figures having risen by as much as 23 per cent.; but as is observed in the Surgeon General's report, this purely statistical comparison should not be regarded, in view of the presence of other factors making for increase, as representing the measure of the actual spread of tuberculosis. It cannot be doubted, however, that present-day economic and sociological changes in India tend strongly to the increased prevalence of this disease, and the Governor in Council concurs in the view expressed by the Surgeon General as to the necessity of establishing special wards and dispensaries for the reception of cases. The question is already engaging attention. These same changes have manifested themselves in another direction also, for the report no doubt correctly attributes to them the very considerable increase in admissions to hospital on account of bodily injuries.

- 4. There was an increase of over eleven thousand in the average number of operations annually performed during the triennium, the percentage of cases ending fatally being practically unchanged, namely, 0.52. The Governor in Council concurs in thinking that these results testify to the high standard of surgical skill maintained in the hospitals and to the present excellence of their equipment on which a sum of nearly two lakes was spent in the course of the preceding triennium.
- 5. The average annual expenditure on hospitals and dispensaries during the triennial period under review was over twenty-two lakhs, as against a previous record of nearly nineteen lakhs. Of this former sum nearly half was contributed by Government, while local and municipal funds were responsible for six and a half lakhs of the remainder. The average cost per patient rose from Re. 0-13-6 to Re. 0-14-3.

- 6. The Governor in Council observes with satisfaction the progress of the movement for the establishment of nursing associations, the number of which increased by four during the triennium. No movement is more calculated to overcome the inherent reluctance of the women of the country to resort to public medical institutions, especially as in-door patients. Much, however, still remains to be done in this direction, as at present only half the civil hospitals are provided with nursing staffs. Government bear a moiety of the expenditure incurred by the associations, and their share amounted in 1913 to a lakh and a quarter. The Governor in Council cordially endorses the well-deserved tribute which the Surgeon General pays to the ladies and gentlemen who devote their time and labour to the support and management of these beneficent bodies.
- 7. During the triennium a civil hospital was established at Jalgaon, the head-quarters of the East Khándesh District. The event was unique inasmuch as, through the admirable generosity and public spirit of the local people encouraged and organized by the efforts of Mr. Simcox, the Collector, the completed building was presented bodily to Government, fully equipped in every detail. Another noteworthy event was the donation by the Hon'ble Sirdar Sir Chinubhai Madhavlal, Bart., C.I.E., of a sum of Rs. 1,15,000 for the endowment of a training school for nurses and midwives in connexion with the Victoria Jubilee Dispensary at Ahmedabad. Nine new dispensaries were established during the triennium under the scheme for the encouragement of such institutions in rural areas. Finally the Surgeon General's report enumerates a number of structural additions and improvements to existing institutions; some of these have been rendered possible by acts of private munificence with which are associated the names of Khan Bahadur Navroji Pestonji Vakil, C.I.E., Mr. M. S. Vakharia, Sirdar Bomanji Ardeshir Dalal, Mr. G. P. Agarwale and Bai Jerbai N. Wadia. Many needs, however, still require to be met both in Bombay and in the mofussil. The number of beds is generally insufficient to satisfy the ever-increasing demand for accommodation, while the necessity of special provision for maternity, advanced tubercular and chronic incurable cases is almost everywhere making itself felt. There is thus a wide field for benefactions on the part of private individuals, and the Governor in Council entertains the hope that the triennium now commenced will witness a marked development in this direction.
- 8. In conclusion His Excellency in Council desires to give expression to his appreciation of the services rendered by the officers of the Medical Department in the cause of the prevention and relief of human suffering. That the report under

review should contain so eminently satisfactory a record of achievement and progress in every branch of the department is, he considers, very largely due to the high standard of professional skill, the keen desire to keep abreast of the developments of medical science and the deep sense of duty of which the officers of the medical services of Government have as a body given proof.

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FIFTIETH ANNUAL REPORT OF THE SANITARY COMMISSIONER FOR THE GOVERNMENT OF BOMBAY, 1913.—Foolscap folio, 47 pp. letter-press and 21 pp. statistical statements (Government Book Depôt, Bombay)—price 10 annas or 11d.

This publication contains not only the report of the Sanitary Commissioner, but also the reports of the Health Officers of the three ports of Bombay, Karachi and Aden, and the report of the Sanitary Board, whose special duty is to examine water-supply and drainage projects. The whole blue book has been reviewed by Government in G. R. No. 9133, G. D., 12th November, 1914, which runs as follows:—

Major Hutchinson should be thanked for a full and interesting report. By comparison with a year of such high mortality as that of 1912, the year 1913, with which the Sanitary Commissioner's present report deals, must be regarded as having been, generally speaking, a healthy one for the Bombay Presidency. This is in a large measure attributable to the more favourable climatic conditions which prevailed during the critical period of the year, the monsoon season being characterized in its early stages by abundant and even heavy rainfall, while during its concluding months the rainfall was in marked defect, circumstances which, whatever their effect on the agricultural prospects, tended directly to restrict the operation of the causes of sickness and mortality during the unhealthier season of the year. Another cause of the reduced death rate was the comparatively moderate prevalence of epidemic disease.

2. The number of births registered during the year approximated closely to that of 1912 and was in excess of the decennial mean by over a quarter of a lakh. The Sanitary Commissioner's observations regarding the extreme range of variation in local birth rates are of special interest. The extraordinarily low birth rate, vis., only 2106 as against 3799 for the Presidency proper, which continues to be recorded for Sind in the face of the steady growth of the population

as witnessed by successive census returns, taken in conjunction with the constant excess of the urban over the rural rate, affords indisputable evidence of markedly defective registration in that province. The effect of the existence of scarcity conditions and of resultant emigration is indicated by the drop in the Ahmednagar birth rate from 47.75 to 34.23 within the space of three years.

- 3. Fewer deaths were recorded in 1913 than in any year since 1909, the number being one lakh short of the decennial mean and the rate of mortality falling from 34.88 per mille in the preceding year to only 26.63. This welcome decline was observable in every district of the Presidency except that of the Upper Sind Frontier. As was to be expected, it is most marked in the districts which in the previous year were most severely visited by cholera, such as East Khandesh, Poona, Nasik and Satara. For the first time separate statistics for rabies appear in this report. The total number of deaths from rabies was 128, East Khandesh, Poona and Kaira being the districts most affected, while Sind was apparently entirely exempt. Bombay City returned 13 deaths. The figures are, on the whole, lower than might have been expected.
- 4. In last year's review the Governor in Council had occasion to comment on the deplorably high infant mortality in Bombay City. Although the figures are still very high, there has, in the past year, been a considerable improvement in this respect, the recorded ratio of deaths to one thousand births having fallen from 451 to 384. This improvement is of course principally attributable to the healthier conditions of the year, but the Governor in Council would gladly believe that credit for it is in some degree due to the increased efforts of the special agencies which are engaged in combating the causes of this terrible wastage of human life. He notes with cordial approval the adoption for the first time of the wise policy of attacking the evil through the medium of the ignorant and untrained indigenous midwives who are so largely responsible for its prevalence, instead of, as in the past, ignoring them altogether and concentrating all efforts on the attempt to supplant them by a skilled trained agency. It has to be recognized that it is an impossibility as yet to improvise an agency of the latter character which will suffice for the needs of the immense population of Bombay, and that therefore the only way of making substantial progress is to bring influences to bear on the existing indigenous agency which will make it as little harmful as The Governor in Council trusts that a steady pursuit of this policy will gradually pave the way to the introduction of legislation on the lines of the Midwives Act which is in force in England.

- 5. The number of deaths from cholera was 5,134. The terrible visitation which in the previous year had accounted for 64,000 deaths, lingered on with rapidly diminishing effect during the opening months of 1913, and then died down completely. But later in the year the Deccan witnessed a sudden outburst of the disease which appears to have had its origin in a local fair. The influence of pilgrim gatherings as a cause of the dissemination of cholera over a large extent of country cannot be overlooked, and the Governor in Council trusts that the special committee, which will soon, it is expected, undertake the investigation of the sanitary conditions of the principal centres of pilgrimage in the Presidency, will be able to deal effectively with this important question. He awaits the submission of the Sanitary Commissioner's promised report regarding the possibility of extending the experimental use of permanganate salts in the treatment of cholera.
- 6. The number of deaths' from small-pox, 9,833, has not been exceeded since 1905. The mortality from this cause was particularly high in both the Khandesh districts, but a number of large towns in other parts of the Presidency also suffered severely. The Sanitary Commissioner draws attention to the effect likely to be exercised on the spread of a contact disease such as small-pox by the increasing extent to which the child population of the country is being gathered together in schools where the children necessarily remain in close proximity to each other for many hours of the day. This is a danger which makes it more than ever essential to guard against any tendency to crowd young children together in school rooms with insufficient floor space and ventilation, and should give pause to those who are inclined to question the reasonableness, as applied to the conditions prevailing in this country, of the requirements laid down by the sanitary authorities in these matters.
- 7. The mortality from "fever" is not, as a rule, of a fluctuating character, the total number of deaths from this cause in any given year generally approximating fairly closely to the mean which is about $2\frac{1}{2}$ lakhs. The year under review was no exception, the actual number of deaths under this head being 246,310, a slight improvement on the returns of the previous year. Although resulting apparently in no higher mortality, malaria seems to have been particularly prevalent in Sind, where the rainfall during the year was exceptionally heavy. The Sanitary Commissioner quotes statistics regarding the distribution of quinine from which it appears that in the course of the year 2,452 lbs. of the drug were, in one way or another, issued to the public, apart from the quantities

dispensed in medical institutions. That this represents anything approaching to the amount required for the effective quininization of the population of the more highly majarious tracts of the Presidency cannot for a moment be contended, nor, probably, would it be practicable to arrange for the distribution of the immense quantity which would actually be required. The Governor in Council is therefore impressed with the view advanced by the Sanitary Commissioner that efforts in this direction should be principally concentrated on the school-going population. both because children are by nature peculiarly susceptible to malarial attack and because the conditions in their case are pre-eminently favourable to the regular prophylactic administration of the drug. The information which the report contains regarding the experiments made in quinine prophylaxis in the schools of several Sind districts testifies not only to the perfect feasibility of a regular system of administration but also to its highly beneficial effect, both preventive and educative. The Director of Public Instruction has recently submitted proposals for dealing on similar lines with schools in the Presidency proper, the adoption of which must await the provision of the requisite funds.

- 8. Plague remained almost stationary during the year, the number of deaths being 25,000 as against 28,000 in the preceding year. There was a remarkable increase in the number of inoculations performed, the number rising from 73,000 to 1,75,000. Of these the Dharwar district alone, doubtless partly as a result of the propaganda of the local Sanitary Association, accounted for 65,000 operations. Among inoculated persons the plague mortality was 113, death supervening within the period of incubation of the disease in 64 cases.
- 9. The expansion of municipal expenditure on objects connected with the maintenance of the public health proceeds steadily, the total expenditure incurred during the year under report being 63 lakhs, an increase of more than seven lakhs over the previous year's figures. Grants from Provincial and Imperial funds aggregating over 27 lakhs were distributed during the year to municipalities in aid of works of sanitary improvement, while the reconstituted Sanitary Board, in the exercise of its recently acquired power, made similar grants to the amount of one lakh. New features in connection with the work under the control of the Sanitary Board were the appointments of the Mechanical Engineer to Government, who inspected the machinery of municipal water and drainage installations, and of an itinerant analyst to the Board for taking bacteriological tests of water-supplies.

- The Governor in Council would have been glad to receive fuller and more detailed information regarding the working of Village Sanitary Committees. observes with satisfaction, however, that, in the opinion of the majority of the Collectors, these bodies are rendering good service in keeping their villages clean. With the generally scanty funds at their disposal it would be unreasonable to expect larger measures. One committee, that of Bhagoor in the Nasik district, is reported to have done work deserving of the highest commendation, while the committees in the districts of Dharwar and the Upper Sind Frontier are referred to as having displayed activity in the matter of the protection of the village water-supply. It is, no doubt, a commonplace to say that the efficiency of these village bodies is in direct proportion to the extent to which their activities are guided and controlled by the district officers. But it is not legitimate to argue from this proposition that they are mere figure-heads and that their constitution serves no directly useful purpose which could not be better effected without their intervention. It is largely through the medium of such bodies as these that gradual progress will be made in the education of the great mass of the rural population in an appreciation of the requirements and benefits of hygiene. His Excellency in Council desires therefore that the establishment of these village committees should be encouraged wherever there is a reasonable prospect of funds being obtainable sufficient to enable them to discharge their elementary functions in the matter of The sanitary surveys of villages, which are being undertaken on a uniform plan by the Deputy Sanitary Commissioners and of which 47 were completed during the year, should prove of assistance to such bodies in determining what their line of action should in each case be.
- 11. The health administration of the ports of Bombay, Karachi and Aden continued to be efficient. Over 11,000 out of a total of 15,319 outgoing pilgrims were vaccinated before leaving Bombay. No pilgrim ship sailed from Karachi during the year.

TRIENNIAL REPORT ON VACCINATION IN THE BOMBAY PRESIDENCY FOR THE YEARS 1911-12, 1912-13, 1913-14.—Foolscap folio, 5 pp. letter-press and 28 pp. statistical appendices (Government Book Depôt, Bombay)—price_8 annas or 9d.

The report has been reviewed in the following G. R. No. 9122, G. D., 11th November, 1914:—

In regard to the number of persons primarily vaccinated the last two years of the triennium, the results for which approximate very closely to one another,

show a distinct improvement over the first. Even with the reduction produced by the inclusion of the latter year's results, the average of the triennium under review, 704,427, exceeds the average of the preceding triennium by 37,930. As the latter represented an improvement of 67,267 on the results of the triennial period 1905-08, it is apparent that there has been steady progress in the spread of vaccination in the Presidency.

- 2. The complete ascertainment of the results of vaccinations still presents considerable difficulties, and the percentage of cases regarding which information was not obtained increased slightly from 7.59 in the previous triennium to 8.28 in the triennium under review. The nomadic habits of certain classes of the general community constitute the principal difficulty in this respect.
- 3. Re-vaccination, which is essential for the prevention of small-pox, is making only slow progress, in spite of the increased activity during recent years of the disease, every fresh outbreak of which gives a temporary and local stimulus to re-vaccination. The annual average number of re-vaccinations during the triennium was 71,003, a figure which the Sanitary Commissioner rightly regards as altogether inadequate, having regard to the adult population of the Presidency, for the effective stamping out of small-pox. The great mass of the people have still to learn to appreciate the preventive value of this operation.
- 4. The output of doses of glycerinated vaccine from the Belgaum Vaccine Institute increased from 635,000 in the concluding year of the preceding triennium to 874,000 in the corresponding year of the triennium under review. The recent introduction of cold storage, which admits of the lymph being prepared in large quantities during the most favourable season of the year, has resulted in a marked improvement in the quality of the material. In Sind where, during the preceding triennium, all operations were carried out with human or animal lymph, more than half the cases are now treated with the vaccine. Climatic conditions and the inexperience of operators still tend, however, to keep down the proportion of successful operations in that province. The Governor in Council observes that in the Presidency circle also the percentage of success is low, lower in fact than in any other registration district, a point regarding which the report offers no explanation.
- 5. The Deputy Sanitary Commissioners travelled over immense distances in the performance of their duties in connexion with the supervision of vaccination. It cannot be doubted that the constant rapid moving which this portion of their

work necessitates is prejudicial to the proper discharge of their more essentially sanitary functions, which requires that they should have time to make a careful and exhaustive study of the sanitary conditions and requirements of the principal urban centres in the areas under their control. This disability constitutes one of several important considerations which have been advanced in support of a proposal, now before Government, to appoint District Health Officers, who would, among other duties, relieve the Deputy Sanitary Commissioners of their routine work in connexion with vaccination. The creation of such posts would have the further advantage of rendering possible the general transfer of the control of the vaccinating staff from the Sanitary Department to the local authorities without giving rise to the more serious of the objections and difficulties to which, as experience has shown, such a measure is, in present conditions, open.

6. Towards the end of the triennium the provisions of the compulsory Vaccination Act were extended to Ahmedabad, the result being an immediate increase of 1,153 in the number of primary vaccinations performed in that city. In Hyderabad it has recently been decided to adopt compulsory vaccination, a measure the urgent necessity of which is indicated by the fact that the percentage of successful vaccinations among children of under one year of age is only 54, against 92 in the case of other Sind towns where the Act is in force. Shikarpur is another important place to which it appears desirable that its provisions should be extende d.

Salt.

REPORT ON THE ADMINISTRATION OF THE SALT DEPARTMENT OF THE BOMBAY PRESIDENCY FOR THE YEAR 1913-14.—Foolscap folio, 13 pp. letter-press and 15 pp. appendices (Government Book Depôt, Bombay).—price 5 annas or 6d.

This report deals with the work of the salt department in the Presidency proper only, and has been reviewed by Government in the following G. R. No. 9664, R. D., 9th October, 1914:—

While there was a continued rise in the production of Barágra salt, the falling off in the production of sea salt during the year under report is disappointing, especially in view of the possible shortage of imported salt owing to the outbreak of the war. Government hope that the shilotries will be able to meet the increased demand which may possibly arise.

- 2. The decrease in expenditure appears to some extent to be due to difficulties in recruiting for the clerical and menial branches of the establishment. Mr. Shepherd's proposals for the revision of pay of officers and clerks are under the consideration of the Governor in Council, who will await his proposals regarding the revision of the pay of menials.
- 3. Government note with pleasure the further steps taken by Mr. Shepherd to improve the details of the administration of the department which are mentioned in paragraph 37 of the report.
- 4. The Governor in Council is pleased to commend the officers and staff of the department for their efficient administration during the year.

Survey Settlement.

PAPERS RELATING TO THE REVISION SURVEY SETTLEMENT OF THE SUKKUR TA'LUKA OF THE SUKKUR DISTRICT, being No. CCCCLXL (new series) of the Selections from the Records of the Government of Bombay.—Foolscap folio, 123 pp. and 4 maps' (The Commissioner's Printing Press, Karáchi)—price Re. 1-2-0 or 1s. 8d.

This publication gives the usual details requisite for a settlement, and contains full information as to the agricultural and economic conditions prevailing in the taluka.

Veterinary Science.

ANNUAL ADMINISTRATION REPORT OF THE BOMBAY VETERINARY COLLEGE AND CIVIL VETERINARY DEPARTMENT IN THE BOMBAY PRESIDENCY INCLUDING SIND FOR THE OFFICIAL YEAR 1913-14.—Foolscap folio, 23 pp. letter-press including Government review and 22 pp. statistical tables (Government Book Depôt, Bombay)—price 7 annas or 8d.

This publication has been reviewed in G. R. No. 9419, R. D., 5th October, 1914, which runs as follows:—

The Bombay Veterinary College continued to show good results under the guidance of its Principal, Mr. Hewlett, and his staff. The number of students rose, the percentage of passes in the annual professional examinations was satisfactory, and the Examination Committee reported favourably both on the examination results and on the general standard of knowledge displayed by the students.

Government view with satisfaction the high proportion of students who are natives of the Bombay Presidency, and are pleased to observe that five members of the Lingáyat community were admitted into the College during the year under review. Four of these students enjoy scholarships awarded by the Lingayat Education Fund and Government believe that the fund could scarcely devote money to a better object. It is unfortunate that difficulty still exists in obtaining suitable candidates from Sind and that two of the six scholarships which are reserved for Sindhis should have remained vacant for the second year in succession. Graduates from the College seem to have little difficulty in finding employment, and it is encouraging to see that some have successfully taken up private practice. hostel appears to be a popular institution, and its usefulness will be enhanced when the new play-ground is completed. The initiation of a post-graduate course in veterinary bacteriology and sanitary science, to which a certain number of members of the Civil Veterinary Department will in future be deputed annually, is a noteworthy departure, the importance of which it is unnecessary to emphasize.

2. Lieut.-Colonel Maxwell remained in charge of the Civil Veterinary Department throughout the year. The total mortality from contagious diseases in the Presidency remained practically constant. There was some increase in the number of deaths due to hæmorrhagic septicæmia, but a decrease in deaths from anthrax. The disease, however, which causes the greatest mortality is rinderpest, and it is unfortunate that last year's high figures were only slightly diminished. This being so, it is particularly to be regretted that the number of inoculations again fell from 20,544 to 12,405, owing to the failure of the supply of serum from the Muktesar Laboratory. The number of reported cases of foot and mouth disease totalled 12,293, or very nearly double last year's figure, but the number of deaths declined from 189 to 153. This somewhat startling result would seem to indicate a more efficient reporting of epidemics and attacks of disease than has hitherto been the case. Four new dispensaries were opened during the year, and at its close 50 such institutions were at work. Their popularity is proved by the large increase of nearly 14 per cent. in the number of patients treated. More satisfactory still is the extraordinary rise in the number of cases treated by officers on tour. Veterinary Assistants visited no fewer than 3,955 villages as compared with 2,760 in the preceding year. treated 24,478 cases of contagious and 14,312 cases of non-contagious disease, the corresponding figures for the previous year being 7,691 and 13,140. The Governor in Council views with the greatest satisfaction the efforts made by the officers of the Department to popularize their profession in the villages surrounding their head-quarters, and is pleased highly to commend the energetic touring of which the figures quoted above are ample proof. Even better results may be expected as the Department expands; and as one Inspector and forty-three Veterinary Assistants are to be added to the establishment during the course of the next five years, each succeeding year should witness an expansion of the beneficent activities of the Department. In view of the rise of pay granted to the lower grades of the cadre, it is to be hoped that no difficulty will be experienced in carrying out the sanctioned increase of staff. The development and the present satisfactory state of the Department is largely due to the efforts of Lieut.-Colonel H. M. Maxwell, who has recently retired after three years' careful superintendence, and the Governor in Council is pleased to acknowledge the high value of his services throughout that period.

- 3. In Sind the year was favourable, and there was a large decrease in the number of deaths caused by contagious diseases. The number of dispensaries rose from 8 to 11 and the number of cases treated, both on tour and otherwise, showed a satisfactory advance. Government endorse the opinion formulated by the Commissioner in Sind as to the importance of truing by road, for it is only by this expedient that the Department can win the confidence of cultivators in outlying parts. The large number of inoculations against hæmorrhagic septicæmia and the success attending the measure, provide an interesting and welcome feature of the year's working.
- 4. The administration of the Glanders and Farcy Department continued to be satisfactory.

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PART II

Agriculture.

CONCESSION RATES FOR THE CARRIAGE OF FODDER.

P. N. No. 10257, R. D., 26th October, 1914, notified for general information that in view of the disappearance of fodder scarcity, the Government of India had decided to withdraw, with effect from 18th October, 1914, concession rates for the carriage of fodder booked to the following stations:—

All stations between and including Dhond Junction and Sholápur, and Dhond Junction and Kadabgaon on the G. I. P. Railway.

Lonand, Koregaon and Tadval stations on the Madras & S. M. Railway.

All stations between and including Pandharpur and Kurduvádi Junction on the Bársi Light Railway.

Commerce and Industry.

A TRAINING SHIP FOR INDIAN BOYS.

P. N. No. 10048, R. D., 21st October, 1914, runs as follows:—

Mr. Muhammad Yusuf Ismáil of Bombay has intimated to Government his intention of starting and maintaining at his own expense a small training ship in the Bombay Harbour for the sons of Indian seamen, irrespective of caste and creed. The object is entirely charitable and the boys will be trained free of charge. The training ship will be affiliated to three free schools and an orphanage which Mr. Muhammad maintains at Nháva. Suitable boys will be drafted from these institutions to the training ship, where they will receive a training in the art of navigation on a scientific basis. If the experiment proves successful, Mr. Muhammad intends to make a permanent endowment to ensure its continuance.

The Government of Bombay heartily welcome this scheme, which is at once charitable and practical and calculated to raise the status and accomplishments H 841-7

of Indian seamen. They have, therefore, decided that every possible facility should be accorded to Mr. Muhammad. They have ordered that the training ship should be allowed free entry into all the ports of the Bombay Presidency and should be exempted from certain customs regulations and formalities. The Trustees of the Port of Bombay have also agreed to waive all their dues in respect to the training ship.

THE INSPECTION OF STEAM BOILERS.

G. R. No. 8691, G. D., 29th October, 1914, made public the report on the working of the Steam Boiler Inspection Department for the year 1913-14. The total number of boilers on the register for the Presidency, including Sind, Aden and the Native States, rose from 3,790 to 3,952. The number offered for inspection was 2,268, an increase of 92. The Inspectors carried out 2,299 regular inspections and paid 580 casual visits, as against 2,196 and 752 respectively in the preceding year. In addition to regular inspections and casual visits more than 1,167 visits were paid for witnessing tests and other miscellaneous purposes. Only seven irregularities were detected and none of the nine accidents reported seem to have caused injury to any person. The usual examinations for the certificates were carried out at Bombay, Karáchi and Aden. The Department is at present working at a loss.

Criminal and Civil Justice.

THE AHMEDABAD COMMISSION OF ENQUIRY.

P. N. No. 7406, J. D., 29th October, 1914, runs as under:—

In January, 1914, Mr. E. Clements, I. C. S., Sessions Judge of Ahmedabad, in the course of a judgment in which he convicted one Maneklal Ishwar in a coining case and sentenced him to three years' rigorous imprisonment, criticized the conduct of the case by certain officers of the Criminal Investigation Department, and expressed an opinion that there was need for a most searching enquiry into their behaviour with reference to one Sitabkhan, who appeared to have been closely connected with the offence. The conviction and sentence were confirmed by the High Court on appeal towards the close of March, 1914, and Their Lordships, though not wholly agreeing with the criticisms of the

Sessions Judge, also held that an enquiry was advisable. Government therefore appointed a Commission, consisting of one judicial and one executive officer, to hold a public enquiry. The members of the Commission were Mr. B. C. H. Calcraft-Kennedy, I. C. S., who had succeeded Mr. Clements as District and Sessions Judge of Ahmedabad, and Mr. J. Crerar, I. C. S., Acting Collector of Salt Revenue.

The Commission held the enquiry in Ahmedabad towards the end of July, and thereafter submitted their report to Government. Since one of the principal objects of such enquiries is to convince the public that all allegations against the police are promptly and thoroughly investigated, and that fitting punishment is awarded for any proved misconduct, Government now desire to make public the findings of the Commission and the action taken thereon.

The Commission has exculpated both the Criminal Investigation Department and the local police from the graver suspicions which had been aroused. They find, that is to say, that Sitabkhan was not employed to decoy Maneklal into the commission of an offence; that he was not allowed to disappear with the sanction or connivance of the police; and that proper steps were taken to produce him when required by the committing Magistrate. But the Commission hold that the investigation into Sitábkhán's connection with the offence was perfunctory. They have reported that in their opinion the false coins found in Maneklal's house were not made by Maneklal himself, nor on the premises. It is clear that Inspector Navroji and Sub-Inspector Dansing of the Criminal Investigation Department became aware that Sitabkhan was implicated in the case at the time when Maneklal's house was searched, and that on that occasion Maneklal mentioned Sitábkhán's name as that of his betrayer. The Commission further find that on the same day these two Criminal Investigation Department officers were actually present when the Sub-Inspector of the C Division of Ahmedabad City recorded Maneklal's statement, in which he again implicated Sitabkhan. Moreover they have admitted that they knew that Sitábkhán was a convicted coiner. The Governor in Council accepts these findings, and holds that it was clearly the duty of these Criminal Investigation Department officers to probe to the bottom Sitabkhan's connection with this case, especially since it is quite obvious that the convict Maneklal cannot have been the chief offender in this case. He was no doubt a willing abettor, but he was not himself the fabricator of the false coins found in his room.

In mitigation of their neglect to follow up the case against Sitábkhán the general defence of the Criminal Investigation Department officers is that when once the house had been searched and the accused Máneklál had been handed over to the local police, their connection with the case ended. It is clear, however, that when the statement of Máneklál was recorded by the local Sub-Inspector Umarbhái, some consultation took place between him and Inspector Navroji and Sub-Inspector Dansing as to what should be done with reference to Sitábkhán's part in the affair. There is a direct contradiction between the statements of Inspector Navroji and Sub-Inspector Dansing of the Criminal Investigation Department on the one hand, and of the District Sub-Inspector Umarbhai on the other, as regards their interchange of views on this point. The latter states that he was advised by them that the evidence was insufficient for prosecution. The former deny it, but the Commission rightly hold that the statement of Sub-Inspector Umarbhai is almost certainly the truth. It is also found by the Commission that the denial of Inspector Navroji and Sub-Inspector Dansing that they were present when the accused was examined by Sub-Inspector Umarbhái cannot be accepted.

It is clear therefore that these two officers of the Criminal Investigation Department have failed in their plain duty thoroughly to investigate the case against Sitábkhán, who, on the evidence with which they became acquainted on the day on which the accused Máneklál was arrested, was seriously implicated in the case. The motive for their neglect of Sitábkhán's part in the case is obscure, but whatever it may have been, their conduct is open to the gravest suspicion.

Government consider, therefore, that they deserve severe punishment, in the first place, for neglecting to pursue the investigation against Sitabkhan, and in the second place, for their prevarication while trying to explain their negligence. The Governor in Council has accordingly been pleased to direct that Inspector Navroji, who was an Inspector, second grade, on Rs. 200, should be reduced to the bottom of the third grade of Inspectors on Rs. 175, and that Sub-Inspector Dansing should be reduced to the rank of Head Constable, first grade, and be placed at the bottom of the grade. His Excellency in Council has also been pleased to direct that neither of these officers should be employed in future in the Criminal Investigation Department.

As regards the conduct of Sub-Inspector Umarbhai of the local police, Government agree with the Commission that he should be absolved from blame

in connection with this affair. It is quite clear that he could not proceed against Sitabkhan without the advice of the Criminal Investigation Department officers of superior rank. Indeed it may be held that, unless he received special instructions, the investigation was clearly for the Criminal Investigation Department to carry out. He did what he could by having Sitabkhan's statement recorded by the Second Class Magistrate under section 164 of the Criminal Procedure Code, and by mentioning in his charge sheet all that he knew with regard to Sitabkhan's connection with the case.

The two Criminal Investigation Department officers have been found guilty of neglect of duty rather than of any actively criminal conduct. The Governor in Council considers the results of the enquiry to be satisfactory in so far as the more serious charge,—that the police officers employed Sitabkhan as an agent provocateur to decoy Maneklal into the commission of an offence,—has been found after a searching investigation to be without foundation.

Education.

SCHOLARSHIPS FOR PARSIS.

P. N. No. 3214, Ed. D., 15th October, 1914, runs as under :-

Mr. Dadabhai Dinshah Karaka, retired Deputy Collector, Ahmedabad, has offered to Government, as the sole surviving executor of the late Mr. Dinshah Hormasji Karaka, four per cent. Bombay Port Trust bonds of the nominal value of Rs. 10,000 and 3½ per cent. Government of India promissory notes of the nominal value of Rs. 200 for the purpose of founding a certain number of scholarships and prizes for the promotion and encouragement of education of students who are sons of Parsi parents professing the Zoroastrian religion and who on account of their poverty are deserving of assistance in the prosecution of their studies. The scholarships will be called "The Dinshah Hormasji Karaka Scholarships" and will be tenable in the Government Middle School, Ahmedabad, Ranchhodlal Chhotalal High School, Ahmedabad, the Sir Jamsetji Jeejeebhoy English School, Surat, and the Sorabji Jamsetji Jeejeebhoy High School, Surat, while the prizes will be called "The Dr. Manekji Khasukhanji Prizes" and will be awarded to students studying at the Sir Jamsetji Jeejeebhoy English School, Surat.

2. Government have accepted the offer and have asked the Director of Public Instruction to convey their acknowledgments to Mr. Karaka. The securities have been vested in the Treasurer of Charitable Endowments.

* * * *

REVISION OF THE PAY OF SECONDARY TEACHERS AND OF DEPUTY EDUCATIONAL INSPECTORS AND THEIR ASSISTANTS.

P. N. No. 3537, Ed. D., 9th November, 1914, runs as follows:—

In July, 1912, the scale of pay of assistant teachers in Government secondary schools and training institutions was revised at a cost of Rs. 31,140 per annum, the initial salary being fixed at Rs. 40 per mensem. It was, however, considered that this improvement did not go sufficiently far, as it was held that, if graduates with superior attainments were to be attracted to Government secondary schools, the scale should be further improved so as to provide Rs. 50 as the initial salary, the remaining posts being regraded with salaries ranging between Rs. 50 and Rs. 150. This further improvement has now been sanctioned with effect from 1st April, 1914, and involves an additional charge of Rs. 26,220 per annum. The major portion of this charge, namely, Rs. 22,000, will be defrayed from the sum of Rs. 50,000 annually accruing to Government from the raising of the fees in Government secondary schools.

2. A second important revision has also been sanctioned with a view to equalising the prospects of educational officers in the inspecting and teaching lines. Inspecting officers are recruited from the same class as teaching officers, and although the former have no vacation, are on tour for a large part of the year and have to bear the strain of an ever increasing amount of administrative and office work, their prospects have hitherto not been so good as those of teaching officers. To remedy this state of affairs, the pay of the highest grade of Assistan t Deputy Educational Inspectors is to be raised from Rs. 125 to Rs. 150 per mensem, so as to equal the pay of the highest grade of assistant teachers. The pay of Deputy Educational Inspectors has also been revised in order to bring it approximately up to the existing pay of their colleagues in the teaching line. Hitherto there have been only three grades, on Rs. 200, Rs. 250 and Rs. 300 per mensem. In future there are to be two new grades on Rs. 350 and Rs. 400. In addition to this, a rise of pay has been granted to the Principals of the Training Colleges at Poona, Ahmedabad, Dhárwár and Hyderabad and to the Head Master of the

Dhulia Training School. These posts are not, strictly speaking, inspecting posts, but they are appointments to fill which inspecting officers are specially qualified and to which they may ordinarily look for promotion. At present four of these posts carry a pay of Rs. 400 and one a pay of Rs. 300 per mensem. In future the incumbents of three will receive Rs. 500 and the remaining two Rs. 400.

3. The cost of the revision described in the preceding paragraph will amount to Rs. 19,200 per annum and will be met from the recurring unpledged balance of the Darbar grant of Rs. 6,70,000.

URDU TEXT-BOOK COMMITTEE.

P. N. No. 3978, Ed. D., 11th December, 1914, runs as follows:—

In addition to the Provincial Text-Book Committee which advises on questions relating to the use of books in secondary schools, there are four Vernacular Book Committees which deal with the sanctioning of works in Marathi, Gujarati, Kanarese and Sindhi, respectively, for use as text-books, library books or prize books in primary schools. No such Committee has hitherto been appointed for Urdu in view of the small number of books annually produced in that language, and the practice has been to refer such books to the Mahomedan members of the Provincial and Vernacular Text-Book Committees after obtaining a preliminary report by one of the special Mahomedan Deputy Educational Inspectors for Urdu schools. As Urdu has now practically been recognised as a fifth vernacular for the purposes of primary education in this Presidency, and as the number of Urdu books to be examined is likely to increase considerably, it is considered desirable that more permanent arrangements should be made for the scrutiny of books in that language. His Excellency the Governor in Council has accordingly decided that a separate Committee should be constituted for the examination of Urdu books, and he has been pleased to nominate the following gentlemen as members of the Committee:

President.

(1) The Deputy Director of Public Instruction.

Members.

- (2) The Special Mahomedan Deputy Educational Inspector for Urdu schools, Southern Division.
- (3) Shaikh Bakarali Ameerali, Acting Deputy Educational Inspector, West Khandesh.

- (4) Mr. J. S. Kadri, Deputy Educational Inspector, Ahmedabad.
- (5) The Hon'ble Moulvie Rafiuddin Ahmad.
- (6) Sayed Muniruddin S. Moulvi, District Deputy Collector, Satara.
- (7) Munshi Kutbuddin Khan.

Local Self-Government.

A CONCESSION TO LOCAL BOARDS.

P. N. No. 10038, G. D., 10th December, 1914, runs as under:—

For some time past it has been under consideration whether District Local Boards could be relieved of some of the contributions which have hitherto been made by them for services performed on their behalf by officers of Government. The general principle laid down for guidance was that these charges should be remitted in all cases where a Local Board contributes to Government for services inherent in the duty of supervision and control by Government officers, or for services which cannot be expediently performed except by Government agency. Local Boards should, however, continue to pay for the services of officers borrowed from Government for work which is incumbent on them by law. Thus it was ruled that Government might properly cease to charge for clerical establishments in the offices of supervision and control and for the collection of district cesses which it is clearly expedient to realise along with the Government revenue. But at the same time Local Boards should not be relieved of payments for assistant surgeons on the Government cadre, who are employed under their orders.

Local Boards have never paid any part of the salary of the executive revenue officers, although the Collector, his Assistants and Deputies and his Mámlatdárs devote a considerable amount of time and energy to their concerns. But they have hitherto contributed to the cost of the local fund establishments in the offices of Commissioners and Collectors and of Educational Inspectors and Deputy Educational Inspectors. The total amount of these contributions averages Rs. 1,06,738 per annum. His Majesty's Secretary of State has now sanctioned the remission of these charges with effect from the year 1914-15. A careful investigation has shown that Local Boards make to Government no other contributions which can be remitted in accordance with the principle above stated.

Miscellaneous.

THE BOMBAY SMOKE NUISANCES COMMISSION.

P. N. No. 8759, G. D., 2nd November, 1914, runs as follows:-

The Act for the Abatement of Smoke Nuisances in the Town and Island of Bombay came into force in June, 1912, and the Commission appointed thereunder first met in September of the same year to draft rules. The rules were finally sanctioned by the Government of India and notified in April, 1913. Actual work started in February, 1913, when the services of Mr. J. Robson, Chief Inspector of Smoke Nuisances, Bengal, were placed at the disposal of the Government of Bombay. Mr. Robson was Chief Inspector of Smoke Nuisances in Bombay for eight months, and was then succeeded by his assistant, Mr. A. H. Fell, who had previously been an Inspector of Steam Boilers.

2. The Governor in Council believes that a short account of what has been accomplished down to the close of March, 1914, will be of interest to the public. It will be first necessary to describe briefly the methods adopted.

By Ringelmann's Smoke Gauge, emission of smoke is divided into six classes as under:—

No. 1. No smoke.

,, 2. Light grey.

" 3. Darker grey.

" 4. Very dark.

., 5. Black.

.. 6. Dense black.

Now it stands to reason that all smoke cannot be abolished. The first three classes are therefore regarded as permissible, but every effort is made to check the emission of smoke of classes 4 to 6. In reckoning the amount of smoke emitted by any chimney, classes 4 and 5 are expressed in terms of 6. For this purpose one minute of class 4 is reckoned as 37 of a minute of class 6, and one minute of class 5 as 55 of a minute of class 6. That is to say, if a chimney emits one minute of smoke of class 4, one of class 5 and one of class 6 in an hour, the emission in terms of class 6 will be 37 + 55 + 1 minutes, or 192 minute.

3. The first thing Mr. Robson did, when appointed in February, 1912, was to take observations of a number of chimneys for a week. The average emission of smoke during this period amounted to no less than 11½ minutes of dense black

smoke per chimney per hour. He then set about reducing the amount of smoke emitted by instructing engineers and firemen in improved methods of stoking and by giving advice to owners and engineers in charge of chimneys which smoked badly as to the means by which smoke could be reduced without loss of boiler power. The result was remarkable. After two months the average emission per hour had fallen from $11\frac{1}{2}$ to $6\frac{1}{2}$ minutes of dense black smoke. At the end of September, 1913, when Mr. Robson returned to Calcutta, it had fallen to 1.61 minute and at the end of March to 1:38 minute. All this was accomplished without a single prosecution being instituted, while the number of statutory warnings served during the year ending 31st March, 1914, was only seven. The Commission report that such results would not have been attained had their Chief Inspector been a less efficient and tactful officer than Mr. Robson, or had there been less co-operation and support on the part of those in charge of the furnaces in the city. They cordially acknowledge that in practically all cases where the Inspectors had to call the attention of engineers and owners to an excess of smoke, endeavours were willingly made by the latter to take the measures best calculated to reduce the emission.

4. The institution of a system of training stokers in improved methods of firing, under which training is carried out by the Commission's inspecting staff and certificates of competency are awarded to those who pass the requisite test, has already been made public in press note No. 5575, General Department, dated 16th July, 1914. (See Blue Book Quarterly, No. 3, p. 273.)

* * * *

TITLES AND ARMORIAL BEARINGS.

P. N. No. 6916, P. D., 30th November, 1914, runs as follows:-

The Government of India have desired the Bombay Government to include in their Quarterly Civil Lists and to carefully keep up to date, lists of—

- (i) Persons, resident within the territories under their administrative or political control, who are holders of Indian titles conferred by Government.
- (ii) British Indian subjects resident within the above territories bearing titles which have been expressly recognised, although not conferred by Government.

The Government of India further desire that it should be made known that titles not registered in the Bombay Civil List will not receive official countenance.

- 2. Title-holders, who have moved or propose to move their residence from one province to another, are requested to inform the Collectors or Political Agents of their districts or agencies, so that the lists of both provinces may be corrected.
- 3. The Government of India also desire to give facilities to Indian gentlemen who wish to register in India Armorial bearings granted by the College of Arms. Gentlemen wishing to apply to the College for new bearings or for the assignment of differences in existing arms, are therefore advised to transmit their applications through the Government of Bombay in the Political Department to the Foreign and Political Department of the Government of India, which will supply the College of Arms with such information as it may require.

Pilgrims.

DELAY IN EMBARKATION.

The following P. N. No. 8483, G. D., was issued on 22nd October, 1914:—

In view of the references which have appeared in the press on the subject and of the representations which have been addressed to them, Government consider it desirable to make a statement of the facts, so far as it has been possible to ascertain them, relative to the sailing of the pilgrim vessel *Mansuri* belonging to the Bombay and Persia Steam Navigation Company.

- 2. The agents of the company, Messrs. Turner, Morrison and Company, had originally advertised the Akbar to sail, but this vessel was unexpectedly requisitioned by Government for transport purposes. As a number of the company's other ships had been similarly requisitioned, the only alternative was to bring the Mansuri down from Karachi where she had already taken a certain number of pilgrims on board.
- 3. The Mansuri was expected to sail from Bombay on the 26th August, and the medical examination of the pilgrims was held in the forenoon of that day. Her arrival from Karachi, however, was delayed, and the pilgrims were not able to proceed on board until the evening. Moreover, immediately on her arrival in Bombay, her crew deserted bodily, and she was consequently unable to sail as arranged.
- 4. It has been represented that this desertion was due to complaints of bad food and water, and it certainly appears that of the provisions which had

been taken on board at Karachi a certain quantity had to be condemned and was thrown overboard by order of the Bombay Shipping Master. As against this, however, the agents produce a certificate from the port health authorities at Karachi to the effect that the provisions, when they were inspected there, were good, and they point out that the water on board was that supplied by the Karachi Port Trust. They contend that the desertion of the crew was due to fear of the war and that the complaints regarding the ship's provisions were merely a pretext. Having regard to the situation existing at the time and to the serious difficulties then experienced by all shipping companies in connexion with their lascar crews, it seems probable that this explanation is the correct one.

- 5. It appears also that another complaint on the part of the pilgrims, namely, as to the insufficiency of the lighting between decks, was to some extent justified, though in regard to this the agents explain that the defect was due to some of the electric wires having been broken during the voyage between Karachi and Bombay in consequence of the passengers having hung their personal effects on them.
- 6. Another crew was subsequently obtained for the Mansuri and she would then have sailed, but in the meanwhile the Port Officer had given orders that the vessel should be put into dry dock for survey. Although, as it eventually turned out, no damage to the ship's hull was disclosed, this precaution was considered necessary owing to the vessel having been aground at Massowah in the course of her previous voyage. In order to save the pilgrims the trouble of having to go ashore and consequently undergoing a second medical examination, it was arranged that, pending the survey of the Mansuri, they should be temporarily accommodated on the Budrie, a ship belonging to the Arab Steamers Company, and that during their stay there they should be fed at the expense of the company, as had been done in the case of the Karachi pilgrims during the detention of the Mansuri at that port. Those pilgrims, however, who preferred to stay on shore were permitted to do so. In the process of transhipment to the Budrie it appears that one slingful of personal effects and provisions accidentally slipped and fell overboard.
- 7. Some of the pilgrims who were kept on the Budrie were anxious to be allowed to sail by her, and the Pilgrim Department enquired of the agents whether this was possible. The latter explained, however, that as the Budrie had not undergone disinfection pilgrims sailing by her would not be permitted to

land at Jeddah. It was impossible therefore to substitute the Budrie for the Mansuri.

- 8. The departure of the *Mansuri* was eventually announced for the 3rd September, and those pilgrims who had stayed ashore were again medically examined on that date. Unfortunately, however, there was once more a delay owing to the difficulty of obtaining firemen and a medical officer. Thereupon some 60 of the pilgrims, exasperated, no doubt, by this renewed postponement and the inconveniences which they had already suffered, absolutely refused to sail by the ship, although as a matter of fact she left on her voyage to Jeddah the very next day.
- 9. The Pilgrim Department intervened on behalf of the persons who were thus left behind. The agents, while stating that they would consider favourably a proposal for the refund of the passage money, pointed out that these persons had no reasonable justification for declining to proceed by the *Mansuri* with the rest of the pilgrims, and alleged that their refusal to sail was due to certain outside influences which had in the interval been brought to bear on them. In deference to a further representation from the Department, the agents, while still maintaining that they were under no legal obligation to do so, definitely undertook to refund their passage money to the stranded pilgrims or, in the alternative, to transfer their passages to the *Bahrein* which was due to sail shortly. Government understand that the pilgrims have in every case received a refund of their passage money.
- 10. In connexion with the delays in the sailing of the *Mansuri* both from Karachi and from Bombay, Government are aware that the shipping company was faced with difficulties of an exceptional nature, and are satisfied that the company was not to blame for them.

Public Health and Sanitation.

St. GEORGE'S HOSPITAL MALARIA COMMITTEE.

Order No. 9873, G. D., 5th December, 1914, which deals with the report of the Committee appointed in April last to enquire into the prevalence of malaria in St. George's Hospital and its precincts, runs as follows:—

Government note with satisfaction the marked diminution in the incidence of malaria in the neighbourhood of the hospital which has been recently effected by the energetic measures of the Health Department of the municipality, and they trust that the campaign which has already been productive of such encouraging results will continue to be prosecuted with undiminished vigour.

- 2. The suggestion made by the Committee that, as an experimental measure, a small section of the hospital should be made mosquito-proof by providing wire-gauze doors and windows is approved. The work should be taken in hand at once. The cost, which is estimated at Rs. 3,727, should be met by a transfer of funds from the lump provision of Rs. 21 lakhs made in the current year's budget on account of grants-in-aid to local bodies for sanitary projects.
- 3. The thanks of Government should be conveyed to the members of the Committee for their labours in connexion with this investigation.

ST. GEORGE'S HOSPITAL NURSING HOME.

P. N. No. 10178, G. D., 16th December, 1914, announced that the St. George's Hospital Nursing Home was ready for the admission of patients.

War.

PARCELS FOR BRITISH PRISONERS OF WAR.

P. N. No. 2290-W., P. D., 26th October, 1914, made the following announcement:—

It has been arranged that parcels for British prisoners of war in Germany may be sent to Mr. Edward Page Giston, 134, Salisbury Square, Ludgate Circus, London, for transmission to Germany. Mr. Giston is an American citizen and is in touch with Anglo-American relief work in Germany. It is essential that the parcels should not contain letters. All correspondence regarding supplies for distribution should be addressed to Mr. Giston direct.

THE DECLARATION OF LONDON.

P. N. No. 2291-W., P. D., 26th October, 1914, notified for general information that copies of the pamphlet containing the Declaration of London, 1909, and the authorised commentary thereon included in the report of the Naval Conference are now available for sale to the public and can be obtained from the Superintendent, Government Printing, India, Calcutta.

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[•] In the 1st number of the Quarterly Press Notes and published Government Resolutions were only classified, and not reprinted. They have nevertheless been included in this index to make it complete for reference purposes and are marked by an asterisk.

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