## 'ADMINISTRATIVE REPORT <br> or mis <br> CENSUS <br> OF THE <br> United Provinces of Agra and Oudb,

1911. 

BY
E. A. H. BLUNT, I.C.S.,

SUPERINTENDENT, CENSUS OPERATIONS


## ALLAAHABAD :

'Printed' by F, Luker, Superintendent, Government Press.
1912.

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## Chapter I.-ENUMERATION.

1. I took over charge of the office of Procincial Superintendent on 1st April 1910, and was also appointed Under Secretary to Government in the Census department with effect from the same date. The latter appointment enabled all references to Government to be made unofficially and was a great convenience. Mr. Bourdillon was appointed my Personal Assistant for three months from December.
2. The rules were based on the Imperial Code of Census Procedure, Part I (Enumeration). This consisted of 9 chapters and 4 appendices, headed as follows : Chapter I.-Definitions : Chapter II.-General Instructions (code, legislation, progress reports, note-book for Superintendent, correspondence with Government and various accounts matters) : Chapter III.-Translation: Chapter IV.-Paper, Printing and Indents: Chapter V.- Census Divisions and Agency: Chapter VI.House numbering : Chapter VII.-Preliminary enumeration: Chapter VIII.-Final enumeration: Chapter IX.-Special arrangements: Appendix I.-The rules for census of Railways: Appendix II.-The rules for Census of Cantonments and Troops on the march: Appendix III.-Census of plantations, mines and factories: Appendix IV.Census of ports (which did not concern this province).

The rules in this Code were quite general, embodying principles rather than detailed orders. The Provincial rules went of course into considerably more detail. They were as follows-

Preliminary Circular 1-A brief skeleton of census operations as a whole for the information of district officers and their gazetted staff.

Circular 2.-The appointment and duties of district census officers.

| Chapter | I.-Preliminary. |
| :--- | ---: |
| Chapter | II.-Census sub-divisions in rural areas. |
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I propose to deal with these and the operations described in each separately. But a few preliminary remarks may be made.
3. As was stated in the report of 1901, it is advisable to make each chapter self-contained so far as possible, and it is important both to arrange the rules in each chapter so far as possible in strict chronological order, and to issue the chapters themselves only a brief while before they are needed. The rules themselves should be as simple as they can be made, and broken up into paragraph and clause and subclause with the greatest possible freedom. Rules so drawn up are much easier to understand: and by the very way in which they are printed, it is much more difficult to overlook any, possibly important, point in them. Moreover it is then possible to pin a careless officer down to a few words. But undue conciseness is not to be recommended : on the whole too much explanation is better than too little. Doubtless, when it is clear that everything that can profitably be said has been said, the blue pencil can be used with freedom to reduce the number of words in which it is said. But nothing should be left out. There was one rule concerning the drawing up of the General Village Register which was certainly in full detail, and considering that it was accurately carried out by all district census officers but two, may be supposed to have been also in sufficient detail. Yet those two managed to so treat the rule that the whole General Village Register had to be done afresh. The facts relating to one of these cases are instructive. The General Village Register was in the first place drawn up correctly in this respect. When drawn up the district census officer discovered a small consequential

Holders of Office.

Rules.

Scope and style of the rules.
difficulty, and proceeded to puzzle over the rule. He called a meeting of tahsildars and others and they discussed it freely. The result was that after much searching of heart they came to the unanimous decision that the rule could not possibly mean what it said, and the General Village Register was drawn up afresh, and wrong. If this could occur in spite of much detail in the rule, what would have occurred if there had been less detail? The officer who has to deal with census operations is more often than not already hard worked, and naturally looks on them and the rules relating to them as an unmitigated nuisance. To mitigate the nuisance by carefully considered rules is desirable not only in the interest of the operations but to ease the burden for those officers : but if conciseness were to result in omission, or in rules that were not plain to any understanding, I doubt if they would welcome the dubious advantage of having rather less material to study when counterbalanced by the fact that they would have to give a good deal more study to the material.
4. Nothing need be said as regards the preliminary circular. The circular regarding district census officers laid down that a covenanted civilian or deputy collector should be appointed to the post in each district. He was an officer who could tour all over the district without detriment to his ordinary duties, and where there are large cantonments he was either a European civilian, or else á European officer undertook such portions of the district census officer's duties as are concerned with cantonments. His name was reported to Government in the Appointment department with the object of avoiding transfer so far as possible. His duties were so defined as to relieve the collector as far as possible of any connection with census operations save that of general control. Important letters from my office were sent addressed to him through the collector : letters on routine matters were sent direct to him, and he corresponded with me in a similar way. This meant that the collector was relieved of quite half of all census correspondence and as regards about two-thirds of the remainder had nothing more to do than see the letter from headquarters and the district census officer's reply. Progress reports were sent in once a fortnight and these too, whilst keeping both the collector and myself fully up to date as to the progress made, saved a great deal of correspondence. They were sent on a double sheet of foolscap : on the left page the district census officer wrote his report: the other page was divided into two parts, one for the collector's remarks, one for mine. Most district census officers kept points on which they needed information from me for these reports. As after seeing them, I returned them with any remarks I had to make to be put in a guard book, a great many letters of reference were saved. All references to me, except on important matters, were on half margin, thus saving the labour of drafting in two offices, and the accumulation of a mass of unimportant letters. Many officers took the fullest advantage of this rule, but some could not be broken of the habit of using the official letter even when I ignored its official nature and sent it back in original with the reply on the letter itself.

The district census officers changed a good deal from time to time : for some transfers could not be avoided and other officers broke down in health. But I am deeply grateful to Government for the help given in this matter. Out of 48 district census officers 37 held the post right through. The advantage of continuity in administration was clearly apparent from the difference in the quality of the operations in the districts where the administration was and where it was not continuous. Yet even in places where this disadvantage was found, some officers succeeded in attaining a very high measure of success, notably Mr. J. N. G. Johnson, C.S., in Cawnpore, Mr. B. J. K. Hallowes, C.S., in Agra, and P. Chandra Datt Pande in Garhwal, a fact that redounds greatly to their credit. Of the officers holding the post at the final enumeration in March, 23 were civilians and the rest deputy collectors.
5. No remarks are needed on chapter I. As regards chapter II, the procedure laid down was as follows. The district was first divided

Census sub-
divisions.
into charges. No charge could lie in more than one tahsil ; in rural areas it was usually the circle of the supervisor kanungo. Municipalities always formed a separate charge or charges: towns might be made into charges if convenient. To this matter further reference will be made (paragraph 7). No charge was supposed to contain more than 15,000 or less than 12,000 houses.
6. Before considering the suitability of the rules as regards charges, it will be well to refer to the definition of a house, as it bears on the question. The definition of a house is always difficult. Without referring to European experience, it may be said that in India in 1881 the house was taken as the building, i.e. enclosure or residence of one or more families having a separate entrance from the common way. This was found to have no statistical value. In 1891 apparently no hard and fast rules were laid down: the only direction given was that some definition should be chosen which would simplify the work of the enumerators. Since then the tendency has been spreading to define a house as the residence of a commensal family. This was the case in the United Provinces in 1901. At this census the same principle was maintained : and Mr. Burn's suggestion of that census-that the commensal family and consequently the house should be decided on the basis of the chulha-was carried out. The general consensus of opinion was that the rule was intelligible. There is certainly no reason why it should not be, if intelligibly expressed : for it is based on a well-known and deep rooted custom of the people-that the members of a joint family eat food cooked from the same chulha or cooking place (eki chulhe ka paka khate hain). To count the houses amounted therefore to counting the families which eat from one and the same chulha, not to counting the actual chulhas, for naturally, a commensal family of large dimensions would require more than one actual cooking place though still theoretioally "eating from one and the same chulha." It follows of course that when in the tables or the report "occupied houses" are mentioned what is really meant is "commensal families:" it has no necessary connection with a building at all. For by the rule all that was required to satisfy the definition was a " dwelling place " containing a commensal family and a chullua or chullhas which they shared in common. The "dwelling place" might be a palace or a hovel, or part of a hovel, or a single room, or a tent, or a hut of leaves, even a tree or the canopy of heaven. But so long as no attempt is to be made to get a census of buildings (and that in this country would be a matter more complicated than in Europe), the present definition is probably as good as any that can be obtained. That it to some extent broke down in the course of house numbering is due to other causes which will be considered when dealing with that chapter. It was not due to the definition.
7. A result, however, which followed almost immediately, and was due to the definition, was the discovery of an enormous increase in the number of houses. This was undoubtedly due for the most part to a real increase in the number of commensal families since 1901, which was caused by a break up of the joint family system. This is not the place to discuss this phenomenon, but as regards the matter in hand, it had the result of causing many charges which were equivalent to supervisor kanungos' circles to appear as regards the number of houses preposterously large. District census officers accordingly broke them up in many instances.

The circles comprised some 400 to 600 houses, the blocks some 30 to 50 . The size of both was appropriate. The charge superintendent was almost invariably the supervisor kanungo and the supervisor a patwari, in rural tracts. In Moradabad, tahsil Auraiya in Etawah and tahsil Fatehpur in Fatehpur, it was not possible, for reasons connected either with special land records, revisions or approaching settlement, to use the revenue staff. The patwaris were allowed to be enumerators and that was all. It was also at one time suggested that the revenue staff should not assist in the same tahsils in the Bundelkhand districts, owing to the quinquennial settlement.

## Definition of a house.

Increase in number of houses.

## Census agency

## Proposals <br> regarding <br> census sub.

 divisions.8. Though the question is really germane to chapter VI, it will be convenient here to discuss the question of census agency. It must first of all be realized that the backbone of the census staff, outside urban areas, is the revenue official. No man ever has or ever will make so good a charge superintendent as a supervisor kanungo; no man ever has or ever will make so good a supervisor as a patwari. There are good and bad supervisor kanungos and there are good and bad patwaris; but both of them by the very nature of their ordinary duties are so well fitted for these posts, that I can scarcely imagine even good men of other stations in life being better than these men for the purposes of census. The supervisor kanungo knows every patwari intimately; he is his immediate superior at all times. He knows, after a year or so in his circle-I had almost said every man, woman and child in it, but certainly every man of any sort of position above that of a very small tenant. The patwari knows every soul in his patwari's circle and all about them : he could probably fill up the whole of the census schedule for almost everybody from his own knowledge. And moreover both kinds of officers are, as part of their ordinary day's work, well accustomed to handling forms far more complicated than a census schedule. If one sent one's census staff to school for a year to learn how to fill up the schedule (as I believe is done in America), I do not believe one could produce men as well fitted for census duties as our supervisor kanungos and patwaris are without any but the most ordinary training. Not to use them, if by any method it can be made possible, would be ridiculous. And they are used, freely and fully, with certain exceptions. I will deal with these exceptions later; at present I am concerned to suggest a method by which they can be used even more fully than before.
9. In the first place I would never, save in the most exceptional circumstances, allow a rural charge to be anything but a supervisor kanungo's circle. I would set no limit to a charge's size. I am persuaded that if the circle is not too large for a supervisor kanungo for revenue purposes, it is not large for him for census purposes. To break up a supervisor kanungo's circle into two charges is radically wrong. To do so means that the knowledge he already possesses of his circle and its inhabitants is in part deliberately thrown away, and a new man is put in his place who cannot possibly acquire the same knowledge in the time available, and even if he could has not the same extraneous reasons for going about that circle and getting to know it. A supervisor kanungo would be continually travelling over it in any case ; that is part of his duty : and he can combine his ordinary work and his census work to a large extent. Anybody else has to make time to visit his circle. Nor must it be forgotten that many supervisor kanungos are relieved of census duty in respect of important parts of their circles since all municipalities within them must, and many towns are, separate charges. As regards patwaris, I can see no reason why the census circle should not correspond to the patwari's circle as a normal thing. It is possible that such circles might in some cases be too small (which would not matter in the least, and indeed,-since the smaller the census sub-divisions is the better the work should be,-would be a positive advantage). In other cases they might be too large. But here again the patwari's knowledge of his circle would make it advisable to keep him in charge of it, even if it were too large for a normal census circle; and if it were so large as to be totally unmanageable for census purposes, then very possibly he would have an assistant patwari who could take a part of it, and if he had not somebody else could be appointed to a part. But in such cases, where either charge or census circle would prove too much for the supervisor kanungo or the patwari, I would not break them up : I would give them an assistant charge superintendent or assistant supervisor to help them, but leave the supervisor kanungo and patwari entirely responsible.
10. In arranging the census sub-divisions too, it would save about two-thirds of the work. Supervisor kanungos' circles and patwaris'
circles are permanent local sub-divisions ; the census charges and circles, apart from urban areas, would not require to be planned out; they would be there ready made. Circles would always fall completely within charges and tahsils and parganas : if in any case they did not also fall completely within thanas, the matter could easily be arranged by dividing the patwari's circle into two census circles, but entrusting both to the same patwari-supervisor. I may add that in one district this method of framing the circles was followed. I fully approved of the experiment, but when I came to know of it, it was too late to suggest it to other districts.
11. There are exceptional cases where the revenue staff cannot be used at all ; such are districts where settlement or survey or revision of land records are in progress and the revenue staff are required for these. Here of course one has to do one's best without them, and after all one is no worse off than some provinces where a similar staff does not exist to be used. At this census in the whole of Moradabad, and in one tahsil each in the districts of Fatehpur and Etawah, the revenue staff could not be so used. The difficulties in Fatehpur and Etawah were not insuperable: only one tahsil in each case was concerned, and the district census officers concerned carried out the operations without much difficulty. But in Moradabad matters were different. The precedent of Farrukhabad in 1901 was quoted to me as showing that no very great difficulty would be encountered in doing without the revenue staff. But such difficulty, and very great difficulty too, was encountered : and the parallels, as the custom of parallels is, did not meet. In both cases there were remarkably energetic district census officers, backed up through thick and thin by their collectors : but there the parallel stops. I have no personal acquaintance with Farrukhabad, and cannot say whether the non-official inhabitants were well fitted by the possession of public spirit and education to assist in census. But assuming that Farrukhabad was in this respect even no more than normally good, Moradabad was abnormally bad. It is a district of absentee landlords with no public spirit as a body (there were of course individual exceptions), and with no particular ambition to serve Government in permanent posts in the future (the usual and a very useful incentive to nonofficials to take up census duties). Living for the most part in the towns, these men resented being given posts (usually as supervisors) which would necessitate their living even for a while and from time to time in their villages. When they found that census duty could not be avoided, they conceived the plan of getting themselves appointed enumerators in the towns where they lived, thereby choosing very much the smaller of two evils. For the enumerator's duties are far lighter than those of a supervisor's ; and they could then stay at home. But nobody wanted them as enumerators in the towns where there were educated persons in abundance for the post, and they were wanted as supervisors in the villages, where in the absence of the patwari or a village school master, there was frequently nobody else available. They and their agents (who were also freely appointed) had a habit, when appointed, of disappearing altogether-nominally, perhaps in reality, to that convenient hiding place, the Allahabad Exhibition. The situation was saved solely and simply by the unremitting energy of Mr. B. S. Kisch, the district census officer, who, with Mr. F. J. Cooke, the collector, at his back, and the assistance of an energetic set of charge superintendents, pulled things through. But the machine never ran easily: from start to finish it was a case of "pulling things through ;" so much so that Mr . Bourdillon, my personal assistant, and myself put ourselves for a time at the disposal of Mr. Kisch in the capacity of extra subdivisional officers to check the schedules after the preliminary enumeration. When it is added that Mr. Kisch was a very hard-worked Joint Magistrate, it will readily be acknowledged that the Moradabad census operations of 1911 must be regarded as his own personal triumph. But I venture to urge, in view of these facts, firstly that the revenue staff should never be refused to a census officer, if by any possible means

Cases where revenue staff was not used.
the refusal can be avoided (I do not of course imply that in this or any other case it could have been) ; secondly, that if it has to be refused the census department should admit at once that the only alternative, in a case such as that of Moradabad, is to pay the staff: there would have been no lack of men and quite good men in Moradabad if they had been paid, and there would have been a substantial hold on them too, which was the important thing lacking (as it was, three charge superintendents had to be paid in Moradabad) ; thirdly, that it be recognized that the census operations will be at least thrice as difficult to carry out as they otherwise would be, and that an officer, if one can be spared, ought to be deputed specially for census. The youngest of young civilians, as experience at this census has shown, will be quite capable of carrying out the duties, if he has nothing else to do.

As regards the second point, it is probable that there are in the province many districts where sufficient non-officials with the requisite qualifications-a sense of public duty and a measure of educationcould be found to carry out the operations both willingly and well without payment. But even in such cases the district census officer and collector could, in practice, only ask as a favour for help, which, if the men were paid, they could demand, and would find it less easy to insist on that help being given, when otherwise they would have a hold on the persons concerned. Though I consider one can legitimately ask (in rural tracts at all events) for the small amount of help required of an enumerator, I am doubtful whether one can as justifiably ask a busy non-official (and the non-officials who would make good supervisors or charge superintendents would normally be of the stamp that is busy in other avocations), to give his services as a supervisor or charge superintendent free of charge. That so many do so, especially in towns, redounds to their credit: indeed it is probable that nowhere in the world would the people respond so cheerfully to the call on their services. But there are not wanting signs that this cannot go on for ever. Grumbles were heard, even at this census, at the burden imposed, especially in busy towns such as Cawnpore and Lucknow. Nor is it surprising, nor does it argue a decrease in public spirit. With progress, the calls of business are growing heavier, and time is beginning to be worth money, even in an East where for centuries there has never been any objection to putting off till tomorrow what could quite as well and even better be done to-day. And once time becomes worth money, money will have to be paid for time.

As regards the first point, I venture to call attention to the instance of Bundelkhand. Bundelkhand is under a quinquennial settlement, which means in practice that every year one or more tahsils in each district have to be resettled. I was first told that I could not use the revenue staff in Bundelkhand. But Bundelkhand is not like the rest of the province. The general state of education is on the whole backward and in a very poor population public spirit is not a notable quality. Those who had the spirit, had not the education; those who had the education, had not the spirit. The result is that if the patwari cannot assist, there is nobody who can take his place; and the patwari himself is not the same useful stamp of man as his confrère elsewhere. I accordingly represented to the Board of Revenue that, firstly, if the revenue staff were not available, the census would certainly be a failure, even if it were possible to carry it out at all ; and secondly, if, in the alternative, the revenue staif attempted to carry out both census and settlement conjointly, the result would certainly be that neither census nor settlement would be satisfactory. The rules allowed of the quinquennial settlement being postponed, and Government applied this rule. The census has I think been quite as successful in Bundelkhand as elsewhere (the district census officers, Mr. A. G. P. Pullan in Hamirpur, Mr. J. C. Moore and Mr. D. M. Stewart in Banda, Mr. J. H. Darwin in Jhansi, and P. Kishnanand Joshi in Jalaun were all extremely efficient officers) : but my reason for mentioning the fact is to emphasize my contention that the assistance
of the revenue staff should not be refused if the refusal is by any means avoidable. I venture to repeat that no body of men make such efficient census officers as the supervisor kanungo and the patwari, that they could scarcely be improved on even if specially trained for census duty; and I may add that modern methods are producing a supervisor kanungo who is incomparably better than his predecessor of the old school, good as he was.
12. The definition of a town was the same as in 1901, viz. all areas where Act XX of 1856 or Act I of 1901 (Municipal Act) are in force, and every continuous group of houses permanently inhabited by not less than 5,000 persons. The second portion merely serves the purpose of allowing of the inclusion of places that are obviously towns, but for special reasons are not under either of the two Acts. There are not many of these, and in many cases the Acts have been applied to such towns since 1901, whilst others are no longer considered towns. The definition is suitable: it omits cantonments, which are treated for some purposes as towns, but as these fall under different rules, it is unnecessary to mention them here. Some towns were classed as cities. Amroha, Etawah, Sambhal and Budaun were added to the list of cities of 1901, and Ghazipur was omitted.

The procedure in various respects differed according as the town was a city, a municipality but not a city, and any other kind of town. All municipalities, whether cities or not, were formed into one or more charges. Normally only cities formed more than one charge, except that an attempt was always made to distinguish the urban and suburban areas. Whether this could be done with ease or not depended on local conditions. Charges, circles and blocks were on the whole rather larger than in rural areas, for the obvious reason that they were more compact : the charges if more than one corresponded to some existing administrative unit or units; generally these were wards occasionally, as in Agra, thanas. Circles were always completely within ward and thana, blocks within muhallas. In Cawnpore, where a reallocation of municipal local sub-divisions was in progress, these were so arranged as to serve the purpose of census sub-divisions also-a remarkable instance of most successfully killing two birds with one stone. As regards cities the census sub-divisions of 1901 were preserved as far as possible: or the new sub-divisions so arranged that they could easily be compared with those of 1901. Towns were formed into charges if a suitable superintendent could be found and the population was near 10,000: the later provision however was to some extent disregarded, and is of no especial value. Other things being equal, the smaller any particular census sub-division is the better for purposes of management, and as to turn a town into a charge is to reduce rural charges around it and in just that part of it which the rural charge superintendent knows least well and somebody else knows a great deal better, I think it might be omitted.

The charge superintendent in municipalities was usually an officer of the board, or a member of it. If there was one charge, he was usually the secretary: and if there were more charges than one, he usually took over one of the charges. Members were frequently charge superintendents or supervisors, and as a rule very efficient ones. In Cawnpore one charge superintendent was a senior clerk of the collector's office. The difficulty I found with non-official charge superintendents and supervisors was that such gentlemen were too well educated for their posts. This operated in two ways: firstly, they thought out possible difficulties which would not have strack a less well educated man, and this gave me a certain amount of unnecessary work in explaining them away: secondly going to the other extreme they were apt to think at times that there was nothing difficult in the rules at all, and that they could learn them up easily at the last moment. In some respects they were right in so thinking: but the rules if not difficult were frequently tricky and with the best educated people practice makes perfect. This feeling was very strong in Allahabad. Also they were all apt to neglect what may be des.rribed as the "dirty work:" the

## Towns.

checking of house numbering and so on. This was again natural ; and in brief I cannot do better than repeat Mr. Burn's dictum of 1901 : "Some of these men (I would say the great majority) did excellent work: but they are uncertain and require watching." It was not always easy to get willing enumerators, for the reason mentioned in the last paragraph but one of. 11 .

In towns the bakhshi was frequently the charge superintendent. Mr. Burn thought these men not generally suitable. My own experience is that it depends on the man. Some such men did excellent work: others were unsatisfactory. They make efficient superintendents if they have a certain amount of local influence. Mr. Burn did not think they had: but I do not think this can be laid down as a general rule. Certainly there is seldom anybody else available. At some tahsil headquarters a tahsil stationary official could be used : and elsewhere, occasionally a non-official. But generally speaking there is nobody available but the bakhshi.
13. The forms in use in this part of the operations-the General Village and Town Registers and Circle List-are generally reported as suitable. The two former were in the same form slightly altered. The columns are as follows : serial number, name of village, etc., thana circle, number in Revenue Register, names of hamlets, muhallas, paraos, etc., number of houses in each village, hamlet, etc., proposed number of blocks, and in the four succeeding columns the names and professions of persons respectively qualified as supervisors and enumerators. The next three columns were the number of census circle and block and the remarks column. In the General Village Register only columns 2 and 3 were filled up for towns; the details were given in the Town Register, which with the exception of column 4 was in the same form.

I myself see very little use in column 7 (proposed number of blocks). The blocks are not finally settled till house-numbering is completed or settled at all till the circle list is drawn up : and it amounts to no more than a statement of the probable number of blocks on general principles. I would however add columns as follows :-
(1) Name of pargana (after column 3).
(2) Language or languages known by supervisors and enumerators. This last was entered in the remarks column on this occasion.
The circle list gave the serial number of the circle, the name of the supervisor, the villages, their serial number in the General Village Register, the serial number of the block, the number of houses in the block, the name of the enumerator, the character known by him, and various dates: date of completion of house-numbering, of testing of house-numbering by supervisors, of commencement and completion of preliminary record and of testing of the same by supervisor and charge superintendent. This is an attempt to combine in one form totally different kinds of information, and I do not think it is either necessary or advisable. I should omit all the columns giving dates. These should be on a separate form or put on the cover of the enumeration book. I would add columns for thana and pargana, which on this occasion were entered in the remarks column.

The Abstract of Circle List showed the serial number, the names of pargana and thana, the number of villages, houses, blocks, circles and charges and the average number of houses per block, per circle and per charge. I was puzzled for some time to know how to use this form. It was not clear what the serial number was supposed to belong to. By the form as given in the code apparently each tahsil (or thana in other provinces) was to have its own line and serial number, but as used in this province, it was more convenient to have each tahsil on a separate sheet. My own view is that in this form the details by pargana and thana are not wanted at all. But what one does want to know is what the charges are like in point of size. This one does not get directly in the form as it stands. I would have the columns as follows: serial number of charge, number of villages, houses, blocks
and circles (in charge), average number of houses per block and houses per charge. The figures should be totalled by tahsils, and the average number of houses per charge given for each tahsil in a special column : and also in the same way for the district. The number of the staff writing Urdu and Hindi respectively should also be given for the whole district and each tahsil.
14. The translation of the rules was for the most part done by me. Chapter XIII was done by Mr. E. H. Ashworth, C.S., who kindly carried on my duties whilst I was ill in September, and Chapter XIV by my head clerk. Chapters V, IX and X did not require translation. The forms and the instructions to enumerators were all translated by me and revised by the Vernacular Department of the Secretariat or by my head clerk.

It is certainly advisable that anything intended for the enumerator should be translated by the Provincial Superintendent himself. The Indian translator has an ineradicable tendency to high flown Persianisms or Sanskritisms and a translation of that kind might as well be in Greek for all the use it is to the enumerator. But I see no reason why the same should apply to the rules. These are not used as a rule by anybody under a charge superintendent: they are well educated men who would not be baffled by Persianisms, and indeed many did at this, by next census probably all will, understand English. Of a rule in English and one in Urdu there can be no question which is the simpler. It appears to me that for a Provincial Superintendent to translate the rules is a waste of valuable time. A translator could do it quite as well, and it is a great tax on the Provincial Superintendent.

Further there are many things which have to be translated, e.g. numerous circulars, which though addressed to district census officers, must finally percolate down to supervisors. Many officers have remarked on the labour involved in abstracting and then translating the abstracts of such orders. But it is totally impossible for a Provincial Superintendent or his office to attempt it, desirable as it may be, and the vernacular department, though they are willing enough to assist, have much work of their own, and one hesitates to abuse the power of using their services which is given merely by one's secondary position as an Under Secretary. The natural remedy is to employ a permanent translator in the Provincial Superintendent's office for the first year (he is not required afterwards) and this is a suggestion well worth considering. When there is no translation to be done, he can help in many other directions.

There was only one complaint against the translations, from a tahsildar, whom I subsequently learnt made a practice of grumbling at everything, and he was easily quieted by the suggestion that if he did not like the translation, it was open to him to draw up another. The rules were published in both Urdu and Hindi (or rather in the Nagri script). The translations of the instructions to enumerators were circulated to all district census officers in proof for criticism : and to test this clearness of the rules in a practical way, they were asked to enumerate each a dozen people by the light of the rules. Though as a general thing the criticisms were purely of a local nature (one officer went so far as to object to the use of the word "ghar" for "house," on account of its similarity to a local word "gher" "cattle enclosure"), and no district census officer appeared to be able to "think provincially" or look beyond the needs of his own particular district in the matter, still many criticisms were of the greatest value and were adopted. Many collectors interested themselves in the matter and the suggestions of Mr. G. R. Dampier and the late Mr. C. E. Crawford were of especial assistance. Other criticisms led to a discovery of possible misunderstandings in particular localities (such as that quoted by Mr. Burn of randua being used as equivalent to an elderly bachelor), and I noted all these in the manual, to be described later on.
15. The general schedule and indeed all forms but the cover, were biliteral according to the neat suggestion of last census-that the headings

## Arrangement of

 the forms.bottom, a means which makes it possible by turning the page with one or the other heading uppermost to use the same form either for Nagri or Urdu. A better time-saving contrivance had seldom been thought of and the unnamed deputy collector who devised it in 1900 deserves the thanks of all succeeding census officials. The forms were calculated according to the code instructions, viz. 54 leaves of the general schedule per 100 houses, 200 leaves of the block list and 120 of the cover, per 100 blocks. I first calculated the probable requirements on the figures of houses and blocks of 1900 with a 2 per cent. margin for increase. This margin owing to the enormous increase of houses proved totally insufficient, and I had to issue a supplementary indent later. When house numbering was finished, for reasons to be mentioned later on, yet a further indent was required, and owing to various contretemps in the shape of forms going astray, or press mistakes in despatching (they sent invoices which did not correspond with the forms sent, as a rule), printing was going on practically up to the day when the preliminary enumeration began.

Printing of all census forms (not rules) was carried out at the Newal Kishore Press in Lucknow. The printing was on the whole satisfactory, a few little misprints, perhaps 3 or 4 in all, crept into the forms despite all corrections in proof; but that was all. But their despatching was nothing short of abominable. I visited the press myself in July, and January (twice) ; on each occasion despatching was in progress. That it is bad is not surprising, considering they were attempting to carry out the packing and despatch of millions of forms (they were printing not only those of the United Provinces but also of Central India) with one despatcher and some three or four packers. For the last fortnight my head clerk was a fixture in the press, seeing to the despatch of forms. If at the next census it is necessary to use a private press again I strongly advise my successor to take all despatching out of the hands of the press altogether. Let him send a responsible clerk there; and borrow 2 or 3 despatchers from the Government Press, the Superintendent of which was of the greatest possible assistance to me in many ways outside his actual duty. Let him also insist on the press providing sufficient packers. Not only, however, was the despatching staff insufficient, but the press had no notion of how to save themselves labour. It never struck them for instance that it was quite easy to count the forms as they came off the machine and pile them in thousands, with say every 10th thousand in counted piles of 100 each : or that any one 1,000 of a particular form is to a form or so the same height as any other 1,000 , so that mere measurement of the height of a pile of forms would suffice. It was not apparently till I gave them clear and detailed instructions of this nature in December that they even thought of such devices: formerly their plan was to build up a huge mass of forms and count the required number from them one by one. It should obviously not have been necessary for me to teach them the common-sense elements of their own business.

The net result was that never at any time, even to within a day or two of the census, was I completely satisfied that all was right in the matter of forms: and the amount of correspondence caused by this dilatoriness on the part of the press was stupendous. That all went well in the end, I can only attribute to good fortune: but personally I had a strong objection to having to give fortune hostages in this wholesale fashion. In the end too, of course, a great many districts had more forms than they wanted. In brief the Newal Kishore Press will be satisfactory enough to any future superintendent so long as he does not let them despatch at all ; if he does he will have no easier a time of it than I had.
10. The supply of forms was based on the principles of 1901.
but I need not dwell on this, for I am convinced that the whole system is radically wrong and should be entirely altered. I take the proceedings in the matter from the beginning.

1. I calculated and had printed forms according to the calculations detailed above, viz., 54 general schedules per 100 houses, 240 block lists per 100 blocks, 120 covers per 100 blocks, on the figures of 1901 plus 2 per cent. These were printed and ready by the end of July.
2. On receipt of abstracts of the circle list in form C, I recalculated the figures by tahsils, on the actual figures there given, and sent a supplementary indent. Parwanas were also printed.
3. On receipt of the revised figures after house-numbering I again calculated the figures, added the forms required for cantonments and railways (then first received) and household schedules, and issued another supplementary indent.
4. Later on I ordered circle summaries and enumeration passes.

Forms were first sent out in August. These were actually the number of forms calculated to be required for the rural tracts of each sadr tahsil ; but they were not intended for those tracts: they were intended for the training of the staff over the whole district. Subsequently the forms for the sadr town, and for the rest of the district (each tahsil separately) were calculated and sent out before December. At a later date the shortage, as shown by the revised forms C sent in after house numbering, was calculated and sent out in January. This was calculated for the district as a whole.

The difficulties in this method are as follows:-
The forms for training were calculated on the basis of the rural tracts of the sadr tahsil simply because all calculations were by tahsils and normally this amount was, or should have been, sufficient for training the whole staff of the district. But in fact it was not always sufficient, especially as regards covers ; and also it was impossible to make some officers understand that the mere fact that the forms were in number those for the sadr tahsil, did not imply that the forms were to be used for that tahsil and no other. Moreover, this system implied of course that the shortage in the sadr tahsil was to be made up from the surplus in other tahsils; but as the forms were in most cases sent direct to the tahsils this was a matter very difficult to carry out in practice. The tahsildar, as likely as not, was in camp when the forms arrived; though by rule he ought to have informed the district census officer of the arrival of forms, as often as not he forgot; the sole order he passed when the forms arrived was "Distribute them," and the result was that all the forms were scattered far and wide when he ought to have kept back in any case 8 in every hundred and eight. Consequently the district census officer not only never knew whether he had received all his forms or not, but when he did, usually had to collect a lot of them from enumerators all over the district. The system is a thoroughly bad one; it appears to have worked well in 1901 (though I confess surprise that it did), but it failed miserably in 1910. I may also point out that it entailed an enormous amount of calculation on the Provincial Superintendent. For instance, take the case of general schedules. He had first to calculate the forms for the sadr tahsil's rural tracts: then for the sadr tahsil town, then for all the other tahsils, and finally once again for all the districts. This amounted to some 350 calculations, all of this form $\frac{\mathrm{X} \times 54}{100}$, where X stands for the number of houses. As X repre sented a figure with from 4 to 6 units, it will easily be understood that the calculation for the whole province took time. The block list was easier to calculate: it had to be done only some 300 times instead of 350 , and amounted merely to adding 20 per cent. to the total number of blocks and doubling the result: but the calculations for the covers were complicated by the fact that Urdu and Hindi forms needed separate calculations. Of the other forms, the household schedules and circle summaries present no difficulty at all ; the forms for

Railways and Cantonments should present none ; but the requirements were very badly stated by some officers concerned, and most of the indents required a great deal of revision. One officer for instance asked for as many covers and block lists as general schedules, and two household schedules to every person whose name could go on one.
17. It is obviously essential to simplify procedure in this matter, in the interests both of economy of forms, efficiency of training, and the peace of mind of the Provincial Superintendent and the district census officers ; and it appears to me perfectly easy to do so. Some district census officers have suggested solving the difficulty by allowing each district to frame its own indent. I see no advantage to anybody in this. It would impose on the district staff calculations they have not now to make, and it would save the head office nothing ; for they would have to check the indents and checking an indent in a calculation of this kind involves working it out afresh. The remedy seems to me to lie elsewhere. It should be first recognised that until the preliminary enumeration begins forms are only wanted for two purposes. The block list is required for house numbering in October and November, and some general schedules and covers are wanted for training purposes between August and December inclusive. To take the general schedules first ( $A$ ) the 54 leaves per 100 houses are made up as follows (I take the figures for 600 houses as showing the requirements of a circle. The circle is supposed to contain 15 blocks of 40 houses) :-
(1) With enumerators-
$\begin{array}{lll}\text { (a) } 1 \text { leaf per } 3 \text { houses .... .... .... } 200 \\ \text { (b) } 2 \text { leaves extra per block } & \ldots . . & \ldots . \\ 30\end{array}$
(2) With supervisor and superintendent at 5 leaves per 100 houses-
(a) Supervisor .... .... .... .... 30
(b) Superintendent .... .... .... 30
(3) With district census officer .... .... 34

The 34 are required to train 15 enumerators at 2 leaves each and one supervisor at 4 leaves.
(a) As soon as the abstract in form C is received in July, the number of enumerators, supervisors and superintendents is known. It is therefore easy to calculate the number of forms required for training at 2 per enumerator, and 4 each per supervisor and superintendent, for each district. The calculation should be made on this basis and the forms sent at once. By that time the Superintendent will have ample forms of all kinds already indented for long ago on the basis of the figurec of the preceding census.
(b) He should next calculate the number of forms required as shown by the number of houses. He can do this at this stage for the whole province, by having the number of houses added together. 34 extra forms for 600 means $5 \frac{4}{5}$, or say 6 for 100 houses. He should now calculate at $54-6=48$ forms per 100 houses: but as the staff may change and he may want extra forms for training the new men that come in he may very well calculate at 50 per 100 houses, which has the advantage of being a very easy calculation.
(c) When the final form C comes in after house-numbering, he can again revise his indents. This will be a more complicated business but at all events under this system a complicated calculation will occur only once instead of three times-
(1) He must first calculate the number of forms required at 48 per cent.
(2) He must next add the number required for Railways and Cantonments.
(3) As a reserve he should add to the total number 5 per cent.

This gives the number of vernacular general schedules required, and that number minus what he has already printed will be the number for which he should indent. These figures of course must be worked
out for each district and state separately.
(4) He must also calculate the number of English general schedules and household schedules required.

These he can then have sent to the various districts and to the sadr tahsils only. I am strongly opposed to sending forms direct to tahsils. It worked very badly under the system of 1900 and 1910 ; it would work less badly doubtless under this: but as the district census officer is and must be responsible for the proper distribution of forms in his district, it is obviously fair that they should be entirely in his hands. It is quite as easy to distribute them to tahsils from headquarters as it is from the press. They should reach the districts not earlier than six weeks or later than three weeks from the date of the preliminary enumeration. This method, will obviously simplify matters all round ; for the Provincial Superintendent who has much fewer and much easier indents to work out; for the districts who will receive forms only as and when they need them ; and for the press, who will have, so far as these forms are concerned, only two despatches to carry out instead of a nominal three, and an actually indefinite number.
(B) Block lists are required for house-numbering. Two leaves are required per block (for block list and house list) and 20 per cent. can be allowed for wastage and possible extra blocks. But I found that this margin was not always sufficient. The number required can be easily calculated as soon as Form C comes in in July by adding 20 per cent. to the number of blocks and doubling the result. For further safety I would also add 2 per cent. to this number, but keep it in reserve. A large proportion of course will be already printed and in July only the deficiency has to be indented for. This can be done by districts at once and the forms despatched in September.
(C) Covers are a more difficult matter. They are required for training since they contain the instructions to enumerators; and they have to be both in Urdu and Hindi since it is totally impossible to print these instructions on a single cover in both languages. I have however been impressed with the advisability of printing the instructions if possible separate. I am aware that to print them on the cover is the usual practice in most countries. But in most countries the system is different in form : it is a system of what we call household schedules; the householder fills up his own forms. For this to be possible it is necessary that education should be much more widespread than it is in India, and the instructions for filling up the form can be, must be and are much simpler than our instructions to enumerators. They can be so, because education is, firstly, better on the whole as well as more willespread and so much explanation in the instructions is not required, and, secondly, because the enumerator can get the form corrected when he collects it, if it has been wrongly filled up. They must be so again for two reasons : firstly, each house gets a single form, and it is not a case of printing the instructions as a cover to that form so much as on its back, which means less room on which to print them. (In France the forms amount to a booklet with a cover, but there the business is much more complicated.) Secondly, it is no use printing elaborate instructions because only the smallest of small minorities would read them: the majority do not even read the simple instructions now printed, as a glance through the household schedules of any district will show.

With a system of trained enumerators, the instructions tend to greater complexity at every census. In 1901 all the more complicated portions of several rules were not printed at all : the supervisor dictated or was supposed to dictate them to the enumerator. Personally I have little doubt that some did not dictate, and that a certain proportion if they dictated, did not explain them. In 1911 all these portions were inserted in the rules. As it happened, some important additions had to be subsequently added by hand. These might have been printed and gummed on the cover, if there had been time ; but there was none to spare. If these additions had formed part of the original instructions I doubt if the cover could have held them all. The probability seems to me
that the instructions at next census will be longer still : and in short I am convinced that the time has come for abandoning the practice of printing the instructions on the cover altogether. They should be printed in much fuller detail and with actual examples in a booklet, with two or three blank pages for inserting any addenda that may be sent later. The extra cost would amount to little more than the cost of the extra paper, for whether on cover or separately, the instructions would always have to be printed. The cover itself can then be printed bilingually or even trilingually, thereby saving much trouble. Moreover, covers if given out early in the operations as they must be, are seldom in a fit state to be used as covers by the time they are required for that purpose. By constant use they become torn and dilapidated, or at all events covered with midnight (and other) oil by the enumerator who goes over the instructions printed on them. A great number had to be replaced for no other reason than this. This affords another argument for printing covers and instructions separately.

The instructions should be ready for distribution with the general schedules for training in August-one per member of the staff with a 20 per cent. reserve will suffice. An edition in Hindi, Urdu and English will be necessary. The covers need not be indented for or printed till the final Form C and should be calculated at 1 per block with a 20 per cent. reserve.
(D) Other forms give no trouble. At the number of enumeration passes the merest guess can be made; and districts should be told to indent, as they have at all events some indication of what is required and the Provincial Superintendent has absolutely none. The easiest way of supplying passes is in sheets of convenient size, in the form of squares each with "Shumar hua" printed on it in Hinai. The sheets resemble unperforated sheets of stamps. Perforation would be an advantage, but it is expensive and not really necessary. The enumerator has only to tear off a square ; for the purpose for which it is required this is ample. The parwanas were much delayed in despatch on this occasion and this gave a great deal of trouble, as non-officials would not do anything till the arrival of a parwana showed them that resistance was vain. They should be ready printed and packed for despatch before the Census Act is passed (at this census this was in September). September is full late for distributing parwanas and as regards Kumaun far too late : but they cannot of course be distributed till the Act which authorizes their issue is passed. As regards the parwana form, I think that there should be a printed signature (the Provincial Superintendent's) and the seal of the collectorate concerned should be affixed ; the labour entailed in signing thousands of parwanas is enormous and should be avoided if possible. Some officers used a stamp signature, but strictly speaking I doubt if its use on a parwana is legal.
18. The paper used was of the size and quality fixed by the Census Commissioner. It was all obtained from the Upper India Couper Paper Mills at Lucknow. The cost was higher than the prices quoted in Calcutta; but as the press was situated in Lucknow and all carriage was saved, on the whole the cost worked out about the same. The mills supplied it with remarkable promptitude, and the quality was excellent, and I was fully satisfied with their work.

## Census agency.

19. Much has already been said on this subject. The revenue staff was the backbone of the census agency and I can only repeat the tribute I have already paid to the excellence of the work they did. Enumerators were as usual non-officials, village schoolmasters, schoolboys of 15 and over, and Government subordinates in other departments. I am very grateful to Mr. G. R. Clarke, Postmaster-General, for the assistance his department gave me. The assistance the post-office can give is obviously limited to some extent, and I was anxious to make as little use of these officials as possible, not of course because their assistance was not valuable but because I was afraid that the use of them might develope into an abuse. Mr. Clarke however insisted that many of his men could give help without detriment to their other duties, and
probably more postal officials helped at this census than ever before. No use was made of the subordinates of the Canal Department and the police were only concerned with certain special matters, the enumeration of their own thanas and lines, wandering tribes, enumeration of wayfarers on main roads and of special gatherings, such as fairs and marriages. But in many districts the police gave a great deal more help than this, especially in collecting the totals. For instance bicycle orderlies were detailed for this duty in Fyzabad and in many districts chaukidars either accompanied the enumerators or acted as messengers to carry in the summaries.

All Government servants are theoretically bound to assist. In practice the bulk of the work falls on the district staff. But apart from the many Government servants who helped as supervisors and enumerators, there were many others, especially gazetted officers, who helped in various ways. The assistance was naturally somewhat spasmodic, but none the less valuable ; on the ethnographic side I got notes of great merit from a great many educational officers and some others, notably Mr. Farnon of the Opium Department.
20. I have little to say on the subject of accounts. The system is an old one and works well enough. Some letters appeared in the press on the subject objecting that it was futile or even dishonest for census accounts to show not the real cost but the extra cost to Government. The writers obviously did not understand what they were writing about. The real cost to Government is the extra cost. If the pay of the Provincial Superintendent is not shown in the census (Treasury accounts), it is simply because he would be drawing that pay in any case. But his deputation means a deputation allowance on one hand, and the pay of a substitute to take his place on the other ; this is extra cost, and is shown in the Treasury accounts. Similarly with all officers of all grades deputed to Census. Moreover, if it is desired to know the cost of census as a department, this is shown in the Departmental accounts, which shows all expenditure involved by or on account of the officials belonging to it. For instance the pay of the Provincial Superintendent is shown in those accounts, but not that of his substitute, who is a Deputy Collector serving in a district in the ordinary line. It is necessary to insist on district officers carefully following the rules, especially those regarding the debit of contingencies. Some officers debited census contingencies to their own grants instead of census, which involved a good deal of trouble afterwards in the shape of references to and from the AccountantGeneral. Other district offices were dilatory in sending in detailed bills ; but the cause in most cases was the same-overwork.
21. This brings me to a point on which all district census officers have laid justifiable. stress. The rules allowed of a muharrir at headquarters on Rs. 15 and one at each tahsil on Rs. 12 for brief periods during the distribution of forms. So long however as the total cost admissible on this scale was not exceeded, district officers could vary the rates of pay or the distribution of the men as they thought fit. In 1901 a good many district census officers had already declared that extra assistance was necessary. In 1910 when I took over charge Mr. Burn told me that he was persuaded that most districts would need a full-time census clerk. This was not his opinion in 1901: but work is much heavier in district offices now than then, and moreover the amount of correspondence at tne census for various reasons, most of which were not the fault of census, was considerably greater than in 1901. Census, for instance, was dragged into the vortex of politics, which necessitated a great deal of correspondence which was of its nature absolutely futile, though imperative in the circumstances. For instance a certain question asked in a Council compelled me at the eleventh hour to send all district census officers an explanation of a matter which they already perfectly well understood. There was also the matter of agricultural occupations, and many questions connected with castes ambitious to rise in the social scale; and unfortunately, as the census grew nearer the correspondence grew greater, so that many things which I might

Extra census staff in districts.
otherwise have printed had to be sent in manuscript. Further many references have to filter down from the district census officer to the supervisor. To ask the Provincial Superintendent to translate all these would be to impose on him and his office an intolerable burden, and the result is that translations and abstracts have to be prepared in district offices. Nor, in spite of codification of rules and that familiarity which comes from use does census tend to become a simpler matter to deal with: indeed the tendency is for it to become more difficult. The procedure may remain the same and indeed may be simplified in so far as the codes, census by census, improve: but pari passu greater accuracy and efficiency in applying the codes is demanded, and it is only obtained at the cost of increased labour and increased correspondence.

To carry through the census operations under these conditions with no permanent help whatever as most districts did, was a remarkable feat : but it is not a feat that they should be asked to repeat. I am firmly convinced that at next census every district census officer should be provided with a full-time English-knowing census clerk on pay that would be now Rs. 25 to Rs. 30 whatever it may be for a similar man in 1920.
22. Chapter VII dealt with the training of the staff and is the most important in the whole code. It is as well to consider what census means in this country. An army of officials is appointed-in 1910 they amounted to over 300,000 . Of these the vast majority are totally unacquainted with census, a large majority are non-official, totally unused to "naqshas" or official routine, and a fair proportion can do no more than read and write. To these men is handed a complicated schedule of 16 columns and they are told to fill it up. Three of the columns are simple enough, but all of the rest could easily be filled up wrong, whilst some it is not at all easy to fill up right. It is obvious that training is absolutely essential if the census is to be a success.

Training was done in two ways. The staff above enumerators were first of all supplied with manuals. The Census Manual consisted of four chapters. Chapter I reproduced the instructions to enumerators: : chapters II and III consisted each of two parts : the first were extracts from the rules applying to supervisors and superintendents respectively, and the second part gave explanations of the instructions, graduated in difficulty so as to be easily intelligible by the persons who used themsupervisors in chapter II and superintendents in chapter III. Chapter IV gave similar explanations of a more difficult kind, with some hints on training and was for the use of gazetted officers. Chapters I and II were bound together to make the Supervisors' Manual ; chapters I, II and III made the Superintendents' Manual; the whole was supplied only to gazetted officers. In this way each officer knew all his inferiors had to know, and printing was made much easier.

This manual was printed in all three languages in the case of the first three chapters : the fourth was printed only in English. It was I think of service. It was in a handy form, going easily into a breast pocket : an officer who had it with him needed nothing else. It contained all that could possibly be needed to elucidate the instructions, as well as the instructions themselves, and the rules of procedure. Once they were issued, references to me for explanations of knotty points decreased enormously. But it has one disadvantage. It is purely and simply a crib. To give it out early in the operations, as many officers desired, would be to court disaster. The staff instead of striving to understand the rules for themselves, would content themselves with looking for an explanation in the manual. The result would simply be that they never would understand the rules. The manuals should be sent out as soon as the officer concerned has received his training: Superintendents' Manuals in the middle of September, Supervisors' in the end of October. Even so the manuals arrived in the districts very late. The reasons were, firstly, that a manual of this kind is a new thing in this province: save a few instructions to supervisors of 1900, I had nothing to go on. It took therefore considerably more time to
draw up than I hope it will take my successor, who will have the manual of 1910 to help him. Secondly at the time when I should have been drawing up this manual I fell ill and could not touch that or anything else.
23. Apart from the manuals the staff was also trained orally, on the old principle that an ounce of example is worth pounds of theory. At a very early stage in the proceedings charge superintendents filled up four schedules. These were examined first by the sub-divisional officer and then by the district census officer ; and a meeting of all concerned was then held, when the errors found 'were discussed. The district census officer then sent them to me with the errors corrected. This was done generally with considerable care, and if conscientiously carried out it is obvious that the method has its advantages. Supervisors and enumerators also had to fill up schedules in the same way and these were corrected by the charge superintendents. But this was a mere preliminary : the real training consisted all through in assembling bodies of enumerators or supervisors and actually making them enumerate real, but preferably imaginary, persons in the presence of the district census officer or other officer. Of the two, imaginary persons are the better to choose : for in probably 99 cases out of 100 a real person presents no sort of difficulty: but by choosing imaginary persons the entries can be made as complicated as is desired or desirable. The part of the imaginary person is played of course by the officer holding the meeting or somebody present with him. Given a little histrionic ability and imagination, the system works well; and in fact it worked very well everywhere, as I found towards the end of my tour of inspection. It was impossible then, when training was practically over, to puzzle any reasonably intelligent enumerator with any of the stock difficulties, and one had to go very far afield to find something that would give him pause. In Fyzabad the district census officer's inventive genius produced combinations of circumstances which were not at all likely to be found, at all events in that part of the earth called India: and though the enumerator naturally took time to elicit the real truth amid the amazing phenomena which the district census officer managed to string together, he never failed to do so in the end. At the last meeting I held in Gorakhpur, the Collector, apparently bored by the ease with which everybody solved all difficulties, as a last resort resolved to play the stock "census" part of a deaf and dumb lunatic. Even then however the enumerator elicited all there was to elicit. I have seen many enumeration books then and since: and the formal accuracy of them is amazing. There is no question that census is better and more accurately carried out by well trained enumerators than on any other system : and there is no question that, thanks to the energy of the district official, our enumerators were well trained.
24. The actual numbering of houses is a most important point. I have already dealt with the definition of the house. In rural areas house-numbering was done in a temporary way by painting the numbers on the houses: municipalities were asked to consider the advisability of taking advantage of the approaching census to carry out a permanent numbering which would serve municipal as well as census purposes. This the majority did : many had already a system of permanent numbering and this was then adapted by the use of sub-numbers to serve census needs.

To some extent the definition of a house broke down through overnumbering. The rules certainly impressed on all the necessity of seeing that no houses were left unnumbered: but naturally this referred to census houses only. As it was, in many places every building with four walls and a roof to it was numbered, irrespective of the fact whether it ever had been or ever could be usegd as a dwelling place; and in some places the presence of a roof, or of all four walls was not considered necessary to constitute a house. I noticed a well with a number on it, and on inquiry was told that wayfarers sometimes stopped there at night: and the Census Commissioner and I discovered numbers on

## House-number- <br> ing.

Jodhbai's Palace and Akbar's sleeping chamber in the ruins of Fatehpur Sikri. As a tahsildar said to me at Cawnpore, too much numbering is better than too little because at all events you make sure that every possible" dwelling place" will be visited, but it gave great difficulty over the indents for forms, which were based on the number of houses, and in many cases the numbering had to be revised.
25. As regards the time when house-numbering is done, many officers have pointed out that the obvious and much the easiest procedure would be to number the houses right at the beginning and prepare the general village register and circle list afterwards. Instead of having a totally unreliable number of houses to work on at first, from the very start this would be ascertained, it would only be necessary to allow for new buildings and the general village register would obtain a precision which at present it cannot possess. With this I am inclined to agree. In some municipalities (e.g. Cawnpore where there was a renumbering of houses being carried out for municipal purposes) this was actually done: and nothing could be better than the Cawnpore arrangements. The houses, etc., were first numbered, the blocks, circles, and charges demarcated on a map and then the general village register (or in this case the town register) was drawn up. The difficulty in rural tracts is that the numbering on the score of expense must be temporary and the rains might wash it out. The opinion of many is that this fear is exaggerated. It is perfectly easy to put the number where the rain cannot get at it. But even if the rain does wash it out, with the block list already prepared, it is perfectly easy to restore the number : and I am firmly persuaded that with a little care as to the spot where the number is placed, this would not be an extensive operation. I saw temporary census numbers of last census still in existence in some places. The greater certainty given to the general village register, the fact that from an early period the exact number of houses would be known and an indent for forms would be saved, seem to me to far outweigh the possible disadvantages connected with rain.
26. The block list was generally suitable in form, though the heading of column 1 might be improved. What is really wanted is a brief description of the locality in which the block lies: and Ithink "Brief description of the boundaries of the block" would be a better heading. "In villages it would be simplest to give the boundaries as follows: "North-fields of A, B and C; East-fields of E, F and G; South-lane running past A's house (or Mahadeo's temple, or any other notable building in the lane) from B's house to C's house; Westlane past tank from D's house to E's house." In municipalities, it would be well to add also the name of the muhalla or tola, etc., in which the block lies and describe the boundary roads by their names.

Another small point is the name of the form itself. Many officers asked for house list forms in spite of clear directions that block list and house list were the same form. "House and block list" would explain all that is required and save much correspondence.
27. The rules for the census of railways were prescribed by the Government of India. It is I believe a new departure that the civil' authorities should undertake the management of the census of railways at all but large junctions, large railway settlements and in the matter of train enumeration if the railway desired them to do so. The opinions of district census officers on the matter vary greatly-generally with the railway with which they had to deal. In some districts, the railways kept all operations in their own hands: in others, they handed over as much as possible to the civil authorities: in the rest they shared the burden, reserving the greater share for themselves. The Rohilkhand and Kumaun Railway, the Bombay, Baroda and Central India Railway, the Shahdara-Saharanpur Light Railway and the Great Indian Peninsula Railway kept practically the whole of the operations in their own hands: the East Indian Railway, the North-Western Railway, and the Bengal and North-Western Railway handed over as much as they could to the civil authorities; and the Oudh and Rohilkhand Railway
whilst giving them some, kept most of the work. Generally speaking most civil officers who did only a part of the railway work of their districts point out that the system makes for a dual authority which it is difficult to work with. Many who had no railway work to do at all complain that they could never get anything out of the railway authorities. The general consensus is that it is best for the civil authorities to manage the whole of the railway work, using however the railway staff for filling up all posts.
28. I am inclined to agree. The success of the railway operations depends entirely on the railway census officer and his charge superintendents. The former is always a very busy man, invariably, and is often very difficult to get at. There was one East Indian Railway census officer (the Traffic Manager in Calcutta) who did practically nothing, and left everything (so far as this province is concerned) to his assistants, the district superintendents at Gaya, Dinapore, Allahabad, Cawnpore and Delhi. I induced him to call them assistant railway census officers instead of charge superintendents. There is a good deal in a name when the use of the wrong name involves a great deal of extra correspondence ; but in any case the fact that three of them were outside the province altogether made things no easier for me. The Great Indian Peninsula Railway census officer was in Bombay: he had only charge superintendents at various places in the province and he expected me to correspond with all of them. I objected and he then consented to forward my letters to them. The Oudh and Rohilkhand Railway charges were certainly never coterminous with civil districts: nor were the Bombay, Baroda and Central India Railway charges. In fact this was a rule more honoured in the breach than the observance; nor is it surprising. Railway districts do not correspond as a rule to civil districts : they keep to their own districts to save men. Moreover, railways do not possess in every civil district men whose duty takes them over the line as should be the case with railway charge superintendents. The net result was that the civil authorities and sometimes I myself found it very difficult to get anything out of the railway census officer or charge superintendent, still more so to meet them personally; whilst the railway officials of stations handed over to the civil authorities frequently refused to listen to any orders but those of their own chiefs, and the chiefs themselves sometimes (though rarely and always by a misapprehension) issued orders contradicting mine.

In sum, though the system of 1911 is an improvement on former ones, and though on the whole the railway census was probably more successful than ever before, it is susceptible of further improvement on the same lines. I strongly hold that the civil authorities should take over the railway census completely. There should be no special, railway charge: each station should be under the civil charge superintendent in whose charge it lies. The station master should be the supervisor and each station a circle, with at least two blocks (residents and station enumeration) and as many more, including train enumeration blocks, as are requisite; the railway clerks, etc., should be the enumerators, but in both cases they should be under the (civil) charge superintendent. Large junctions might be created into charges with the station master as charge superintendent, but he too should be under the district officials. The same mutatis mutandis should apply to settlements, workshops and so on. The superior railway officials should have no concern with the census save (1) to tell their subordinates to put themselves under the orders of the civil authorities, (2) to decide when and where train enumeration should take place, (3) to allot sufficient extra clerks (who would however be trained by the civil authorities and under their orders) for this purpose. If relieving clerks had to be sent for this purpose from one civil district to another, they could easily be trained in the district from which they were sent, before they left it, by the civil authorities of that district. There would then be much less work for everybody: for instance the whole mass of correspondence calling for lists of stations from railways would be saved. The charge superintendent
would know his own stations and no lists would be necessary at all; nor any correspondence, save to make sure no small crossing stations were omitted, or new ones lately built. How great a saving of time there would be over this single matter will be seen when I say that information called for in July was not ready till October, and it took Mr. Ashworth and myself ten hours' hard work to get the files into an intelligible state before orders could even be passed.

I also ordered the railway totals to be collected as a rule by the district supervisor in whose circle the station was situated. This was necessary or else a great waste of time would have occurred. For instance-
(1) Some Benares figures would have had to travel to Benares, via Gaya in Bengal.
(2) All the Banda Indian Midland Railway figures would have gone past Banda to Mahoba in Hamirpur and then back again ; and the East Indian Railway ones up to Allahabad and then back.
(3) Cawnpore totals would have gone down to Jhansi and then back to Cawnpore.
(4) Some Muttra, Aligarh and Agra figures would have gone to Bandikui in Rajputana and then back again.
(5) Some East Indian Railway figures from Tundla to Ghaziabad would have travelled to Delhi and thence back to their district headquarters, often by other lines ; others from Tundla to Etawah and Fatehpur to Allahabad would have gone first to Cawnpore and then back again.
Cantonments

Preliminary enumeration.
work was then checked by the whole staff. In many districts drafts were prepared and not copied in the schedules till checked. This was at the discretion of the local staff and was meant to meet the case of inferior enumerators ; but in many districts it was done generally. Some district officials by way of training ordered the enumerators to prepare a complete draft of their block, which provided an extra preliminary enumeration. But this is not a practice to encourage. It meant double work for the enumerator and it is not well to over-work a volunteer staff. And further, the facts of December may well be very different from those of February, and it would require careful arrangements to take away every vestige of these drafts from the enumerators to ensure that the proper preliminary enumeration is done and the December draft not substituted in its place.
31. The date was the 10th March. It has to be one when a moon is at or nearly at the full : but this particular time was just before the Holi festival when there is a considerable movement of people for short distances. There were a few fairs at the time: the Piran Kaliar fair in Saharanpur, the Misrikh fair in Sitapur and a concourse of people in Gorakhpur due to a religious festival. All arrangements in this last case had been made to reduce this concourse to manageable dimensions when the death of the convener occurred, which made the assemblage larger than ever. There were rumours of another unexpected Gobind Duadashi fair at Ajodhya : but the rumours did not materialize.
32. Great difficulties were however caused by plague. The conjunction of plague and census is a new thing in this province. Plague involves a large migration for short distances in rural areas-usually from the village to the nearest grove-and a less large but still considerable migration of the richer townsfolk to places which are not affected. The first difficulty was met by directing the enumerator, in the case of all emigrants to a reasonably short distance from his block, to ascertain, during the preliminary enumeration, exactly where they were, note it in the house list, and give their temporary habitations the same numbers as their houses. Just before the final census he made a second special tour to bring his information up to date and asked all concerned not to move from the spot where they then happened to be till the morning of the 11th March. He then counted them as present in their houses. This worked well enough in practice, though many enumerators had liberal ideas on the subject of what constituted .a "reasonably short distance," with the result that they trebled the distance they had to cover. Where the distance was not "reasonably short," fresh blocks were formed. In towns as a rule little could be done, unless the migration was just outside the town limits : in cities practically nothing. In these cases fresh plague blocks were formed. As regards migration to long distances, in some cases a re-enumeration was ordered in June or July. The presence of plague vastly increased the difficulties of the census staff. It is greatly to their credit that they successfully overcame them, and that though naturally many refused to act in view of the increased danger, yet with a little persuasion the objections of the majority were overcome, whilst many needed no persuasion at all. Such conduct would need no comment in the case of a Government servant, but in the case of volunteers who had nothing to gain and thought they were and possibly to some extent really were risking their lives in their self-imposed duty, it is worthy of the highest commendation. The history of plague as connected with census operations shows the conduct of the whole staff in a remarkably favourable light: as regards the higher members of it, for the tact and energy they displayed in meeting their difficulties, and as regards all for their courageous devotion to duty. In one or two places a rumour was current that house-numbering was a systematic device to spread plague, but here too the tact of superior officers brought the operations through.
33. The rules directed the preparation of a carefully considered scheme to get in the provisional totals. In all districts this was doze with great success. The first figures wired and indeed the first in all

Final enumeration.

Plague.

Schemes to get in the provisional totals.

India were those of the Rampur State. The next were those of Muzaffarnagar. By the 15th all totals were in save those of Dehra Dun. Here a very sad occurrence delayed the totals for two days. It had been raining heavily in the hills and the rivers were in spate. Two forest peons sent to carry books and summaries to Chakrata were drowned in attempting to cross one of these. The figures were restored as soon as the fact was discovered. The loss of these two lives in the conscientious discharge of a humble duty was most distressing ; it is hoped that something will be done for their families and steps have been taken to endeavour to secure it. I have been told by the Census Commissioner that but for this delay the United Provinces totals would have been out before any other. When it is remembered that 50 totals had to be collected in this province (more than in any other), that Kumaun always presents peculiar difficulties, enhanced on this occasion by heavy snow and rain, and that in Mirzapur and parts of the Bundelkhand districts there were also considerable natural obstacles to be overcome, it will be admitted that the results were highly creditable, and all the more so because there was only one mistake of any magnitude, which was discovered at once. The rest were trivial and all but one or two obviously telegraphic errors. Besides Rampur and Muzaffarnagar, the best work considering all difficulties was done in Fyzabad, Hamirpur, Almora and Garhwal. The principles are fully described in the rules and need neither comment nor explanation.
34. Nothing need be said of the miscellaneous arrangements, which followed precedent and were quite successful.
35. In July and August $I$ spent about six weeks on tour examining the progress of preliminary operations. At this stage the only person whom it is necessary to meet is the district census officer and there are only a few registers to inspect. It was totally impossible to visit every district personally and I adopted the plan of fixing convenient centres where the district census officers visited me, bringing their papers. A day was ample for what was needed and by this method I personally met all district census officers save some four or five. These too I should have met, had I not fallen ill and had to return to the hills before my tour was quite finished. Between the 1st November and the 25th January I or Mr. Bourdillon personally visited every district, some more than once, giving each two days and the larger ones three days. My proceedings have already been described in the paragraph on training. I have only to add that all charge superintendents should be seen and a selection of supervisors and enumerators. The rural, municipal, cantonment and railway staff should all be seen separately as conditions vary a great deal amongst them. I usually spent one day (two in the larger places) at headquarters and one at some convenient place where there was a railway station in the district, thus seeing a larger selection of men than I otherwise could have seen. The census file was also examined, the question of indents gone into and all and sundry, from the district census officer to the enumerator, were invited to propound conundra for solution. There was a certain similarity about these, it must be admitted.
36. I take the instructions seriatim:-

Column 4 (religion). -I am inclined to think that there is little use in taking Hindu sects again. At this census an attempt was made to discover how many Hindus and Muhammadans themselves knew their sects. The truth as regards Hindus appears to be that only those of a somewhat more than usually religiovs turn of mind have a sect. Many did not even know what a " panth" or " mat" is. I asked a chaprasi the question and he gave me his caste. When I explained, after a whispered conversation outside he came back and gave me his subcaste. It is of course necessary to take Christian sects, and possibly it may be of value to know the number of Shias and Sunnis (Muhammadans as a rule know their sects), but I see no use in taking Hindu or Jain figures, unless the latter (as they did at this census) desire it themselves.

Column 8.-The subcastes of Bhangis were taken for ethnographical reasons : those of Brahmans owing to their importance; those of Rajputs, Ahirs, Jats, Tagas and Gujars for reasons chiefly connected with infanticide. Of these, there will be no reason for taking the subcastes of Ahir, Jat, Taga and Gujar again, and it is a difficult business owing to the enormous number of subcastes that exist in these castes. I think Brahman and Rajput subcastes should always be taken; they may always be necessary for ethnographical reasons. The Bania (so-called) subcastes must always be taken because there is really no such caste as Bania ; the subcastes are the castes. "Caste or tribe " is a distinction without a difference in this province.

Column 9.-The principal occupation is the most lucrative one (except in exceptional cases where it is the one taking most time). I could find no word for it save "khas ;" but if it is used, it must be defined or it may be misinterpreted " traditional " or " most dignified."

The rule was, I think, suitable-judging from results. But too much explanation can scarcely be given on this column.

Column 10.-The rule is not too well worded. The phrase " at any particular time of the year" puzzled many. What is meant is that the inquiry about the subsidiary occupation is' not to be restricted merely to such an occupation as a man may happen to be following at the time of the census, but to include any such occupation, no matter when he follows it. The rule might also explain that two occupations, and two only, are to be recorded; and if a man follows more than two occupations, the two to be recorded are the two most lucrative.
"Column 11.-For " dependents" there is no word but " mutaalliqin" or its Hindi equivalent " adhin." Many phrases were suggested such as "bal bache" but all were open to the same objection that they only included some of the class of person who are " dependents." The words " mutaalliqin" and "adhin" on the other hand include many who are not " dependents ; " they connote subjection to authority rather than support by others. They would for instance include grownup sons in a Hindu joint family; and would exclude an aged father, however much of a dependent he might be on his sons. The only possible way is not to use the word at all but to speak of "workers" and "non-workers," taking care to restrict "work" to such work as either directly increases or indirectly prevents the decrease of the family income.

Column 13.-An attempt was again made at this census to draw a distinction between Urdu or Hindustani and Hindi, meaning by the latter that varied assortment of dialects which are spoken chiefly in the villages. The result was that census became a shuttlecock of the politicians. It is unnecessary to discuss the matter here, but I should strongly suggest that no attempt be made to draw the distinction in future. Firstly, it is not particularly scientific ; for Urdu linguistically is merely a dialect of Hindi, and though it is by far the most important and possesses a status (thanks to its literature) far above that of any other Hindi dialect, it seems incorrect to distinguish between one dialect and all its sister dialects merged under one name. Secondly, even if there had been no wirepulling to spoil the results, I doubt if these results would have been worth much. The average villager does not know the difference, nor do many enumerators ; it needs an educated man to tell it. Thirdly, the information is linguistically incomplete ; if it was possible to take details about all the dialects, the matter would be different; but it is not, simply because the villager frequently does not know the name of his dialect, and if he does it is as frequently not a name that anybody else knows. The locality where each dialect prevails is perfectly well known, and the proportion of persons who speak it as a mother tongue can easily be calculated. If it be objected that many speak Urdu as a mother tongue, it may be replied that this is dubious, except in the districts where it is the local dialect, or among well-educated Muhammadans and Kayasthas. Many more can speak it no doubt, but not as a mother tongue; they speak it as a learnt
language, as an Englishman speaks French, or even a Scotch boy speaks English; and the number of these can be obtained from column 14. It would be simplest to record merely those who speak " the vernacular of the province."

Column 14.-This column purports to show the language in which a man is literate. As a matter of fact the primary schools only teach one language but in different scripts, viz. Persian and Nagri. I do not know how far this information is still required by Government, but I think the rule should stand. If the rule for column 13 is not changed as suggested, the information is required as a partial check on column 13. If the rule for column 13 is changed, it will be all the more necessary to retain it to obtain the number of Urdu speakers, which can then be ascertained by adding together the figures of particular localities, those of particular classes, and the educated in Urdu. The rule should stand as it is to avoid controversy, though it is hardly probable that controversialists who for two censuses have been kept from attacking this rule, thanks to its vague wording, will be checkmated once again.

The other rules and those regarding procedure call for no comment. The headings of the columns were appropriate.
37. The form was suitable in every way. The headings should always be printed in all three scripts to assist the enumerator who often does not know English. As usual, they were filled up for the most part most inaccurately. It is quite clear that many people never looked at the instructions at all. The mistakes at times were childish. At least 9 tourists in 10 seem to think "globe trotting" was a lucrative occupation; several seemed to think they were dependent on the "globe trotting" of somebody else, as they put "globe trotter" in column 11. A well-known hotel keeper put himself and his wife on the same line, entering 2 in the "serial" column, and described themselves as dependents-the entry in column 11 was " actual work." Ladies of course were no more truthful than usual about their ages; one lady put her own and her daughter's ages at such figures that, if they were correct, she was a mother at 14. One lady apparently took the pertinent queries asked as impertinent queries: one could almost see the indignation in her mind as one read the entries in the " literacy column "-." thoroughly well educated," in the "English" column "Of course I do" (she was an AngloIndian) ; and in the "infirmities" column "perfectly sound." A favourite method of entering a dependent was to enter him or her as dependent on "father" or on "A. B." This could be put straight if it was possible to identify the father or "A. B."; but in several cases, "father" or "A. B." were not present in the same schedule.

I have dwelt on this, because the Census Commissioner at a late stage in the proceedings directed that special enumerators who knew English should, so far as possible, collect these schedules; and whilst collecting, correct them in consultation with the head of the house. This system should be freely extended; for the household schedules give a totally disproportionate amount of trouble to the abstraction offices. It should be stated on the back of the form that an English-knowing enumerator will if possible be sent for this purpose and the head of the family should be present to meet him. Where no such enumerator is available, if possible the head of the family should translate the entries to him. In train enumeration any such arrangements would be difficult : but if it were arranged that train enumerations always took place at some small wayside station where Europeans are not likely to alight, an enumerator or enumerators could easily be sent through the train for the purpose. Other things being equal, it is in any case advisable to carry out train enumeration at such a station rather than at a large junction where in the hurry and bustle inseparable from such stations the work must be far more difficult. If English railways can stop their fastest trains every day at such stations to collect tickets from
passengers travelling to large stations further on, Indian railways can surely do it once in ten years for census purposes.
38. These were similar in nature to those in 1901, though fewer in quantity. No remarks are called for.
39. The working of the Census Act was satisfactory: its penal provisions were not applied at all. The same appointments were made as in 1901. Magistrates, Superintendents of Police and Assistant Superintendents of Police were appointed census officers and the power of appointing census officers was delegated to district officers, and 1st class magistrates, subject to the control of the District Magistrate, and to the following railway officials:-
(1) District Traffic Superintendent, North-Western Railway, Saharanpur.
(2) Engineer-in-Chief, Oudh and Rohilkhand Railway, Lucknow.
(3) Traffic Manager, Bengal and North-Western Railway, Gorakhpur.
(4) General Traffic Manager, Great Indian Peninsula Railway, Bombay.
(5) General Traffic Manager, East Indian Railway, Calcutta.
(6) Traffic Superintendent, Bombay, Baroda and Central India Railway, Bombay.
(7) Traffic Superintendent, Rohilkhand and Kumaun Railway, Bareilly.
(8) Manager and Chief Engineer, Shahdara-Saharanpur Light Railway, Delhi.
Commissioners of divisions were empowered to sanction prosecutions.
40. Indian Christians present several difficulties. Not only is the enumerator likely to make mistakes in the record of sects, but the convert himself does not know his own sect. Heads of Missions were asked to give their converts slips with the sect, name in Hindi or Urdu, which slips were to be shown to the enumerator. They responded to the request with alacrity, but in many cases either the convert lost his slip or the enumerator ignored it. All that was possible was also done to secure accuracy by using Christian enumerators or sending literate Christians to help the staff when checking these entries. It is certain that nothing more is feasible; and this the missionaries have themselves admitted to me. There were no cases reported by anybody of enumerators refusing to enter Christians as such, save one, which on enquiry proved to be one of the not infrequent cases where the converts themselves had denied their Christianity, and the enumerators had conscientiously though unnecessarily reported the matter and asked for orders. I was told that members of the Arya religion and some zealot landlords had used their influence to prevent Christians recording themselves as such; there were some cases of the kind, but not, I imagine, very many.
41. Three kinds of certificates were given :-

Printed in gold for superintendents and supervisors. These were usually 20 per district, but the number was often and deservedly exceeded.

Printed in red for supervisors and enumerators. The number issued did not ordinarily exceed 20 per 100,000 of population.

Printed in black for enumerators. The number issued did not exceed 40 per 100,000 of population.

These were printed in Urdu and Hindi, with a small edition in English for railway officials.

Non synchronous tracts.

## Census Act.

Subsidiary table I.-Census. Divisions and Agency.


Subsidiary table II.-Number of forms supplied and used. $A=$ Supplied, $B=u$ sed.


- 000's omitted.

Nots.-Figures in brackets against United Provinces refer to 1901 census.

## Subsidiary table III.—District Census charges.



Note.-Rs. 1,124-15-7 which are not included in abdve figures have been paid in the year 1911-12 to various Railways on account of enumeration. * Excluding expenditure incurred by Railways.

## Chapter II.-THE PREPARATION OF THE STATISTICS.

42. The statistics were prepared in eight offices known as census central offices. Their situations were chosen, as far as possible, on a consideration of their central position, the supply of candidates for employment, the accommodation available and the healthiness of the town in which they were located. Actually however the determining factor was the third of these-the available accommodation; and it is probable that this will always be the case. Indeed from other points of view the location of several offices was anything but ideal. The offices

| Office. | Districts. |
| :---: | :---: |
| Agra | Dehra Dun, Meerut, Bulandshahr, Aligarh, Agra, Muttra. |
| Shahjahanpur .. | Muzaffarnagar, Saharanpur and six districts of Rohilkhand. |
| Sitapur | Bahraich and six districts of Lucknow division. |
| Cawnpore | Etah, Farrukhabad, Mainpuri, Etawah, Cawnpore, Jalaun, Jhansi, Hamirpur. |
| Mirzapur | Ballia, Mirzapur, Ghazipur, Allahabad, Fatehpur, Banda and family Domains of Maharaja of Benares. |
| Fyzabad | Fyzabad, Sultanpur, Partabgarh, BaraBanki, Jaunuur, Azamgarh, Benares. |
| Gorakhpur | Basti, Gonda, Gorakhpur. |
| Naini Tal | Kumaun districts, Rampur and Tehri States, Andamans. | and the districts dealt with in each were as in the margin. Of these the building in Agra was suitable, a large house belonging to the Rampur State, known as the Shorawali Kothi ; the sole difficulty was that it was impossible to get the very large boxes containing the slips up the narrow stairs which led to the house. In other respects too Agra was a suitable centre: my own head office was located there, and there were numerous candidates available, though the proximity of Bharatpur, where one of the Rajputana offices was situated, inclined the hands to endeavour to play one office off against the other. The building at Shahjahanpur consisted of a couple of disused British Infantry barracks (as in 1901), a quite ideal situation; they were lent to me by the Military department. There were also numerous candidates for employment, including some who had worked in the similar office 10 years ago. At Sitapur, the buildings were also disused barracks, but it was a great deal more difficult to obtain men. One would have imagined that Cawnpore was an excellent centre for an office, owing to the large number of educated men available : as a matter of fact it was not, for the commercial establishments could afford to offer better terms, and it was only the influence of that experienced officer, M. Lutf Husain, which made it possible to carry on the work at all. The building was the old municipal office, just vacated for other quarters, and very suitable indeed. At Fyzabad the office was situated in the Gulab Bari. The Gulab Bari is the mausoleum of Shuja-ud-daula and the clerks were housed in rooms over the inner and outer gateways, which are separated by about 150 yards of lawn and road, so that the site was by no means ideal owing to the impossibility of proper supervision, whilst there were other obvious objections. At Mirzapur, the municipality lent a not very suitable building (it was too small), on the ground that the presence of a central office would be of benefit to the town. Unfortunately Mirzapur could only supply us with an inefficient and distinctly troublesome set of employés and there was no great selection of them. At Gorakhpur the building was a court of wards house, the same as was used in 1901, cramped and eminently unsuitable for an office and in a bad state of repair. At Fyzabad and Gorakhpur there were numerous candidates available. Finally at Naini Tal, the office, a small one, was housed, together with my own, in a bungalow. There was great difficulty in getting Urdu knowing men for the Rampur and Andamans schedules, and in the end they were imported from Rampur.

It is useless to write at any length on the suitability of buildings. Their selection depends almost entirely on the state of affairs at the

## General arrangements and location of offices.

time, and every successive provincial superintendent has to make his own choice and "dree his own weird." But so much may be said. Mirzapur should not be selected again-building or no building. The same building in Gorakhpur should not be again taken (10 years hence it will in all probability be a ruin). The other sites are suitable: whilst Benares and Lucknow should be able to provide buildings, though the rents are sure to be high. At Meerut there is usually accommodation; indeed there was an excellent house available at this census, but the owner could not be traced (there were civil decrees out against him) and in the absence of a lessor it was impossible for the census department to become a lessee. At Farrukhabad it may be possible to find accommodation of an excellent kind in the old fort, if military arrangements permit. Finally it is quite useless to send any work to Naini Tal save that of Kumaun : men who know Urdu cannot be obtained locally, and plains men will not come to the hills. At the same time the office must always be maintained, simply because only a Kumauni can read his own country's abominable Nagri handwriting; and Kumaunis will not migrate to the plains.
43. In some provinces, e.g. the Punjab, the slips were copied locally and the central offices only took up the work of sorting. This system has its advantages. The work of copying can be started earlier and as far more men are available it can be finished more quickly. It also gives the central offices more time to get into working order. But in this province at all events it would render supervision all but null and void. The provincial superintendent cannot possibly see every copying centre. The collectors and their staff have quite enough to do without the added responsibility of checking the copyist's work together with the somewhat tricky business of filling up register A. It would be impossible to appoint sufficient inspectors, and the result would be that there would be no check or supervision save that of supervisors, with the very little that superior officers would have time to give. I am firmly convinced that for this province at all events copying can only be carried out in central offices. I do not think that there need be more than 8 of these.
44. (1) The system.-I do not propose to go at any length into the system of abstraction which was followed at this census. It was in essentials the same as in 1901; and it is fully described both in the Imperial Census Code, Part II, and Chapter I of the Provincial Manual of tabulation and compilation of census statistics. Briefly put, the system consists in (1) copying the entries in the schedules for each individual on to a slip, (2) sorting the slips for each table in succession, (3) entering the results in a "sorter's ticket ", (4) compiling the figures of the sorter's tickets into district, tahsil or other totals. A good deal

| Males. | Females |
| :---: | :---: |
| 涹 married | $\square$ married |
|  | < unmarried |
| 9, widowed | $>$ widowed | of copying is saved by having slips

of various colours to denote various religions, and symbols printed on them to denote sex and civil condition. These symbols were as in the margin and werequite suitable. But of course any symbols would do (e.g. square, circle and triangle) so long as they
are sufficiently distinctive.
(2) The printing of the slips.-The slips were 4 by $2 \frac{1}{2}$ inches. Colours of four kinds were used, badami for Hindus, blue for Muhammadans, red for Christians, and yellow for other religions. At the top of each was printed the symbol of sex and civil condition. There were 11 lines-the top one was for the reference to the enumeration book (serial numbers of person, block, circle and charge) and was marked "number". Next followed a blank line for the sect, where given. The remaining lines were marked 7 to 15, corresponding to the number of the various columns in the schedule; columns 4 to 6 were shown by the colour and the symbol, column 16 was separately dealt with. All slips were bilingual and supplied in bundles of 500 . They were printed
by Murray's London Printing Press at Lucknow, and the work was excellent in every way : their sole difficulty was finding boxes to pack the slips in. The indents were based on the number of each religion, sex and civil condition in 1901 plus 25 per cent. I may here remark that the Christian and "other" slips were insufficient in numbers, and that the widowed male slips of Hindus and. Muhammadans also gave out. This was due to the large increases in these categories and I should strongly advise a cent. per cent. addition in the indent for slips of Christians and "others" (which includes Aryas) at the next census. The numbers are few enough in any case. It is well too to print a number of white slips without symbols, say 5 per cent. on the total population, which can be dyed to the requisite colour with a cheap dye obtainable in any bazar, the symbol being written in. Several deputy superintendents eked out their supplies of Christian slips by dyeing spare Hindu slips red.
(3) The staff of a Central Office.-Theoretically the staff of a cen-

| Post. | Pay. |
| :---: | :---: |
| 1 Depu'y Superintendent | Grade pay plus 20 per cent. Deputation allowance. |
| 1 Head Assistant | 80 |
| Inspectors (varying number). | 50 |
| 1 Record keeper .. | 35 |
| 1 Assistant record keeper | 20 |
| 1 Accountant .. | 30 |
| 1 English clerk .. | 20 |
| 5 peons and chaprasis. Varying in numbers. | 7 |
| Supervisors .. | 25 |
| Assistant supervisors .. | 15 |
| $\begin{array}{lll} \text { Copyists } & . . & . . \\ \text { Sorters } & . . & . . \\ \hline \end{array}$ | \} Paid by the piece. | tral office was as in the margin. The copyists were appointed in numbers which varied according to the population employed. It was calculated that the work of copying ought to be completed in 40 working days: and that at 500 slips a day, 50 men could complete the work for 1 million persons in that time. The number of copyists appointed was worked out on this basis. Similarly 33 sorters were appointed to every million of population. To every 10 copyists there was a supervisor and 1 or more assistant supervisors according to the speed with which the gang was working. To every 10 sorters there was a supervisor. At a later date compilers were appointed, at the rate of 1 or 2 to every district under a single supervisor. There were 5 inspectors to each office, except Naini Tal, which had 2, during the copying and sorting operations.

45. The deputy superintendents consisted of 1 civilian and 7

| Office. | Name. |
| :---: | :---: |
| Naini Tal | Mr. B. H. Bourdillon, C.S. |
| Agra | Babu Pridumana Krishna |
| Shahjahanpur | Babu Jhumak Lal |
| Sitapur | Munshi Gada Husain |
| Cawnpore | Munshi Lutf Husain |
| Fyzabad | Munshi Mahabir Prasad |
| Mirzapur | Babu Anrudh Lal Mahendra |
| Gorakhpur .. | Pandit Badri Narayan Misra, R.B. | deputy collectors all of whom had been district census officers. Their names are in the margin. As regards this selection, I venture to suggest, firstly, that the best possible deputy superintendents will always be ex-district census officers, simply because they have an intimate knowledge already of all that is in the schedule, the various errors that may be found there, and the possibilities of extracting information from it. Further, the district census officers have a very responsible and difficult year's work, and it is fair that they should obtain the few plums that exist in the census pudding, namely the special allowances of deputy superintendents. Secondly, putting a civilian at Naini Tal head-quarters, which is a light charge, means that the superintendent has at his disposal for odds and ends of work of all kinds a well qualified assistant. Mr. Bourdillon gave me very valuable help indeed in this way, in addition to his duties as deputy superintendent. Thirdly, it is advisable that the Superintendent should know his deputy superintendents and their capabilities more than usually well: if ex-district census officers are selected he does possess this knowledge. Lastly, it is usually stated that youth is a desideratum, owing to the very strenuous nature of the work. Caeteris paribus this is doubtless so, but only if other things are equal. Experience counts for a great deal and I had no deputy superintendents better than B. Pridumana Krishna and M. Lutf Husain, who were also the best of Mr. Burn's men in 1901, and P. Badri Narayan Misra-all

## Selection of the

 staff,three very senior deputy collectors. M. Gada Husain had also passed his youth, but his capacity for work was already well known to me in other lines than census. The other four were all young officers.
46. The choice of the Head Assistant is almost more difficult than the choice of deputy superintendent. He has to be a man who can exercise authority; he has no very clearly defined duties save that he is in charge of the clerical staff, and is expected to assist the deputy superintendent in every way I found that men who had already dealt with census, either as census clerks at head-quarters or charge superintendents, made the best head assistants: and provided that they were otherwise qualified, it was well to let the deputy superintendents select their own men. Of the eight assistants, one (Agra) was a clerk from the Postmaster-General's Office : one (Gorakhpur) was a supervisor qanungo who had been a charge superintendent: one (Naini Tal) had held the corresponding post in the same office in 1901; two were selections of their deputy superintendents and the rest had been census clerks. I was extremely fortunate in my choice of head assistants; all eight of them worked excellently and two of them, B. Guru Narayan of Mirzapur and P. Jai Dat Tiwari of Naini Tal, finished off the work by themselves, when their deputy superintendents for various reasons had to give over charge before it was completed.
47. The inspectors were a new post at this census and a most useful addition to the staff. They were selected chiefly on the recommendation of district officers and consisted chiefly of junior clerks from collectorate and other offices, and young candidates for naib tahsildarship. One of my own clerks was given an inspectorship, did remarkably well, and on his return to my office became my chief compiler. Their duties consisted of supervision and check of the work of the copying and sorting gangs under them; they relieved the district superintendent of a lot of this work, which in 1901 was a serious burden.
48. There is little to be said as regards this branch, save that it is essential to take if possible men who have some knowledge of record room work. The record room of a census central office is full of such masses of heterogeneous records and forms of all sorts, there is so much to get into order and keep in order, that unless a man has done the same sort of thing before, matters may get into the most inextricable confusion.
49. A very great deal depends on the supervisors. If they are not conscientious and trustworthy, work is certain to get into confusion. At the same time it is totally impossible to make certain that there are no "hard bargains" amongst the large number that has to be selected. One can only depend in the first place on the recommendations of district officers, eking them out with men who have good certificates, and weed out the incompetent as they are discovered. Deputy superintendents should have a list of waiting candidates to help them to fill up blanks, but as often as not they can find capable men amongst their copyists. The one supervisor of compilation in each office ought to be a carefully selected individual : I was lucky enough in many cases to induce ex-inspectors who had no permanent post to stay on in that capacity on a reduced pay. I should strongly advise that in future there should be no supervisor of compilers, but an inspector: the extra Rs. 25 for 3 months or so is a small price to pay for the much more intelligent supervision that is so obtained.
50. These men were appointed entirely by the deputy superintendents; though in Agra, owing to the fact that the deputy superintendent could not join for 3 or 4 days after the office opened, I made the selection myself. There are almost always any number of applicants: but a very large proportion of them either are insufficiently qualified or prove thoroughly undesirable. The qualifications required were a knowledge of both Urdu and Hindi. Few people know both equally well. Many, finding that the knowledge of both scripts was indispensable, tried all sorts of tricks to make me believe they possessed it. To test them I made them read out a petition. After two or three
had gone through the test, I found a strange and extraordinary fluency in the succeeding applicants. I gave the next man another petition, and, as I expected, he rattled off with the utmost aplomb what was written in the first. Secondly, a large proportion thought copying would be easy work and that they would draw the same pay whether they did much or little. The methods of payment by the piece were carefully explained to them : but in at least one office they thought it was a mere hoax and were much disappointed, having wasted their time for a week, to find that it was not. The result was that these "wasters "-there is no other term for them-were always coming and going, and the staff was never the same from week's end to week's end.
51. The special copyists were permanent hands who knew English and did the copying of English slips, drew up the village directory, copied the special infirmity slips and sorted them, and did odd jobs generally that required a knowledge of English.
52. The rules for copyists and the check of their work will be found in the Manual of Tabulation and Compilation. I do not propose to go through these at length : a description of the general procedure will suffice.
(a) Preliminary operations.-Before the office opened the record room staff and the head assistant were at work trying to reduce chaos to order. I lay some stress on these preliminaries, for I am persuaded that improvement in the system is more desirable here than anywhere else. The object is to get to work at the earliest date possible : but I am convinced that the system as it stands always results in more haste and less speed. When the office is first opened it resembles nothing so much as a very untidy parcel office at a busy railway station. There are piles of boxes containing slips, of boxes and bundles containing records, more boxes containing stationery and forms, empty boxes of several sizes, pigeon-holed boxes, rolls of matting or gunny, tables and chairs. The record keeper and the head assistant have to put all these articles in order. The task would be heavy even if it merely consisted in opening the boxes and putting the things in them away: but when neither of them know in the least the use of any of the articles which the boxes contain and have to consult their rules at every step to find this out, when moreover the contents of each box have to be checked, some with the greatest care, and the result noted in registers, it becomes a stupendous task. I assisted personally at the opening of the Agra office and can vouch for this. Long before the record room is in anything like order, the copyists are ready to start work and are demanding books and slips; the record keeper has to satisfy their demands, which means a great deal more writing up of registers. Then the copied books begin to return, involving extensive checking and the special copyists begin their demands for books. In a word the record keeper and his assistant may work double tides, yet because they are not allowed sufficient time to put things in order at the beginning, they are and must be in arrears all through, at all events till sorting begins. The rules cannot be followed, there is a risk of all sorts of disasters-papers may get lost, slips may get mixed up: a by no means inconsiderable danger is that the record keeper must perforce work at night and the use of a light in a record room is obviously dangerous. Yet the remedy is simple. All that is required is to lay down that the record room and office generally must be in order before work is commenced at all, and that the whole permanent staff, from the deputy superintendent to the peons, must devote their whole attention to this preliminary operation. Not a copyist should be engaged, not a book given out, till this is done, even if it takes a fortnight. I am persuaded that copying will take no longer for delaying its commencement a little; and it will be carried out under far more satisfactory conditions. I am further persuaded, from my personal experience of the beginnings of an office, that it is impossible to lay too much stress on the point ; though indeed it should scarcely be necessary to elaborate it.

Special copyists.

Copying.
(b) Copying of the slips.-The general procedure was as follows. The copyist was given (1) a copy of the rules, (2) an enumeration book, (3) a selection of slips, (4) a pigeon-holed box and (5) a pencil. The rules will be found in the provincial manual of tabulation and compilation. This manual consisted of the following parts. Chapter I was a general description of the system, details regarding the staff and management of central offices, and the furniture required. Chapter II (copying) consisted of the rules for copyists, those for supervisors and assistant supervisors, and those for inspectors. Chapter III (sorting) consisted of general and special rules for sorters, rules for supervisors, and rules for inspectors. Chapter IV dealt with compilation. Chapter V (office instructions) consisted of rules for head assistants and clerks, record keepers, accountants, and special copyists. Chapter VI gave the forms, lists, registers, \&c., required in the work. Chapter VII was a confidential chapter, for deputy superintendents only, regarding their methods of test and supervision. The various parts of the manual were printed separately, and each man got only such part or parts as concerned him.

The supervisor of a gang of copyists was given the books of a whole charge at a time, together with the register A of that charge which served both as a guide to show what copyist had dealt with each book, and as a record of the total population found to exist after copying, by religion and sex. Each copyist got a book at a time, and when he had copied all the entries into the appropriate slips and his work had been checked by the supervisor or assistant supervisor, he was given another book. Certain contractions were allowed. The pigeon-holed box, a great feature in a census office, was used by the copyists to arrange their blank slips in. There were four rows of six pigeon holes each. The horizontal rows were labelled by religion, the vertical rows by sex and civil condition. In this way there was a pigeon hole for each of the 24 kinds of slips, and the copyists quickly learnt to find the right slip without looking at the pigeon holes at all.

All deputy superintendents were of course on the look-out to discover how to combine speed with accuracy in the matter of copying. In the end the system generally adopted was one which a copyist in Mirzapur office evolved for himself, and I doubt if for both speed and accuracy it could have been bettered. Before he began each page he of course selected all the slips for that page, laying them on top of each other in the correct order. It is a matter of common knowledge that the entries on a particular page are extremely similar. The caste will usually be the same, so will the birthplace and language, and there will rarely be an entry of literacy at all; the only entries which vary are age and to some extent occupation. The copyist, having selected his slips, would always look down the page and make a mark in the first column, wherever there was an entry different in nature to the majority of the entries on the page. In this way, once he had entered the serial number and age, he could copy the rest of the entries without looking at the book at all save in the rare cases where he had made a mark denoting a variation from the normal entry. The possibility of error was thus reduced to a minimum, and of omission almost to vanishing point: whilst the speed attained was very great. The particular copyist who invented this method was the first in the province to exceed 1,000 slips in a day, and so far as I could discover could do 1,000 any day he liked. This was twice the rate regarded as normal.

## Method of payment.

 ich at 500 slips as a normal daily average was equivalent to a monthly wage of Rs. 12. At first the men were quite incapable of doing 500 slips a day and the result was numerous small strikes mostly engineered by the drones who had hoped to be able to do as little as they liked and draw good pay for it. Later on they were doing a great many more than 500 slips. The weekly averages are given in the margin for the whole
province; the steady progress from 200 to over 4 times that figure is worth remarking. The system of paying by the piece was exceedingly unpopular, and it has its disadvantages, one of which is that the good copyists are anxious to work very long hours to increase their tale of slips, which has a prejudicial effect both on their work and their health : whilst the bad ones are apt to try the work for a week or so and then finding that they cannot do the normal amount leave the office. It seems to me impossible to get away from the principle of piece payment : but I should be inclined to modify it as follows. For the first fortnight every copyist should be paid at a fixed wage of say Rs. 6 however much or little he does: it takes him a fortnight to get into the swing of the work, and as he is really learning during this first fortnight, it is only fair to treat him with leniency. On the other hand to prevent copyists coming and drawing Rs. 6 for doing nothing during a fortnight and then leaving altogether, I should lay down that a man must work for at least a month before he is entitled to any pay at all, and if he resigns before the end of his first month he will forfeit all sums due to him : and also that he must at any time give 3 clear days' notice of his intention to resign, or in default of notice forfeit $\frac{1}{4}$ th of any sums due to him. This I think will prevent discouragement at first with the consequent strikes, and also put a stop to the troublesome practice of copyists suddenly leaving without warning-the two chief troubles incidental to the system of payment by the piece.
54. The chief duty of the supervisors and assistant supervisors was to test the work of the copyists. At first they tested every entry : but afterwards restricted the test to 50 per cent. of all entries, and paid particular attention to those where error was probable-e. g. the birthplace, occupation and literacy columns. The test was sufficient even when applied in a mechanical manner; and when a modicum of intelligence was brought to bear on the matter, was all that could be desired. But the supervisors had other important duties connected with the writing up of register A which took a good deal of time, and had to be done with great care as so much depends on that register. The materials for six imperial and two provincial tables as well as the village directory come directly from register A. The rules laid down that all other work was to be laid aside to test the slips of a copyist when he was ready for it: and this was a source of frequent trouble. On the one hand it was undesirable to leave half done the checking and arranging of a set of slips for register A; on the other hand a copyist could not be kept waiting, since time to him meant money. Yet when matters had progressed and copying was in full swing, no sooner was the work of one copyist tested, than another presented himself. The result was that they were often perforce kept waiting. To reduce the gangs, or to appoint an extra assistant supervisor was only a partial remedy, simply because the checking of the work of 10 copyists is very nearly a full time job for 2 men as it is. The obvious remedy appears to me to be to hand over the sorting of slips for register A entirely to one or two special gangs of men of the class of supervisors: it is certainly of sufficient importance to warrant it. I should be inclined to say that one such man to every two or three gangs of copyists should be sufficient. The supervisors and assistant supervisors could then devote their whole time to testing and make a much better job of it, whilst copyists would not have the same legitimate causes for grumbling at delay. Two men moreover could do the check of 10 copyists' work with ease if they had nothing else to do and there would be little if any extra cost, since the cost of the new gang for register A would be covered by the saving in the extra assistant supervisors which under the present system must, sooner or later, be appointed to every gang.

## Test of the

 work of copyists.
## The number of copyists.

55. At 500 slips a day it was reckoned that 50 copyists could copy

| Week ending.' |  | No. of offices working. | No. of copyists. |
| :---: | :---: | :---: | :---: |
| 25-3-11 | . | 8 | 1,553 |
| 1-4-11 | . | 8 | 1,581 |
| 8-4-11 | . | 8 | 1,707 |
| 15-4-11 | . | 8 | 1,786 |
| 22-4-11 | . | 8 | 1,886 |
| 29-4-11 | . | 8 | 1,904 |
| 6-5-11 | . | 8 | 1,898 |
| 13,5-11 | .. | 8 | 1,796 |
| 20.5-11 | . | 8 | 1,604 |
| 27-5-11 | .. | 4 | 546 |
| 4-6-11 | .. | 2 | 195 | the slips of a million persons in 40 days and this was the ideal aimed at. But it was an ideal which was never attained as the figures in the margin show. There were never more than 1,904 copyists instead of 2,400 and the result was that the work took 54 days instead of 40 in 4 offices, 60 days in 2 offices and 66 days in 2 offices. The cause, besides the unpopularity of the system which certainly affected the number of candidates, was the prevalence of plague, which was rife almost everywhere, and specially bad in Mirzapur, Gorakhpur and Agra. One or two of the hands died, which caused many others to resign : in Gorakhpur it was necessary to house them in plague huts, whilst in Mirzapur great credit is due to the deputy superintendent who managed to get a good many of the staff inoculated.

56. Little need be said about the main principles of sorting. The making up of boxes for the purpose is particularly difficult, as on the one hand the two boxes in each pair must contain the male and female slips of the same circles, each pair must contain only one religion, save in the case of minor religions, and no pair of boxes may contain slips relating to more than one tahsil or city. Still it cannot be simplified and though troublesome is not unduly so. The preliminary counting of the slips is of very great importance, as it is the final check of register A, and I think it would be wise to lay down that no sorting of any box shall commence till all boxes have been counted and made to agree with that register $A$, for once the circle bundles of slips have been broken up in any one box it is a matter of very great labour to find the slips of any particular circle again.

The order in which the tables were taken up was satisfactory, as were generally the rules printed on the back of each sorter's ticket. There were however one or two errors which will be noticed presently. It is to be noted that " Christians" and " others" slips are to be mixed up for the whole district at an early date in the proceedings, since separate figures are not required for any smaller local sub-division : but provincial Table II gives certain information connected with age and literacy for these religions by tahsils and consequently if this table is preserved, it will not be possible to mix these slips by districts until Tables VII and VIII have been sorted for. As regards Table XIIA no reference should be made in the rules to " selected" castes: the sorting should be for all castes, as it is impossible to say which castes will show the highest figures of infirmity. As regards Table XV it saves labour in the end to have 3 sortings first of seven or eight large occupations, then of 16 , then of 24 . In Table XVI it is extremely neces ${ }^{-}$ sary to define the traditional occupation with precision and also the various occupations which go under the large heads of this table. The table gave a very great deal of trouble and this was due chiefly to the difficulty felt by the sorters in assigning the occupations to the proper heads. It would be worth while to work through the vernacular index of occupations (which will not need to be drawn up afresh) and compile a list showing under which heads the various occupations there mentioned fall. It might also be considered whether it is not worth while to sort this table for certain castes where mistakes are likely to be made by not consulting the caste entry together with the occupational entry, merely so as to secure a correct return of occupation. At this census for instance there is certainly a widespread error in the matter of the difference between religious and other beggars. If the Faqir caste had been sorted for Table XVI it would have been easy to put the error straight. In Table XVIII the fact that a rule stated that " all Europeans \&c. whose birthplace is Great Britain or a British Colony
or dependency will be treated as British subjects," and omitted to add the words " and Ireland " after Great Britain, resulted in one office showing all its Irishmen, born in Ireland, as non-British subjectsanother injustice to Ireland! Finally, the extra sorter's ticket, showing the ages of British subjects born in Great Britain and Ireland needs consideration. No exact correspondence can be obtained with Table XI at any time, but the divergences should not be great. If the rules were strictly observed and persons were content to enter England, Scotland, .\&c., and not a village, town or county, for their birthplace some accuracy might have been obtained even under the rules laid down at this census. As it is, the only possibility is to sort all European British subjects by birthplace completely, wherever the birthplace may be, and subsequently to sort those found to be born in Great Britain by age periods. This will make an unnecessarily lengthy process of it, but is the only way to obtain accuracy. Not even a deputy superintendent can be expected to guess that "Khonth" is "Kent" and the Superintendent is the only person who can put this table straight.
57. I am persuaded that the method of payment by the piece cannot be satisfactorily applied to sorting. There are too many differences between the boxes assigned to various sorters to make it satisfactory : :some are very difficult tasks, some quite easy : and however closely a deputy superintendent may watch the actual work and however carefully draw his conclusions, it is a matter more or less of chance whether he watches a fast, medium, or slow worker, and what the boxes being dealt with are like. Rates varied not only from office to office, but within offices, and the accounts became quite needlessly complicated ; whilst lenient though the rates were, they were seldom if ever exceeded. Moreover, payment by the piece induces sorters to scamp their work and fudge their returns, i. e. to sacrifice ascuracy to speed, when accuracy is so much more essential than speed. I should certainly put sorters on a fixed monthly wage, which should be put somewhat higher than 8 annas a (working) day-say Rs. 15 a month. - The sorters should be told that if they do not work satisfactorily they will be fined: and the deputy superintendent should determine as the work goes on, roughly, how much work should be done in any particular month, and fine or not accordingly, deciding each case on its merits. A very great deal of unnecessary trouble is caused to everybody by attempting to pay sorters by the piece, and no good purpose is served, since the rates vary so much within offices.
58. The system of testing sorting laid down in the rules is entirely satisfactory on paper. But there is one inherent weakness in the present system - namely that the sorter knows how many slips he has in his box, and ought to find at each sorting, and consequently it is quite easy for him to fudge his figures to make them correct. Nor can one be very greatly surprised at his doing so. He has sorted some 15,000 slips and finds his count is short by one or two. He knows he has the missing slips but has miscounted them. Time is money to him, and it will take him an hour or more to recount them. The temptation to fudge the most convenient item is enormous; which convenient item is naturally the most numerous. Yet this can be very easily avoided. If the sorter is on fixed wages, time is not so definitely money to him (this is a further disadvantage of payment by the piece), and he will be less anxious to fudge at all. Secondly, it should be laid down as a strict and invariable rule that the inspector should always take a few slips, not fewer than 5 and not more than 50 , out of every box before or during the process of sorting and lock them up : no sorter can then ever fudge his ticket. This, combined with a specially careful scrutiny of the categories where fudging is most likely to occur, should prevent any possibility of its going undetected. There was a somewhat serious case .of widespread fudging in Shahjahanpur. Details are unnecessary : the trouble was largely due to too little care in ascertaining exactly the number of slips in each box in the first place: and in the second to not adopting this device of removing slips. The result was a complication
of errors. Some sorters were finding the right number of slips and fudging that number to a wrong one, because the total number of slips in the box was not accurately known. Others, whose total was right, fudged when they got a wrong figure. And so on. The fault was chiefly the record keeper's but there was indubitably lack of supervision on the part of both the inspectors and the supervisors : whilst the deputy superintendent was in fault in that he issued the most excellent orders, but did not see they were carried out. A very considerable amount of re orting had to be done to put matters right, and though in the end the errors were found to be not extensive, it was a matter more of luck than good guidance, and was due chiefly to the fact that the sorters themselves had as a rule run straight despite all the temptations and opportunities to run crooked. It cannot be too often repeated that given this one little detail of removing slips from every box at every sorting, there is practically no possibility of fudging, given the prescribed check; without that detail, there is no possibility of preventing fudging, without a complete check of every slip. There are of course other tests applicable only by the deputy superintendent, such as comparison with the figures of the previous census and a consideration of the internal evidence. A useful addendum to the deputy superintendent's library would be a short pamphlet showing exactly what information can be extracted from the subsidiary tables of the report of the previous census which will be useful as a check for the various tables ; though many striking variations would often appear (at this census they would have been very striking. indeed), yet even if they resulted in unnecessary resorting no harm would have been done.
59. There is in my opinion no branch of the work in which improvement is more needed. The general principle is simple enough : it. merely consists of transferring the figures in the sorters' tickets to certain registers and totalling them : and there are numerous methods of checking the accuracy of these totals. Yet the fact remains that the check is frequently mechanical to a degree, and the registers when réceived always disclose errors--some, but very few, arithmetical ; but a large number which are obviously errors of misclassification or misplacement in the registers. The first point that it is necessary to bring: out is that compilation can and in my opinion should be carried on at the same time as sorting. There is no reason whatever, once (say) Table VII has been sorted for, that Table VII should not be compiled; and the longer the time that is given to compilation and the more the deputy superintendent is able to consider it at leisure, the better. The compiling staff should be selected from young men who know English : the advantage of having certain entries, and all figures, written in Eng-. lish, is enormous. Transliteration of such an entry as "United Kingdom of Great Britain and Ireland " is puzzling : translation of it is: much worse. Compilers should work in pairs, each man checking the, arithmetic of the other. After a careful test of the accuracy of the work by the supervisor, the register should be laid before the deputy superintendent, who will proceed to apply all the cross checks, internal or with other tables, available to him. Alist of these was supplied to provincial superintenderts and might be provided for deputy superintendents. He should also test the figures by internal evidence, e. g. comparing number of males and females, the relative numbers in various categories at the same age period, \&c., and by comparison with the figures of the previous census. This when done at leisure would serve as an excellent test of sorting as well as of the compilation, and beyond general supervision and occasional testing of the actual work in progress is nearly all the personal check of the sorting operations that the deputy superintendent need do. It would be much easier to resort if necessary, whilst the sorters were on the spot, than it is after they have all dispersed ; and there would be much more time to refer points of detail to the local authorities or the superintendent. Further, compilation would start much sooner in the head office. A point I consider of great importance is to so arrange the forms of compilation register that males and females are on the same
page and not on separate pages. I can instance one undoubted error which would have been avoided if this had been done. A certain district shows some 3,000 males of a particular Rajput sub-caste and no females at all. It is obviously impossible that there should have been none : it is absurd to suppose that the copyist deliberately omitted to copy the sub-caste of these particular females (especially as doubtless several copyists were involved). What undoubtedly occurred was that the sorter forgot to sort them out. Now, males and females are in different boxes, and different tickets. If the deputy superintendent did not chance to notice the discrepancy between the two tickets, the error would not be corrected at once. It was still easier to overlook it in the compilation register. But if in the register the two columns had been side by side, he could not have possibly overlooked it. When the error came to my notice it was much too late to correctit. There is no question where these missing women are-they are included in Rajput others, where the females exceed the males by just the requisite number.
60. I do not believe that there was any avoidable inaccuracy in the, operations at any stage of the proceedings. The testing of the copyists' work was searching and thorough, as the actual figures of tested entries prove. I found no important mistakes in any of the sorter's tickets which I inspected, nor in any of their results (save as regards Table XVI- in most offices this table was in the end practically done by the deputy superintendent and inspectors). There were undoubtedly errors of classification in compilation, chiefly in Tables XI (where names of places. were misunderstood and geography was at fault), XIII, and XV: but they were very ur common, and save in two cases, never serious. There were practically no arithmetical errors. One small point bearing on the accuracy of the figures is that the most striking divergences from the results of former enumerations were always found to admit of an explanation based on differences in the conditions of the decade. In, my own office, the compilers though slow were very sure and no arith-, metical error however small was allowed to pass, whilst frequently curious figures were brought to my notice by the head clerk or chief compiler in the course of compilation, long before the table was finished. Of all the Tables XV alone gave my office trouble: but I fancy that this was due chiefly to misplacement of figures in my own office. To show how thoroughly the chief compiler understood his duties, it is sufficient to say that he worked out XVD himself quite apart from Table XVA and used it as a check on the latter : and reconciled every error which was found in XVA himself - a work that took time but was well worth both the time and trouble involved.
61. The main object of an administrative report, as I conceive, is to draw lessons from past experience for the use of the future. A bald account of " how I did it" is of very little value-especially when the manuals, codes and correspondence are all preserved and give that account in far greater detail than is possible in a report of this kindcompared with an account of "what I would not do if I had to do it agaiu." I have made various suggestions, which appear to me to be improvements, in the course of this chapter and the preceding one. So far as the actual enumeration is concerned, I need say nothing more than I have already said ; the chief changes I advocate are (1) to stereotype the local ceusus sub-divisions in rural tracts and to make them , correspond to existing revenue divisions (qanungos' and patwaris' circles): not to break them up if too large, but to give the official concerned an assistant; (2) to simplify the method of supplying forms to districts. As regards the preparation of the statistics, I summarize the suggestions already made, and add certain others.
(1) The actual work of copying should not begin till the office is in complete and thorough order. The record room especially should be put straight before the work commences. Otherwise a desire for haste results in ultimate confusion.
(2) The supervisors and assistant supervisors should be relieved of all work in connection with register A , which should be drawn up by a

Accuracy of the statistics.

Suggestions for improvement of the system.
specially selected staff of men of the same calibre as the supervisors. They should be under one special inspector, who can also deal with the special copyists, whose duties require special attention.
(3) Copyists should be on a fixed rate of pay for at least a fortnight till they are fitted to cope with a daily rate. This will prevent discontent. They should lose all pay if they do not serve at least a month, which will prevent the constant coming and going which is so prejudicial to the working of an office: and they should be fined $\frac{1}{4}$ th of all sums due to them if they leave the office without giving at least 3 days' notice.
(4) Sorting should not be allowed to begin at all till the total number of slips has been accurately ascertained and tallied with registar A for the whole office. A great deal of the trouble in Shahjahanpur office was due to the fact that the slips of some circles were said to be in one box when they were really in another.
(5) Care must be taken to see that such a general rule as that "Christian and other slips shall be mixed together for the whole district" does not conflict with the needs of any table. On this occasion the needs of Provincial Table II were overlooked, and remembered just in time. Again, it was never quite certain whether by "city" was meant "Municipality plus cantonment" or Municipality only. Sometimes it seemed to mean one, sometimes the other. If once cantonment slips are allowed to be mixed up with tahsil slips, it is very difficult to separate them again. In at least two cases, it is not possible in consequence to give figures for municipalities plus cantonments. Personally, I consider that the circumstances of cantonments are so special and peculiar that I should always omit them, as being likely to confuse the true issues. Table XVI again must have much clearer and more detailed rules, or it will give a totally disproportionate amount of trouble. There are only two alternatives : one is to sort every occupation separately as is done for Table XVA and allow only the deputy superintendent to classify in compilation: or to compile a complete list of all occupations falling under separate heads. In one office, Mirzapur, the former alternative was actually ordered by the deputy superintendent, in others the check carried out by the inspectors and deputy superintendent had to be so thorough that it amounted to a fresh sorting. It is impossible to allow men of the calibre of sorters to use their brains in such a matter. Even the best are sure to use them wrong. At Agra I found a sorter engag $\epsilon$ d on this table. His classification was full of mistakes : yet none the less he had always quite plausible and sometimes excellent reasons for what he had done. It was a striking instance of the fact that it is impossible to give any sorter scope for thought: the more mechanical the process of sorting is the better it will be.
(6) The system of payment of sorters should not be by the piece but by a monthly wage.
(7) The principle of removing a certain number of slips from every sorter's box should be rigorously insisted on. Short of mixing the slips at every fresh sorting (as was done in this province in 1901-a cumbrous and troublesome safeguard), it is the only way of certainly preventing fudging.
(8) The system of compilation should be elaborated in several directions. (a) The methods of arithmetical check should be systematized: compilers working in pairs should check each other's results, the supervisor's work should be restricted to a further check of the same nature. (b) An inspector should be kept for compilation (this will be easy since compilation as is said below should go on at the same time as sorting), whose duty will be some further arithmetical check, especially cross checking both internal and with other tables : each office should have for this purpose a complete list of the figures in various tables that should correspond: (c) The deputy superintendent should concern himself chiefly with comparison of the figures in regard to their actual meaning, and not so much with arithmetical checks. (d) Compilation should be carried on with and at the same time as sorting; it will in this way be itself a very valuable check upon the latter. Compilation of a table
should start as soon as the slips have been completely sorted for a particular table. (e) Finally males and females should be put on the same and not different pages of the register ; otherwise it is quite possible that some errors, which a comparison of the two would disclose, will not be found out till it is too late to put them right.
(9) The tables when they finally reach the Superintendents' office should approximate as nearly as possible to the form in which they will appear in the imperial tables. I give details :-

Table VII-Should be totalled not only by quinquennial periods, but (for all religions, Hindus and Muhammadans) also by the larger periods of part B. of the table.

Table XI-Should be totalled for all religions, as well as by religions separately. On the other hand no attempt at classification of entries should be made. In many cases only the Superintendent is competent to do this, and even he is sometimes reduced to a fruitless search through the largest gazetteer and atlas available. All entries should be put down as they are given.

Table XIII.-Here again but a certain amount of classification of entries should be done. It is easier for the Superintendent to do most of this himself than to answer the countless references he will otherwise get on the subject. (See Chapter XI of the report.)

Table XV -Should be totalled by all religions together as well as by separate religions.

On the other hand, Tables XII, XVII and XVIII are most easily compiled in the head office.

My reason for making these last suggestions is this. Compilation in the Head Office should not consist unnecessarily of mere totalling of details to form the given groups for the imperial table. This can be done quite as accurately and much more easily in the central office which has only six or seven districts to deal with. It should consist of a partial but careful counter check of tickets with registers: a complete arithmetical check of the registers themselves : an examination of the inherent probability of the total figures: such classification as cannot satisfactorily be done elsewhere : and finally a compilation of district figures into provincial and divisional ones. This is quite enough to fully occupy the head office: and the more ordinary arithmetic it has to do the less will such matters as these be attended to. Whatever can be done as well in the central as the head office should be done in the former, leaving the head office to do only what the central office cannot do, or cannot do as well. I can vouch for it that the delay in preparing Tables XI and XV was due largely to the fact that there was such a large amount of ordinary addition to be done, to total the figures of the different religions. The central offices can add just as well as the head office and there is no reason why they should notnot to mention the fact that errors in addition may occur under the present system, and when they do, it becomes necessary to check not only the addition of the head office, but that of the central office since the error may have occurred in either.
(10) No scale is laid down anywhere for the office of the Superintendent. I am inclined to think that in this province at least its needs are underestimated ; certainly I know that I could have found work at all times for more men than I possessed or could, in the state of the budget, expect to possess. I put the minimum requirements of the head office as follows :-
(1) For the first 6 months:-

1 Head clerk on Rs. 125: should know English, Urdu and Hindi well.

1 Translator on Rs. 75.
1 Second clerk (accounts and correspondence) on Rs. 40.
1 Typist on Rs. 35.
1 General clerk, (for records, \&c.) on Rs. 30.
(2) When the forms begin to go out, also:-

1 Despatcher on Rs. 25.
(3) About a month before census, when all the work connected with the offices begins, in addition :-

1 Clerk, accountant only, on Rs. 35.
1 Clerk for general work on Rs. 30.
(4) When compilation begins :-

1 Compiler for every 2 million of population, on Rs. 25, whilst one of the senior clerks becomes chief compiler.
(5) When the report is well in progress:-

1 Draughtsman on Rs. 40.
As soon as the bulk of compilation work is over, the compilers can be reduced : but at least 6 should always be kept, for all the multifarious tables which will be required at all stages of the proceeding, and to assist with subsidiary tables.

Finally, it will be found that all sorts of persons, from heads of departments to missionaries and private people with a fad, will ask for all sorts of figures. I made a practice of supplying such figures, if they involved any fresh compilation, or any compilation before its due time, only to heads of departments, and only if I was supplied with a man to get them out. This action was based on the orders of the Census Commissioner to me that the imperial report was to take precedence of everything and no such requests were to be complied with until it was ready. To private persons I of course only supplied such figures as were ready at the time of the request, and refused to take out any but those which were taken out in the natural course of events. One gentleman, who had some fad on the subject of plague, asked me for complete details by quinquennial age-periods for every village in a very large district.
(11) The village directory is a large and very troublesome matter. The mere printing of it (it has not, so far, been printed at every census) takes at least a year, and cannot be begun till the report is out since the press simply do not possess enough figure type or machines to put more than two or three districts in type at once. The mere figures give no trouble, being merely copied from register A. But the names of the villages do. It is a matter of chance and whim how they are spelt. By far the most sensible method, since the directory is a compilation which is chiefly used in the district, is to adopt one method of spelling whatever it may be for the whole province. The local authorities should be asked to collect all the names (either from old revenue records or direct from the patwari) in Nagri. Somebody in the district who knows Nagri well and English at all events well enough for purposes of exact transliteration should then be made to transliterate these names exactly into English according to the selected system, taking care for instance not to change " au" into "o" or "e" into "i". Both lists should then be submitted and after check arranged in English alphabetical order.
(12) As regards presses, there is but one word of advice: that the Government Press should be used if possible, for everything, and that when it comes to printing the report, the Superintendent be asked to put a special section on this particular work. I was fortunate enough to have the services of the ex-gazetteer section, with excellent results,

Subsidiary table I．－Copying the slips．

＊By＂Copyist units＂is meant the total number of Copyists multiplied by the number of working days they worked．

Subsidiary table II．－Sorting．

| Period． | Number of boxes sorted for table No．－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 볌 | 官 | ه | x | 戍 | 炅 |  | 昌 | $\dot{\theta}$ | 垵 | ¢ | － | － | $\stackrel{B}{B}$ | 笑 |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Up to end of May | 248 | 33 | ． | 40 | 40 | $\cdots$ | ． | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | ． | $\cdots$ |  |
| Up to end of June 1911. | 2，815 | 2，483 | 619 | 1，849 | 2，005 | ．． | ．． | 1，015 | 306 | 43 | 42 | 41 | 94 | ．． | $\cdots$ |  |
| Up to end of July 1911. | 192 | 296 | 1，365 | 448 | 404 | ． | ． | 1，116 | 1，615 | 1，327 | 1，273 | 1，269 | 1，587 | 18 | 18 |  |
| Up toend of August 1911. | 54 | 77 | 380 | 128 | 129 | － | ．． | 303 | 534 | 1，618 | 1，652 | 1，654 | 977 | 24 | 24 |  |
| Up to end of September 1911. | 21 | 29 | 245 | 66 | 61 | ． | ．． | 184 | 325 | 638 | 644 | 649 | 502 | ． | － |  |

## Chapter III.-COST OF CENSUS.

62. The figures dealt with below are those up to the end of December 1912. The net expenditure up to that date was Rs. 3,06,053. To this has to be added the pay of the Superintendent's head office for two more months, amounting to some Rs. 500, and the cost of printing the report, which may be put at about Rs. 5,000 . (It was estimated in the same way at Rs. 6,200 in 1902-3, but I am informed by the Press that their new methods of charging will reduce the cost considerably: on the other hand there was a great deal more printing to be done.) A deduction has also to be made of three months' pay of the Head office establishment, being a contribution from the Local Government on account of the work done on the Provincial Tables; this will amount to some Rs. 1,500; and the proceeds of the sale of some typewriting machines, \&c., \&c., have also to be deducted. The full cost of the census will therefore be about Rs. 3,09,000.
63. The total expenditure in the three years amounted to Rs. 9,492 as against Rs. 8,508 at Mr. Burn's census. The District office establishments cost only Rs. 3,787 as against Rs. 4,665: I have already dealt with this question in chapter I, paragraph 21 and need say no more on it. I am not inclined to regard this decrease as a matter for congratulation, for it means that the regular staff were overworked. There was an increase in travelling allowance yet even so the sum is exceedingly small. It was due chiefly to the fact that District Census officers came to see me at selected centres in the rains, and that the census clerks usually accompanied the District Census Officers on tour. The justification for the first proceeding lies in the fact that I saw every District Census Officer and his work instead of only a few : the second proceeding needs no justification. There was a very great increase in freight, due partly to the fact that the system of sending forms direct to tahsils was carried out wherever possible : partly to the fact that the Newal Kishore Press sent the forms by rail, consigned to be paid on delivery, so that the cost of freight appears under this head instead of A-II-8 "Despatching ; " partly to the fact that there was much more despatching to be done. It is not clear under which head railway charges were shown in 1901; at all events it is clear that they were much heavier at this census.
64. Paper and printing cost Rs. 22,114 as against Rs. 19,112 in 1901. The paper was all bought in Lucknow where the press was also situated, so that there was no cost of carriage: but naturally it was rather more expensive in Lucknow than Calcutta. Taking cost and carriage of paper together, the expenditure was some Rs. 300 less on this occasion. Printing however was nearly twice as heavy an item; this was due, of course, to the fact that the bulk of the work was done by a private press.

The whole cost on enumeration was Rs. 31,606 as against Rs. 27,620 in 1901, or Rs. 3,986 more.
65. It will, I think, be admitted that considering (1) that there were eight offices instead of seven, (2) that the staff of each office was larger (notably by the inspector grade on Rs. 50 and the assistant supervisors on Rus. 15) and on the whole, rather more highly paid-Deputy Superintendents for instance got the usual 20 per cent. deputation allowance instead of Rs. 50,-the total cost of office charges, viz., Rs. 2,03,294 as against Rs. 2,00,544 in 1901, was not excessive. (This sum is obtained by adding Rs. 5,411, the amount of the Deputy Superintendents' deputation allowance included under C-V-20 Deputation Allowance, to Rs. $1,97,883$, the total of B-III, office charges.) Moreover, if the cost of the staff alone, from Deputy Superintendent to copyist and chaprasi be taken, the cost is only Rs. 1,83,390 in 1911 as against Rs. 1,91,356 in 1901the decrease is due of course to the fact that the work was on this occasion

## Preliminary,

A.-Enumer-ation.-I.-District establishment charges and District contingencies.

## II.-Press

 charges.B.-Abstraction and compila-tion-III.Officecharges.
carried out in a less period of time. No further comparison in detail can be instituted on the accounts as the subdivision of the staff was different at the two censuses. There was a very considerable increase in contingencies which came to Rs. 19,903 as against Rs. 9,188 in 1901 : the chief items where increases occurred are purchase and repair of furniture (due chiefly to the substitution of boxes for baskets for the sorters, and to the increased staff of supervising officers, notably inspectors)-this accounts for over Rs. 7,000 of the increase; stationery, Rs. 2,691 as against Rs. 1,852: and miscellaneous' Rs. 3,892 as against Rs. 412. There was a considerable decrease under freight-Rs. 619 as against Rs. 1,942 .
66. These charges amounted to Rs. 16,436 (deducting the cost of a typewriting machine with Wahl adding attachment for my office which for some reason was added to 15 "Paper for compilation"), as against Rs. 16,213 in 1901. The paper for slips cost nearly Rs. 4,000 less than it did ten years ago : the paper for compilation was more expensive but far more forms were printed. Printing cost Rs. 4,666 as against Rs. 377, but the slips were printed at a private press, and the rules, manuals, sorters' tickets and compilation forms were printed in far larger quantities than in 1901, when apparently a good deal of the work (e.g., the sorters' tickets) was in manuscript. The despatching charges were low, only Rs. 1,393 as against Rs. 2,281 in 1901.

The total cost of abstraction and compilation came to Rs. 2,19,731 as against Rs. 2,16,758 in 1901, after making the adjustments mentioned above, for Deputy Superintendents' deputation allowance and typewriter, and deducting the cost of the report in 1901.
67. The total cost was Rs. 58,147 as against Rs. 60,717 in 1901.
c.-Superinten-
dence.-V.-
Personal
charges.
VI.-Establishment"andioffice charges.

Deductions.

Accounts. The decrease however is even larger than this. First from the total of Rs. 58,147 , Rs. 5,411 have to be deducted for the Deputy Superintendents' deputation allowance which was shown elsewhere in 1901; and for three months I had a Personal Assistant, whilst no such officer existed in 1901. The figures of 1911 therefore represent the pay of one officer for three months, the deputation allowance of one officer for eleven months and of seven others for roughly eight months, in addition to the pay and deputation allowance of the Superintendent ; whilst the figures of 1901 include the latter sums alone (in addition of course to travelling allowance in both cases).
68. The total cost under this head amounts to Rs. 19,101 and Rs. 1,000 (roughly) for a typewriting machine, total Rs. 20,101 as against Rs. 9,439 in 1901. This is a large increase, but it appears to me a mistake to overwork the Superintendent's head office; whilst on this occasion there was far more work to be done, as a glance at the mere size of the Imperial tables volumes of the two censuses will show. The office establishment has cost Rs. 10,252 as against Rs, 5,139 in 1901 : from this however three months' pay, equivalent to some Rs. 1,500 has to be deducted, and some Rs. 500 (two months' pay of a reduced staff) added. The cost will therefore be about Rs. 9,200. The travelling allowance has been greatly increased ; whilst the office rent amounts to Rs. 1,023 as against Rs. 150, and furniture to Rs. 673 as against Rs. 46. There has also been a considerable increase in other contingencies.

The total cost under superintendence however is only Rs. 77,248 from which a sum of Rs. 5,411 (Deputy Superintendents' deputation allowances) has to be deducted, and Rs. 500 as above, added. The total sum therefore is Rs. 73,338 as against Rs. 70,157 in 1901.
69. The deductions on various accounts amount to Rs. 18,123 , to which those mentioned above must be added : these amount to some Rs. 2,300 more. In 1901 they amounted to Rs. 17,348.
70. The complete accounts of $1910-13$ up to January 1912 are given as an appendix to this chapter. Below I give the chief items of account, altered so as to correspond to those of 1901, by (1) adding Rs. 5,411 for Deputy Superintendents' deputation allowance to figures under "B abstraction and compilation" and subtracting it from "C Superintendence ;" (2) subtracting Rs. 1,000 (approximately) for cost of a
typewriter from " B, " and adding it to "C ; " (3) adding Rs. 500, estimated cost of office for two months more, to "C ;" (4) adding Rs. 5,000 as estimate for the printing of the report ; (5) adding Rs. 1,500, estimate of three months' pay of head office as a contribution from the Local Government, and Rs. 800, on account of other anticipated refunds, to the deductions.


Departmental accounts.

| $\pm$ | Sub-head. | 1910-1911. | 1911-1912. | 1912-1913. | 1910-1913. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. | I.-Distriot Establishment oharges .. <br> 1. District offioe establishment .. <br> 2. Remuneration of census officers <br> 3. Travelling allowance of census officers <br> 4. Contingencies | Rs. a. p. <br> 3,976 3 4 <br> 3,591 1 4 <br> 60 0 0 <br> 325 2 0 <br> 3,481 1 0 <br> 443 7 3 <br> 119 15 0 <br> 3 0 9 <br> 2,280 15 4 <br> 633 10 8 | $\begin{array}{rcc} \text { Rs. } & \text { a. } & \text { p. } \\ 259 & 2 & 4 \\ 196 & 8 & 4 \\ \ddot{62} & 10 & 0 \\ 1,772 & 4 & 3 \\ 56 & 15 & 1 \\ \cdots & & \\ 3 \ddot{53} & 9 & 10 \\ 236 & 11 & 9 \\ 1,124 & 15 & 7 \end{array}$ | Rs. a. p. $\begin{array}{ll} \because & \\ \because & \\ \because & \\ \ddot{3} & 7 \\ \cdots & 0 \\ \because & \\ \because & \\ \ddot{3} & 7 \end{array}$ .. | Rs. a. p. <br> 4,235 5 8 <br> 3,787 9 8 <br> 60 0 0 <br> 387 12 0 <br> 5,256 12 3 <br> 500 6 4 <br> 119 15 0 <br> 3 0 9 <br> 2,634 9 2 <br> 873 13 5 <br> 1,124 15 7 |
|  | Total I | 7,45748 | 2,031 $6 \quad 7$ | 370 | 9,492 111 |
|  |  | $\begin{array}{rrr} 22,114 & 13 & 0 \\ 12,538 & 10 & 0 \\ 7,869 & & \\ 1,792 & 3 & 10 \\ 6,077 & 9 & 7 \\ 1,706 & 5 & 7 \end{array}$ | $\because$ $\cdots$ $\cdots$ $\cdots$ $\cdots$ $\cdots$ |  | $\begin{array}{rrr} 22,114 & 13 & 0 \\ 12,538 & 10 & 0 \\ 7,869 & & \\ 13 & 5 \\ 1,792 & 3 & 10 \\ 6,077 & 9 & 7 \\ 1,706 & 5 & 7 \end{array}$ |
| B. | Total A, I and II .. | $29,572 \quad 14$ | 2,031 67 | 370 | 31,606 1411 |
|  | III.-Office charges <br> 9. Correspondence and accounts establish ment. <br> 10. Menial establishment <br> 11. Working :taff- <br> (a) Officials <br> (b) Non-officials <br> 12. Travelling allowance <br> 13. Contingencies <br> (a) Office rent .. <br> (b) Furniture <br> (c) Stationery <br> (d) Postage and telegrams <br> (e) Freight <br> (f) Miscellaneous | $\begin{array}{rrr} 58 & 0 & 0 \\ \cdots & \\ \cdots & \\ \cdots & \\ \ddot{8} & 0 & 0 \\ 1,629 & 2 & 5 \\ 448 & 12 & 8 \\ 98 & 3 & 0 \\ 60 & 1 & 0 \\ 504 & 1 & 0 \\ 518 & 0 & 9 \end{array}$ | $\begin{array}{rrr} 1,77,896 & 8 & 9 \\ 9,615 & 0 & 11 \\ 2,324 & 8 & 5 \\ 47,218 & 6 & 9 \\ 1,13,053 & 1 & 4 \\ 685 & 7 & 4 \\ 18,273 & 13 & 8 \\ 2,657 & 9 & 9 \\ 8,875 & 10 & 2 \\ 2,593 & 12 & 2 \\ 657 & 6 & 6 \\ 114 & 15 & 0 \\ 3,374 & 8 & 1 \end{array}$ | $\begin{array}{ccc} 26 & 4 & 8 \\ 26 & 4 & 8 \\ . & \\ . & \\ \cdots & \\ \cdots & \\ \cdots & \\ \cdots & \\ \cdots & \\ \cdots & \\ \cdots & \\ \cdots & & \end{array}$ | $\begin{array}{rrr} 1,77,980 & 13 & 5 \\ 9,641 & 5 & 7 \\ 2,324 & 8 & 5 \\ 47,218 & 6 & 9 \\ 1,18,053 & 1 & 4 \\ 743 & 7 & 4 \\ 19,903 & 0 & 1 \\ 2,657 & 9 & 9 \\ 9,324 & 6 & 10 \\ 2,691 & 15 & 2 \\ 717 & 7 & 6 \\ 619 & 0 & 0 \\ 3,892 & 8 & 10 \end{array}$ |
|  | Total III | $1,687 \quad 2 \quad 5$ | 1,96,170 66 | 2648 | 1,97,883 $13 \quad 6$ |

Departmental accounts.


Subsidiary table I.-Actual expenditure distributed under the heads of account prescribed by the Comptroller-General.


Subsidiary table I.-Actual expenditure distributed under the heads of account prescribed by the Comptroller-General-(concluded).

$\dagger$ In addition to this the total amount of Rs. 5,045-11-0 has been spent as pay of establishment for January and February 1913 Rs. 551-9-9; Contingencies Rs. $58-8-0$; Travelling allowance Rs. $57-8-0$, and printing charges from ist September to December 1912 Rs. 4,378-1.3.

Subsidiary table II．－Expenditure distributed under the heads prescribed by the Census Commissioner，according to（a）Comptroller－General＇s and（b）Departmental accounts．

| $\begin{aligned} & \text { rid } \\ & \text { dy } \\ & \text { 蔚 } \end{aligned}$ | Sub－head． | Expenditure according to Comptroller－General＇s accounts． |  |  |  | Expenditure in 1910－13 according to Departmental accounts． | Difference： |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1910－11． | 1911－12． | 1912－13． | $\begin{gathered} \text { Total } \\ 1910-13 . \end{gathered}$ |  |  |
| 1 | － 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | Personal charges ：－ <br> Deputation allowance of officers deputed to Census duty． | $\begin{array}{rrr} \text { Rs. } & \text { a. } & \text { p. } \\ 3,460 & 7 & 8 \\ 3,460 & 7 & 8 \end{array}$ | $\begin{array}{rrr} \text { Rs. } & \text { a. } & \text { p. } \\ 8,866 & 11 & 4 \\ 8,866 & 11 & 4 \end{array}$ | $\begin{array}{rlll} \text { Rs. } & \text { a. } \\ 2,304 & 0 & 0 \\ 2,304 & 0 & 0 \end{array}$ | Rs． a． p． <br> 14,631 3 0 <br> 14,631 3 0 | $\begin{array}{rrr} \hline \text { Rs. } & \text { a. } & \text { p. } \\ 15,015 & 6 & 0 \\ 15,015 & 6 & 0 \end{array}$ | $\begin{array}{rcc} \text { Rs. } & \text { a. } & \text { p. } \\ +384 & 3 & 0 \\ +384 & 3 & 0 \end{array}$ |
|  | Establishments ：－ | 75146 | 4，328 $14 \quad 6$ | 5，110 1411 | 10，191 111 | 10，252 119 | ＋61910 |
|  | Pay of men without substantive appoint－ ments． | $751 \quad 46$ | 4，262 12 5 | 5，110 1411 | 10，124 1510 | $\} 10,25211 \quad 9$ | ＋61 910 |
|  | Deputation allowance of men deputed to census duty． | ． | $66 \quad 21$ | ． | $66 \quad 2 \quad 1$ |  |  |
|  | Travelling allow． ance ：－ | 3，301 006 | 1，415 515 | 792150 | 5,509410 | 5，509 410 | － |
|  | （1）Of officers <br> （2）Of establish： <br> ment． | $\begin{array}{rrrr}2,927 & 14 & 0 \\ 373 & 2 & 6\end{array}$ | 78711 627 10 | $\begin{array}{lrr}210 & 4 & 0 \\ 582 & 11 & 0\end{array}$ | $\begin{array}{rrrr}3,925 & 13 & 0 \\ 1,583 & 7 & 10\end{array}$ | $\begin{array}{rrrr}3,925 & 13 & 0 \\ 1,583 & 7 & 10\end{array}$ | $\cdots$ |
|  | Contingencies ：－ | 2，123 57 | 2，061 1 1 | 2，128 $13 \quad 3$ | 6，313 41 | $6,313 \quad 4 \quad 1$ | ．． |
|  | （1）Office rent ．． |  | $\begin{array}{llll}90 & 0 & 0\end{array}$ | 610 | 1，023 410 | 1，023 410 | $\cdots$ |
|  | （2）Purchase and repair of fur－ niture． | 4612 | 25476 | 371120 | 1,673 | 1,073 673 | $\cdots$ |
|  | （3）Looal purchases of stationery． | $55 \quad 76$ | 202110 | $222 \quad 210$ | $480 \quad 5 \quad 4$ | $480 \quad 5 \quad 4$ | ． |
|  | （4）Postage and tele－ gram charges． | 1，139 70 | 54780 | 13220 | 1,819 1 0 | 1，819 10 | ． |
|  | （5）Freight （6）Miscellaneous | $\begin{array}{lll} 317 & 12 & 6 \\ 240 & 10 & 3 \end{array}$ | $\begin{array}{lrl} 593 & 9 & 0 \\ 372 & 18 & 9 \end{array}$ | $\begin{array}{lll} 348 & 13 & 0 \\ 443 & 14 & 2 \end{array}$ | $\begin{array}{lll} 1,260 & 2 & 6 \\ 1,057 & 6 & 2 \end{array}$ | $\begin{array}{lll} 1,200 & 2 & 6 \\ 1,057 & 6 & 2 \end{array}$ | $\cdots$ |
|  | Total，Superintendence | 9，636 223 | 16，672 05 | 10，336 112 | 36，644 1310 | 37,090108 | ＋445 1210 |
| 号荡甪 | Temporary establish－ ment in District office． | $3,976 \quad 3 \quad 4$ | $259 \quad 2 \quad 4$ | ．． | 4,235 | $\begin{array}{llll}4,235 & 5 & 8\end{array}$ | ． |
|  | Pay of men without substantive appoint－ | $3,50410 \quad 3$ | 19688 | ． | $3,701 \quad 2 \quad 7$ | $\} 3,787$ 9 $\quad 8$ |  |
|  | ment． <br> Deputation allowance | 8371 |  |  | 8671 | $\} 3,78798$ | － |
|  | of men deputed to |  |  | ． |  |  |  |
|  | census， Remuneration of census officers． | $60 \quad 0 \quad 0$ | $\cdots$ | ． | $60 \quad 0$ | $60 \quad 00$ | ． |
|  | Travelling allowance of census officers． | $325 \quad 20$ | 62100 | ． | 387120 | 387120 | ． |
|  | Contingencies ：－ | 3，481 110 | 1，772 4 4 3 | 370 | 5，256 123 | 5，256 123 | ． |
|  | Local purchase of sta－ tionery． | $\begin{array}{llll}443 & 7 & 3\end{array}$ | 56151 | ．． | 50064 | 50064 | ． |
|  | Postage and telegrams | 119150 | ． | $\cdots$ | 119150 | 119150 | ．． |
|  | House numbering ．． | $\begin{array}{llll}3 & 0 & 9\end{array}$ |  | ．． | $\begin{array}{lll}3 & 0 & 9\end{array}$ | 3009 | $\cdots$ |
|  | Freight | 2，280 $15 \quad 4$ | 353 910 |  | $2,634{ }^{9} 9$ | $2,634{ }^{2} 9$ | ． |
|  | Miscellaneous | 633108 | 23611 124 12 | 370 | 873 124 124 15 | $\begin{array}{r}87313 \\ 124 \\ 124 \\ \hline\end{array}$ |  |
|  | Total，Enumeration | 7，45\％ 44 | 2，031 | 370 | 9，492 111 | 492111 |  |
|  | Pay of men without | ．． | 1，28，268 103 | 2648 | 1，28，294 1411 | ＋1，30，018 154 | ＋1，724 |
|  | substantive appoint－ ment |  |  |  |  |  |  |
|  | Deputation allowance of officers deputed to census duty． | $\cdots$ | 47,176139 | ． | 47，176 139 | $47,218 \quad 6 \quad 9$ | ＋4190 |
|  | Travelling allowance | $58 \quad 0 \quad 0$ | $\begin{array}{lll}685 & 7 & 4\end{array}$ | ．． | $743 \quad 7 \quad 4$ | $\begin{array}{lll}743 & 7 & 4\end{array}$ | ．． |
|  | Contingancies ：－ | 2，467 3 | 17，578 56 | ．． | $20,045 \quad 811$ | 20，741 1 | $\ddagger+695 \quad 8 \quad 3$ |
|  | Office rent $\quad . \mathrm{id}^{\text {d }}$ |  | 2,65799 |  | 2，657 909 | 2,657 9 9 | ．． |
|  | Purchase，hire and repair of furniture． | 448128 | 8，875 $10 \quad 2$ | $\cdots$ | 9，324 610 | 9，324 610 | $\cdots$ |
|  | Local purohase of stationery． | $98 \quad 30$ | 1，898 40 | ． | 1，996 70 | 2，691 $15 \quad 2$ | $\ddagger+695 \quad 8 \quad 2$ |
|  |  | ¢0 1 0 | 65766 | ． | $\begin{array}{lll}717 & 7 & 6\end{array}$ | $\begin{array}{ccc}717 & 7 & 6 \\ 1,47 & 1 & 0\end{array}$ | ． |
|  | Freight | $\begin{array}{lll} 1,342 & 2 & 0 \end{array}$ | $11415 \quad 0$ |  | $\begin{array}{lll} 1,457 & 1 & 0 \end{array}$ | $\begin{array}{lll} 1,457 & 1 & 0 \end{array}$ | ． |
|  | Miscellaneous ．． | 518 00 | $3,374{ }^{3} 81$ | $\cdots$ | 3，892 810 | 3，892 810 | ． |
|  | Total，Abstraction and Compilation． | $\begin{array}{llll}2,525 & 3 & 5\end{array}$ | $1,93,709410$ | 2648 | 1，96，260 1211 | 1，98，721 146 | $+2,46117$ |

[^0]Subsidiary table II.-Expenditure distributed under the heads prescribed by the Census Commissioner, according to (a) Comptroller-General's and (b) Departmental accounts-(concluded).


* Includes Press expenditure up to August 1912 only. The Superintendent, Government Press, has stated that the expenditure from 1st September to the end of December 1912 was Rs. 4,378-1-3.
$\dagger$ Includes full pay of Superintendent. Column 6 shows pay of his substitute only.
$\ddagger$ On account of cost of tabulation of Andamans and Nicobar's population.
§ This amount includes expenditure up to the 2nd of January 1913.
|| This amount includes Rs. $36-4-0$ on account of the charges for the forms supplied to Census office, Burmah, and should not be accounted for in the Departmental accounts as per note of Article 9, Census Imperial Code, Part I Chapter II. The balance Rs. 695-8-2 is adjusted against the head "Local purchase of stationery" under "Abstraction and compilation."


[^0]:    ＊Includes deputation allowance of Superintendent，his Personal Assistant and Deputy Superintendents．The difference is due to the fact that the full amount of deputation allowance has been shown in the Departmental accounts while in the treasury accounts annuity has been deducted．
    $\dagger$ Includes Rs．9，641－5－7 for correspondence and accounts establishment，Rs．2，324－8－5 for menial establishment and Rs．1，18，053－1－4 for non－officials working by the piece，\＆c．
    $\ddagger$ This is an account of the amount adjusted in Accountant－General＇s office for the stationery supplied from Central Stores． As there is no separate head for this in Departmental account it is shewn as excess．

