

Mr. Oldham.

The Distance Test.—With large relief-works in progress I have never seen the inhabitants of neighbouring small villages and hamlets successfully excluded from the works. But with regard to large villages and towns, the test was applied by removing the bulk of the laborers to a certain distance from them, employing on the intervening work a few permanent and identified gangs into which new applicants could not slip.

The test was ordinarily applied by this method, under which the laborers had either to walk from four to seven miles out to the work every day, or had to stay on it altogether. But sometimes whole bodies of laborers as they stood on the works were transferred to other works from twenty to thirty miles distant.

This last test was temporarily effectual and kept away all persons not in distress. After settling down on their new site the laborers would again begin to change in character. The former test was effectual as regarded the towns or large villages against which it was directed.

At present the test is applied by having one central work only in a taluk. This has undoubtedly kept away many persons who were in distress.

Except as a temporary expedient for dealing with masses of people who have rushed to the relief-works in numbers out of proportion to the available supervision, and as a measure directed against particular centres of population, I do not favor the test, which must be unequal and yet difficult to enforce against some of the persons for whom it is wanted. If it had to be applied systematically, I would do so by keeping all large relief-works at a certain distance from towns and large villages, five miles at least, by having huts provided for all the laborers, and by transferring them to other works (with hut accommodation) in their gangs as they stood, after they had been admitted and organised.

Mr. Gillon.

The distance test should always be applied to laborers in good bodily condition. Sickly and emaciated applicants for work can be dealt with more leniently and allowed to work near their own homes, inasmuch as they are obviously in need of relief. Ten miles has been considered sufficient for the test, and is sufficient, seeing that the laborers cannot go to and from the work daily. It is by no means enough that the laborers should have to go some distance to and from the work. It might keep off some improper applicants, but will not deter a large number from increasing the family store by an easily-earned subsistence wage. The distance test is very effective in the very cold and the rainy seasons, but in warm dry weather the people are by no means averse to bivouacking in the open in the nearest field or by the roadside. As prospects improve and famine is on the decline, it is desirable to increase the distances and to occasionally move from one work to another those in good condition. These tactics I found very successful in October 1877 in the Jammulamadugu Taluk of the Cuddapah District. Thousands on relief-works disappeared in a very short time without any evil results. Heavy rain had fallen, and there was considerable demand for labor, so that there was no danger in trying these experiments at that time. The distance test obviously cannot be enforced unless the residence of applicants for labor can be ascertained. Last year, when the people of one taluk or district wished to obtain work in a neighbouring district or taluk, they were in the habit of describing themselves as residents of some village within easy distance of the work. In this way thousands would describe themselves as belonging to a village

Mr. Gillon—continued.

which, according to the census tables, did not contain more than 500 inhabitants. It is therefore necessary to require all applicants for work, whose physical condition is good, to provide themselves with certificates from the heads of their villages stating how long they have been residents of those villages. If these tests are, as they should be, applied to such persons only whose physical condition is good, it is scarcely necessary to ascertain whether the inhabitants of Z go to B or not. If they are compelled to go to B, the test is superfluous.

Lieut.-Col. Bartleman.

Until near the close of the famine the distance test, though partially, was not regularly enforced. By this I mean that, although some of the coolies had to travel long distances of from fifteen to thirty miles to the works and to leave their homes temporarily, the vast majority of them came from villages within a radius of seven miles of the place where the works were going on and generally returned to them at night. For the first two months of the famine I would have the maximum test ten miles with no specified minimum, so as to give the people an opportunity of witnessing the system now in force and of gaining confidence. After that and until the decline of the famine I would have the minimum test five miles and the maximum twenty-five. At the close of the famine I would increase the minimum test to fifteen miles and the maximum to forty. This would not alone secure that the coolies did not return to their respective villages daily, but also that they did not entirely forsake their homes, which only the most dire distress can induce them to do. I have

I am not aware of the instance mentioned, but I should say the coolies would be equally unable to hear of their friends at twenty-five as at forty-five miles distance. Other causes must, I think, have operated. If it is a recent instance, the ruin in their villages would have induced them to leave.—
A. McC. W.

seen hundreds of apparently destitute coolies who willingly travelled twenty-five miles from their villages to the works and remained night and day in their immediate vicinity desert in masses on being ordered to go to a place twenty miles further off, merely because they were thereby prevented from hearing of how things were going on in their homes and villages, and from holding communication with their friends.

Mr. Scanlan.

In my experience of famine (Bengal 1873-74 and Madras 1877-78) this test has only been applied this year, and is undoubtedly one of the good tests where the majority of those relieved are concerned, but I do not think it is a test for some classes. It was considered that ten miles was a sufficient distance; there was no restriction as to where they should live, although one or two camps were established near the works, and I have no doubt that where persons were a great distance from their homes they availed themselves of the shelter provided for them. It would be hard to say if the inhabitants of Z were in every instance forced to go to the works at B, for the Maistries and underlings of the works never seemed to trouble themselves about this; and my experience is that it was only enforced when their superiors and others had opportunity of going through the gangs in detail, when certainly inhabitants of village Z were found on the works at A; but lately this has been well looked after by the officers of the Public Works Department and myself, so that it may be said that inhabitants of Z were refused admittance on work A and directed to go to B. The measures adopted to ensure that they did go were these: I instructed all the Maistries and Overseers on the works when they received nominal rolls from the Monigars or others empowered to grant them, they were, if the applicants' village were within the prescribed limit from their work,

Mr. Scanlan—continued.

to send on the persons holding tickets in charge of a head cooly to some other maistry's or overseer's gangs and see that they were duly received in that gang, for the monigars are ignorant about position of gangs and the people naturally in the first instance go to the nearest work to their village. The test lately was relaxed to 5 miles. I am not in a position to state the causes which led to this, but can say, as far as this taluk is concerned, it is a change for the better, for there is only one line of work which skirts the north-east of the taluk along the banks of the Cauvery (the whole length extending about 14 or 15 miles) and should there be really distressed people needing work in a village close to the 7th mile of work the 10 miles test would practically debar them from any work at all. The test has been effectual against non-distressed cultivators coming on to the works, but it has not been effectual against their wives and daughters in some instances who by this means supplement the household earnings. And at the same time it has been effectual against some distressed classes coming on to the works whose customs and prejudices and other circumstances require them to live at home or be near at hand owing to their dislike to herd with low classes in camp. To enforce the distance test is a very troublesome thing especially if entrusted (and it must invariably to a great extent) to underlings on the works, and abuses must creep in at all times. The maistry who probably is a temporary man is either too indifferent about orders or fears any great reduction in his gangs lest his services should be dispensed with, and is ready at all times to give or enter fictitious villages as well as names in his register, and an understanding with the cooly further binds the transaction, the result is that the majority of officers are duped. In applying the distance test I have no modifications to propose, but would suggest that some better and surer system be adopted for enforcing it.

Mr. H. Shaw.

Distance Test.—This test in the Madras Presidency required the laborer to go for work not less than ten miles from his residence. If he did this he necessarily lived away from home, and these two circumstances proved that his sole object was self-support whenever that could be obtained.

The adoption of this test has been remarkable for keeping away those who were not really in distress, but who otherwise from neighbouring villages would have crowded on the works with the object of gaining a little money for comparatively little labor, at a time when there was little employment in the fields.

It is advantageous occasionally to transfer gangs from one locality to another, as this has the effect of weeding out those who are not fit objects for relief, but who have, through deception or other means, managed to get engaged on a work convenient to themselves. When this has been done I have known three-fourths and more of the people to abscond.

Lient.-Col. Prendergast.

Works cannot be fixed on, at a particular distance from a village: works considered suitable were sanctioned; and the people who lived nearest came to them. People were not forced to live away from their homes when there was work near at hand. A being a work near Z village, the people of Z were not directed to go to B work, unless there were too many to keep at A. The clearance of the Fort ditch at Vellore, and deepening the Suriagunta, gave employment to many people of the town of Vellore for several months. The works were instituted for the sake of the people of the town:

Lient.-Colonel Prendergast—continued.

the town people were not forced to go to works outside, nor were people from villages sent to the works at Vellore.

The distance test has been a good deal relaxed in this way : that people who were living in a cluster of villages, near a work, came to that work, and when there was distress all over the district, it seemed unnecessary, and cruel, to shift people about, when it was certain that they would be put on a work at one place, if not at another. There was a tendency among the Civil Officers too, from a feeling of compassion, to bring works near to the people, rather than to bring the people away to works. In the height of famine this system is, I think, quite admissible, but when times are not so bad, it is faulty. Villagers that were not in distress applied for work near their homes : they were told they could not be employed there, but that there were works further off for them : they altogether declined to go. Here the distance test acted as a check on the villagers. Having obtained nominal rolls from the Civil Department, they managed to represent themselves as in need of employment, but when subjected to the distance test, they no longer cared to ask for work. The test has been very effectual, and I am sure it has kept away people who were not in distress to a very considerable extent. I do not think it has been too severe at all ; for if people were really unfit for work away from their homes, there was Civil Agency work or village relief to keep them from starvation. In general, I would say the distance test should be applied according to the local circumstances : when there is no doubt from the peoples' appearance that they must work, I would not care where they found the work ; but when there is doubt, then I would transfer the people to a distance.

Captain Awdry.

The distance test has been variously applied in this district. In some cases coolies have obviously preferred to remain at night at their own homes, distant in one case nine miles from the work ; this involved starting to work very early in the morning and returning very late at night, but they preferred it to camps on the works. I have never insisted on their living in our camps, but when the severity of the famine was a little passed I directed that coolies should not be employed within ten miles of their homes, so that their remaining on the works became tantamount to their living away from their homes.

Towards the latter part of the famine the inhabitants of Z would be told to go to work at B and told they could not be employed at A and at A they *would* not be employed, but it was no duty of this department to insist that they should go to B ; they might either remain at Z and not work or go to B to work. I have allowed a relaxation of the test along the Cauvery bank work and the Poogalore channel work because the people of neighbouring villages had been on the works all along and done good work and were working at not greater than normal rates, *i.e.*, below the famine.

Some old people may have been kept away, but I do not think many, and I consider a ten miles or more distance from their homes as a very good test. I would relax it in favor of the small Puttadars as they cannot well leave their lands, at least if they do they will be uncultivated, which is worse than a small extra expenditure of relief on them.

Lient.-Col. J. O. Hasted.

The distance test, I do not think answers. These people are hard to drive, and though many will go to a distance with their families for means of subsistence, they will not be driven to any particular work. Attempts were made to bring down large numbers

Lient.-Col. J. O. Hasted —continued.

of coolies from Kurnool District to the Kistna Delta works; they failed altogether. Many started, some of them came to the work, but hardly any remained. On one occasion when I was visiting a relief work, a list of some hundreds of coolies sent by the Kurnool District authorities was brought to me, and I directed that the whole body should be drawn up at a little distance for examination. On proceeding to examine them a little later, not one was to be found, and I was told that, hearing of sickness in the camps, the whole had decamped immediately. On another occasion, nearly 200 were brought down, work was allotted to them, tools served out and so on, but the same evening they came to me and said they must return to their homes, as there was sickness in our camps. If accounts are correct, there is no doubt of distress being very prevalent in the part of the Kurnool District these coolies were sent from.

Mr. Nordman.

The Distance Test.—People should not be sent too far from their homes; to which they may otherwise never return, but wander about from place to place until they die by the roadside. Twenty miles I consider, save in rare and exceptional cases, the maximum distance to which people ought to be sent for work. The test has, when judiciously handled, been on the whole effectual, and has kept away many persons who were not in distress. It has, on the other hand, been occasionally too severely enforced and kept away people who were in distress.

Regarding the question with A, B, Z:—to my knowledge, not as a rule; but in some instances, yes. The people were sent to B in charge of a responsible subordinate, and on the road a certain proportion of them would abscond, and find their way back to the works, through a relief camp.

The test has been relaxed occasionally, especially where it was desirable to employ a certain class of people, such as woddors for instance, upon a work for which they are peculiarly fitted and which happened to be nearer their homes.

Mr. J. W. Rundall.

The Distance Test.—This is most important and should be rigidly enforced; it is a test for the enforcement of which the Civil, not the Professional Department must be responsible, and moreover it is one which has been very much ignored during the recent famine.

From what I gather, the inhabitants of Bellary and other large towns were employed in the immediate vicinity, and as there was no tasking and scarcely any professional supervision, the actual out-turn of useful work has been next to nothing. The distance test would have prevented the works becoming a lounge for all the hangers-on of a large military station. During the latter part of the famine, the inhabitants of Z have been sent to B and refused admission at A. I think 10 or 12 miles should be the minimum distance, and laborers should not go some distance to and from the work, but should be hutted at the work. The only relaxation of the distance test I would allow is the employment of the weaker people on well and tank clearing near the village *after* the bulk of those requiring relief have been sent to some work at a distance, and from these drafts of able-bodied people should be sent periodically to the large work.

Major Meade.

The distance test is most valuable and should not be less than 10 miles. In this district, South Arcot, there has been no great

Major Meade—continued.

famine, but great distress. There were two famine relief works started as it was found that there were a large number of coolies on each work being near it, they were transferred to the work farthest from their homes; but few of them stood this test, they went away to their ordinary vocations.

The famine relief rates are very high, especially when the payment to the children is considered, and it is too attractive to coolies who live near the work. I would have no modification of this test for famine relief works proper.

Mr. Cotton.

On the work I have been in charge of the coolies have come from distances of 20, 25, and 30 miles and in a desperate condition, sometimes too weak to work at all for a day or two with hardly a rag, in some cases not even a rag, they have lost their all; their villages will go to rack and ruin, and they have been driven to the last extremity. I consider that where it is advisable to start a large work that those coming from a distance should be relegated before they have come to this sad stage. The test is quite sufficient at a distance of three or four miles, not more, so that they can get back to their villages at night. On the work I am in charge of now I have found this the case, those who belonged to villages near by left as the work proceeded. In the Bengal famine in my experience, in the Sarnu and Chuprah Districts, the embankments on the Gunduck and new and useful roads were quite sufficient to employ the people, and they were able to return to their homes at night. You saw no deserted villages and houses in ruins, and few homeless people. It appears to me that the test was sufficient if they went to and from their houses to their work.

Mr. L. W. Paynter.

The distance test was only applied a few times after I had charge of the works. The people employed by the Civil Department, and supposed to have undergone this test, were kept on by me on the same works until more labor was required on other works, and it was necessary to transfer some of the people. A gang of 500 in charge of maistries were ordered from one work to another of the same description only 5 miles distant, and not 200 joined the new work; what became of the remaining 300 I do not know, but as this occurred last November and there had been heavy rain for some time they probably found work in the fields near their houses. Afterwards in December a work was closed, and the people about 450, employed on it, sent in charge of their maistries to another work only a few miles distant, and on this occasion they all deserted. The test was, however, not put into force by me chiefly for the purpose of proving it, as I only received charge when the distress was rapidly diminishing, and all the people made over were supposed to have undergone the test, but because more labor was required in one place than another. I do not consider this test is too severe, and that it has kept people away who were in distress; and it is effectual in preventing people coming who are not in distress if combined with the labor test. The distance is not sufficient if the people can return to their homes each day; it should be far enough to compel them to live away from their homes.

Mr. Leggatt.

Distance Test.—This test has been applied with advantage in this district; works have gradually been closed, and the laborers employed thereon have been shifted to neighbouring works first at short

Mr. Leggatt.—continued.

distances, so that they were able to go to and from the work to their villages, and afterwards to longer distances from their homes. From 5 to 20 miles was considered sufficient for this test. The test has been effectual in keeping away persons who were not in distress. I do not consider it has been too severe in this district; people who are in distress and willing to work would gladly go any distance to earn their livelihood.

If any modification of the distance test should be needed, it might be made in applying the test to other than able-bodied persons with whom the Public Works Officers should have nothing to do.

Mr. Maxwell.

On a road work which is generally of some length, even though all the people are paid the same rate, the strongest should be made to walk the farthest, and the same for other works if possible. I have never found it practicable from the large numbers employed on my works to make the inhabitants of particular villages go to a distant work; all that could be done was to observe which end of a work was nearest to the homes of the majority and make that the locus of the weak people no matter where they came from, the farther end being for the strong. This was convenient in other ways as the third-class people were close at hand for daily payment. Some of my works were five miles long and had 3,000 people employed, so that the strong had to walk long distances.

The only other application of a distance test that I am practically acquainted with, and consider legitimate, is that which was applied to all people on works within a radius of twenty-five miles of the Palar Anicut in North Arcot. These people had been paid regularly for a long time and not much task exacted from them, so that they had acquired bodily strength and also confidence in their managers; the minor works were closed and the able-bodied people drafted to the central (first class) work on Anicut Channel, only the third-class people being allowed to remain near their villages. Large numbers (15,000) were thus collected together, some from twenty-five miles distance who would not have gone two miles from their homes at the beginning of the famine before they acquired confidence. This drafting was made rather too suddenly, and subsequently there was distress in at least one of the deserted taluks; more timely notice might have been given, and the minor works should not have been closed altogether, as was the case with the exception of one or two in each taluk.

My opinion is that it is right to give every one a chance of work on low pay within two or three miles of home, a continual draft of able-bodied people being kept up in the direction of any first-class work which can be opened in the district on higher scale of wages; but I consider it waste of money to admit people either with or without nominal rolls directly on works where there is a high scale of pay, as my experience is that any work with good pay will be crowded immediately with able-bodied people from the neighbourhood who have enough of money to bribe the village reddies.

In the first instance the wage test of a bare subsistence should be applied with daily payment, light task, and work near home. The next step is to pay the people who walk farthest the higher rate of pay to prevent overcrowding near the towns which nearly always takes place and is likely to produce cholera. The third step is to draft people to a first-class work who are considered able to go, and they should be given batta daily and taken care of on the way.

Mr. Maxwell—continued.

I have carried out the above classification and circulation continually and find it prevents overcrowding of the works, it simplifies tasking and payment, and I do not think there has been undue hardship as only in the case of the Palar Ancient channels, when transfer was made by order of Government, has the distance test exceeded 15 miles, also the same individual was only transferred once as a rule.

A certain percentage of people sent out to distant places were readmitted to their original work, when on farther inspection it was found they had not improved in condition and were unfit for the task; they were paid full for day of return. I think that a distance test should not be exacted from any one at first, that it depends on the judgment of the officer in charge of works as to the time, persons, distance, &c., whether it will be too severe.

Mr. Russell.

This test has hitherto been only applied by the Public Works Officers, the practice being for the Revenue officials to send nominal rolls with the applicants for admission into relief works, the production of which is the authority for the Public Works Officers to grant work. The rolls have then to be carefully gone through, and the people put to work at some distance from their own village. As people invariably apply at some work within a very short distance of their homes, they are of course sent off to work at some distance, but in many cases they do not go, but after fruitless and repeated applications all down a line of road to each officer or subordinate wander back to their villages, finally receiving relief either in a relief house, or on a Civil Agency work. I would suggest that instead of granting merely work-tickets, the Civil authorities sort the coolies by villages, and give them tickets for *the particular work*, which fulfils the conditions of the distance test. The people would then know at the time of their applying for tickets of admission the conditions under which alone relief would be given to them, and that if they did not accept those conditions relief would be denied to them, whereas at present the majority of people who come on to works are not aware of the conditions on which relief is to be given, and when refused work by the Public Works Officers and Overseers on account of the near proximity of the work to their villages they become disheartened and will not go further in search of relief imagining that they have in some way been swindled, or that the Public Works Overseers will not take the trouble to receive them. I, therefore, think that it is of importance that all applicants for relief should clearly understand, at the time of application, the conditions of relief, and should have noted on their tickets and be informed of the name of the particular work on which they can obtain relief. They will either then refuse to go, or they will go to the work directed, knowing that they will obtain relief at no other, and much additional trouble will also be taken off the hands of both Civil and Public Works Departments.

Ten miles from their homes has been taken to be the least distance at which work can be given, and it has been insisted on that coolies should live in the camps provided for them, as it was considered impossible that they could both walk to and fro for this distance, and at the same time do the daily amount of work required of them.

The inhabitants of Z have invariably been refused admittance on the work at A, near to their own village, and have in all cases been directed to go for work to B, ten miles off. In order to ensure that they do go to B, they are sent off under charge of a maistry, but there is of course nothing to prevent them wandering off anywhere they choose.

Mr. Russell—continued.

The test has only been relaxed in a case where the next work was situated at a distance of 25 miles or more and in the case of Civil Agency coolies. The test has been most effectual, and has, I believe, kept away all people who were not really in need of relief. I do not think the test has been too severe, but owing to the facts mentioned above, viz., that people come on to works under a false impression of the conditions under which they can obtain work, and are disheartened when they learn them, I think that it has practically kept away some people who were in distress. I can propose no modification, except that as mentioned above, viz., that the conditions under which alone work can be given to them, be clearly explained to all people when applying for relief to the Civil Officers.

Captain Morris.

My experience during the famine is, that many will come to a work when within reach of their homes, that is, within five or six miles distance, but who will not go to live in working-camps, when such work is too far from their village to admit of their walking to and fro daily. I have ascertained that, to one work, at all events, carried out during the late famine, people would come daily from villages, fully five miles distant, though sheds for their accommodation were provided on the work itself. It is not at all desirable that laborers should thus needlessly expend their strength, but it is not possible to compel them to avail themselves of the shelter provided.

I am unable to answer the question as to whether people were refused admittance at one work and directed to another. It was laid down as the duty of the Public Works Department to employ all people sent by the Revenue Department; and those thus sent were drafted off to the different works. Registration was carried on at the principal villages. This I think a mistake. The Registry offices should be on the works themselves, and these should be so arranged as to be within a moderate distance of all,—say twenty miles or so. This could, I think, be easily managed by having one or two large works in each taluk, on which sleeping accommodation should be provided for all who chose to avail themselves of it. I have no doubt the distance test, as applied in this district, has, as a rule, kept away those not in distress, and in some cases, but not many, it has been too severe and kept away some who were in distress; but this is unavoidable. It is simply impossible, consistent with proper supervision, to provide work within easy reach (that is, within a distance of three or four miles) of all; indeed, I doubt if it would be possible under any circumstances. Within a distance of twenty miles, people could easily return to their villages to take advantage of any favorable change in the season.

Mr. Ruthnasabapathi Pillay.

(1.) Within five miles, people, whether really needy or not, take anxiously to work. Beyond five miles and within ten miles, they go willingly enough, but beyond ten miles and within twenty or twenty-five miles, only the needy go. Beyond that, even the needy are unwilling if they had their homes or huts. There is not among the people here much tendency for emigration, unless desperately driven to it by force of time and distress. In this Division, when people of village L refused to go to village B, they were generally thrown off employment, several who were not really needy were put off, but not efficiently, on account of the loose system of admission these people were again taken on.

(2.) There was also another difficulty experienced which requires consideration, viz., the separation of the weak from the

Mr. Ruthnasabapathi Pillay—continued.

healthy. Though they may not be members of the same family, people of the same village or adjacent villages wish to live together ; separation often disheartens them. Hence also my suggestion about Medical Assistants being given to Public Works Officers, who must inspect the camps at least every week and redistribute the people. By this means a more correct approximation to the actual excess due to famine and famine sickness could be struck out. Thus, though in paragraph 2 of this Chapter, I said that some require to be provided for on Civil works, my own humble opinion is that the distinction is not a very conducive one. Especially that "members of the same village to keep together" appears more important than "maximum work turned out in return." For good results in either way, I believe my suggestion may work better. Hence also my impression that all works should be under the same agency.

(3.) To continue from paragraph 2, these people thus admitted again were employed on civil works, and there was not sufficient check to the influx, admission, and readmission of the said-to-be needy. It was therefore also suggested in Chapter II that villagers must be required to certify the applicants, and that foreigners (less than six months' residence) required to be specially noticed. Occasional and temporary transfers to works within twenty miles and beyond ten miles must be found a good test.

Mr. Mooneappa Pillay.

I have been in charge of Udiarpolliem Range of the Trichinopoly District during the last famine, and about 3,000 famine-stricken coolies were transferred from the famine depôt at Trichinopoly to the famine camps built by me at a distance of 45 miles from the above depôt. They were carried both by railway and land under the charge of overseers deputed for the purpose. Those who travelled by land travelled at the rate of 10 miles a-day, a march found convenient to them, and a batta of 1 lb. of rice per head for each travelling day was allowed to them. Those who were sent by railway were paid to railway fare. Having been cut away from their homes, they had to be settled at their camps and attending works within a reach of five miles, which they felt convenient. As I had two camps built, one at the distance of four miles from the other, I have had occasion to direct coolies to go from one camp to another, and, in doing so, to ensure their arrival thither, I have escorted them under peons. Every one of them had been famine-stricken ; the application of this test had been effectual, and had not kept away people in distress, because they had found relief in the shape of batta even during their journey.

Mr. Abdul Kareem Khan.

This test has in some cases been improperly applied and the laborers dragged to unnecessary long distances. A distance of fifteen miles seems to be quite enough for all purposes. During the height of famine it was enough that the laborers had to go some distance to and from the work, but at its beginning it is to be insisted that they should live away from their homes. The penury that was indicated from their appearance and clothing and a regard to the sanitary measures necessitated the relaxation of the test, and hence the villagers being close to a work had also been employed on that work. The test on the whole has been to a great extent effectual, but at the same time it has been too severe when misapplied ; it would therefore be advisable if a maximum distance of fifteen miles is fixed for this test, and that its enforcement is restricted at the beginning and in

Mr. Abdul Kareem Khan—continued.

the decline of famine, and that its relaxation authorised when the appearance of an applicant indicates extreme poverty and weakness.

Sergeant Stewart.

The distance test was not much attempted, and so far as carried out only kept laborers from relief, some of whom, I fear, really required further relief. I beg to submit that this test is objectionable and tends to keep people in their villages starving. If it be not as a test, but for better supervision, or more useful work, then they should be taken away from home; but as a mere test sending men of village Z away 10 miles to work at A when work at B is near their village, leads them to doubt the reason and refuse to go.

Lieut. Henderson.

The distance test often fails, because, with a limited staff, it is impossible to trace or identify individual applicants for relief. All who come to large useful works should be taken on irrespective of the distances they may come.

Deputy Surgeon-General P. G. Fitzgerald.

The modification I would propose in the application of this test is its entire abolition. It is founded on the assumption that, if a man, though willing to work near his own house, refuse to accept work at a certain distance therefrom, he must have sufficient means for the support of himself and his family independently of that offered to him on the above condition. This I believe to be a mistake, and a mistake in a matter of this kind may mean death to thousands of people who might otherwise live. A man may refuse work on the condition mentioned for other reasons than that which alone is supposed to actuate him, as, for example, from a consciousness that his strength was unequal to a day's work *plus* a journey of four or five miles to reach it. The effect of the test in such a case will be to let him die by slow starvation, or, at the best, to throw him into the class of "special cases" who are incapable of any labor but must be fed notwithstanding.

It is unreasonable to expect that the ordinary famine officer will be able, from a man's appearance, to tell whether his plea of inability to work under such a condition is well founded or not. Even a medical man would often hesitate to give a positive opinion in such a case, for he knows that the *appearance* of strength does not always imply its actual possession, and that the human frame, like a beam of wood, is no stronger than its weakest part.

Surgeon Gray.

In the Kurnool District from four to six miles was the distance considered sufficient. Many coolies came from ten to twenty-two miles away, and these, of course, had to live away from their homes.

Coolies from Kurnool and Nagalapuram went to work at a place called Peddapaud, which is four miles from Kurnool and six miles from Nagalapuram. After work these people returned to their homes. In one instance the distance test (for such it must be called) was rather too severe. This was in the Kurnool District, where in about May last relief coolies were employed on the Bellary road. According to Government Order the Department of Public Works Officers were not allowed to register people for work; the Civil authorities had to do this. Only two enrolling depôts were established—one at Kurnool, and the other at Pattikonda. The distance

Surgeon Gray—continued.

between Kurnool and Pattikonda is fifty-three miles, so that persons in the villages at Kodoomur and Koravamala had to go a long distance before being enrolled.

Kodoomur is twenty-two miles from Kurnool and thirty-one from Pattikonda.

Koravamala is eighteen miles from Pattikonda and thirty-five miles from Kurnool.

I saw many people in these villages who refused to go to either Kurnool or Pattikonda, because they believed that telling them to go so far was simply another way of telling them that there was no work for them. When there are only two enrolling depôts so far apart, the Village Magistrates should be instructed to send those people willing to work to the enrolling depôt with a nominal roll in charge of a Kattpuddi or a taliari, taking measures to provide for them on the way.

Surgeon McNally.

Owing to circumstances the distance test has been variably applied, or, rather, its incidence has been variable. As a rule laborers did not go more than five miles to relief works; but, at all large works, there were many wanderers from distant places who either put up in the neighbouring villages or bivouacked on the spot. They had usually to find shelter for themselves, but, in some instances, sheds were built for them.

In no case within my knowledge was the distance test enforced in the manner described.

In some cases—for instance the Muddanur-Jammulamadugu Ghat Road works, where nearly 8,000 people were at one time employed—laborers were said to walk as far as five to ten miles every day to their work. Those only who had some strength left were able to accomplish this, and the test fell very unequally on the inhabitants of different villages. I strongly disapprove of such a distance test. The most feeble individuals—those who are most in need of relief—are precisely those who are least able to bear it. Besides, a great deal of working time and energy are wasted in walking to and from the works. If any distance test be adopted it should be to compel relief laborers to live at the works, where necessary shelter ought to be provided for them.

QUESTION 6. *The Wage Test.*—Where relief is given in the form of money wages, the wage will be chiefly based on the quantity, kind, and price of food required to support life, with a margin for condiments and contingencies. What are the assumptions as to the quantities of food to be given to laborers of different ages, sexes, and capacities for labor, and the extra allowance for condiments, &c.? Have you any data by which to test the accuracy or error of the assumption made as to the quantity of food required? State your experience as to the physical condition of laborers who have for some time subsisted on any given relief wage, giving the amount of that wage, and the quantity of food it supplies? What have you ascertained as to the actual kind and quantity of food purchased by laborers with their wage? How is the price ascertained of the standard kind of food on which the wage is based? How would you, with your present experience, formulate the conditions of the wage test?

Sir W. R. Robinson.

“Wage Test” means of course that work is to be done for “subsistence wages.” So long as the wage is sufficient for subsistence

Sir W. R. Robinson—continued.

and for maintenance of strength to labor, and if sufficient food can be got for the wage, the principle is right. But, of course, very close observation is required as respects this vital adjustment amongst miscellaneous labor-gangs of all sexes and ages; and here no doubt we largely failed. The addition to an adult's wage, of three pies for each of his infant children—sixty-four for a rupee—continued throughout our famine period a futile measure as respects saving life, and was otherwise productive of much mischief. The necessities of the case dictate prompt distribution of wages—much suffering and probably fatal debility was caused by neglects in this respect during the height of our famine in many places.

Mr. Longley.

It has been assumed by some, though in my opinion (confirmed by experience) fallaciously, that the price of 1 lb. of grain is sufficient to maintain an adult laborer in health, allowing a few pies for condiments, and the following scale was allowed in G.O., No. 329, dated 31st January 1877 :—

(1.) On works on which taskwork not less than 25 per cent. below ordinary task is enforced—

For a man	the value of 1 lb. of grain	+ 1 anna	for condiments.
" woman	" 1 lb.	" + $\frac{1}{2}$	"
" boy or girl	" $\frac{1}{2}$ lb.	" + $\frac{1}{2}$	"

(2.) On works on which taskwork not less than 50 per cent. below ordinary taskwork is enforced—

For a man	the value of 1 lb. of grain	+ $\frac{1}{2}$ anna	for condiments.
" woman	" 1 lb.	" + $\frac{1}{4}$	"
" boy or girl	" $\frac{1}{2}$ lb.	" + $\frac{1}{4}$	"

The effect of the above wages was carefully watched, and in G.O., No. 1088, dated 15th March 1877, it was deemed insufficient to maintain the people in condition. Accordingly a relaxation was allowed in the case of persons whose appearance indicated physical deterioration.

In G.O., No. 1788, dated 22nd May 1877, the wages in both the above classes of works were assimilated. In G.O., dated 24th September 1877, No. 2847, the following scale was adopted :—

(1.) Upon Professional Agency works (corresponding with Class I of G.O., dated 31st January 1877)—

For a man	the value of 1 lb. of grain	+ 1 anna 6 pies.
" woman	" 1 lb.	" + 1 anna.
" child of seven years and upwards	the value of $\frac{1}{2}$ lb.	+ 9 pies.

(2.) Upon Civil Agency works (corresponding with Class II of G.O., dated 31st January 1877)—

For a man	the value of 1 lb. of grain	+ 1 anna.
" woman	" 1 lb.	" + 9 pies.
" child	" $\frac{1}{2}$ lb.	" + 6 pies.

The wages sanctioned in G.O., dated 31st January 1877, were being paid on Sundays, though no work was exacted on those days; but, as the scale prescribed in G.O., dated 24th September, included the pay for Sundays also, no payment has since been made on those days. Assuming the price of 1 lb. of grain to be 1 anna, the following statement compares this scale as distributed on all the seven days of the week with that sanctioned in G.O., dated 31st January 1877—

Mr. Longley—continued.

Description.	G.O., No. 2847, 24th Sept. 1877.		G.O., No. 329, 31st Jan. 1877.	
	A.	P.	A.	P.
<i>Class I, Works—</i>				
For a man	2	1½	2	0
„ woman	1	8½	1	6
„ child	1	0½	1	0
<i>Class II, Works—</i>				
For a man	1	8½	1	6
„ woman	1	6	1	3
„ child	0	10½	0	9

Early in 1877 I visited the relief laborers, some 3,000, engaged in dismantling the fort walls at Dharmapuri. The work was comparatively light and adapted for women and children. It was prosecuted on the daily wage system. The rates of wage averaged—

For men	2 annas.
„ women	1 anna and 6 pies.
„ children	1 anna.

Wage was given on Sundays, but work not demanded; the non-working children of employes were fed at kitchens on the work. The average price of rice was 1 anna and 2 pies per lb.; deducting 3 pies and 2 pies respectively for condiments from adult and children's wages, men could procure 1½ lb., women 1 lb. and 1 oz., and children 11 oz. of grain. On this wage the men were in best condition, but the women and children were all below par. A number of these gangs were inspected by Dr. Macdonald (Bengal Medical Establishment), doing duty as Sanitary Officer in the Salem District, and he wrote thus on the 9th May 1877:—

“The women, lads, and girls were under-fed. Even those who received some aid from friends were in bad condition.”

What you have ascertained as to the actual kind and quantity of food purchased by laborers with their wage?

That they got the best food procurable, and as much of it as they could get for their money; the very confirmed betel and tobacco consumers sacrificed a modicum of food to gratify what to them was almost a necessity in the shape of the betel or tobacco.

The cheaper kind of food is taken as the standard; once in every fortnight Tahsildars ascertain the ruling price in the bazaars of their head-quarters and communicate the same to the Public Works Department Officers.

How would you with your present experience formulate the conditions of the wage test?

The wages should be regulated as follows:—

For 25 per cent. of the ordinary outturn—

	Food-grain.	Money-payment for Condiments.	
		OZ.	PIES.
For a man	20	+	8
„ woman	20	+	8
„ child	12	+	3
For 50 per cent. of the ordinary outturn—			
For a man	24	+	8
„ woman	24	+	8
„ child	16	+	3
For 75 per cent. of the ordinary outturn—			
For a man	30	+	8
„ woman	24	+	8
„ child	16	+	4

I believe, if these rates are curtailed, the physical condition of laborers will sensibly deteriorate.

Mr. Price.

Many years before the famine occurred I had given some attention to the habits of the laboring classes in the adjacent district of North Arcot and in a taluk (Wallajah) bordering on this district. I made inquiries of many persons regarding the quantity of food eaten by the working classes. I then learned that the regular allowance which a really hard-working and healthy male adult cooly could dispose of in a day was one local measure of *raw* rice (120 tolahs) = 3 lbs. In Salem pretty nearly the same calculation was made, the "mánam" there being, as well as I can remember, just about half a Madras measure. The quantity was two mánams of rice per diem and a little less in the case of dry grain. The quantity mentioned may look rather large, but it is to be remembered that the man gets nothing with his rice or dry grain excepting a little pepper-water and salt, or a chutney made of tamarind, a brinjal or two, and pepper. I have often seen the working people eating, and have wondered how they could stow away such masses of rice or ragi with so little to help it down.

The regular wage in harvest time, when men have to work hard, is 2 annas and a measure of grain, or else 2 annas and one or two meals, according to the master's power of bargaining. People who are not so heavily worked of course do not eat the quantity mentioned. In Bellary, where I was a divisional officer, at the commencement of the famine we gave, I believe, a Bellary measure, which to the best of my recollection is $2\frac{1}{4}$ lbs., to a male adult, half a measure, to a female and child over twelve, and quarter for each child. I think, too, that there was a money payment also of 6, 4, and 2 pies for condiments, but cannot be sure. The orders issued on the subject are on record at Bellary. There were so many changes in wages at different times that without actual records to refer to, one cannot be certain of anything. I however remember the Bellary measure of rice being issued amongst the ordinary run of natives; from two to three ollocks (eight ollocks make a Madras measure) of raw rice is taken as sufficient for a meal and there are two such meals eaten in the day. This would give from half to three-fourths of a Madras measure per diem as the allowance of an adult male in fair work, or from 1 lb. 1 oz. to 2 lbs. 7 oz. The average for laborers may be taken at 2 lbs. for a man, $1\frac{1}{2}$ for a woman, and two-thirds to one-third for a child; 3 pies per head will, in ordinary times, purchase quite enough salt and condiments and, where there is a family, they manage on less per head. I remember when we served out grain at Bellary, one-eighth of measure (Bellary), which was about 3 or 4 pies' worth, would buy all the requisite condiments. The bazaarmen on the works used to sell them by "penn'orths;" the coolies could have so much of "this that and the other" or of some other "this that and the other" for the one-eighth measure, and they bought according to their taste. I, three or four times, sent men to buy and bring me these *petits plats* of condiments and they were always pretty nearly the same and enough. When the one-pound ration was introduced prices had risen and the six-pie allowance was probably not more than enough. I have seen the effect of the payment of the price of one pound of grain and 6 pies on a very large number of laborers. My experience is that they slowly but steadily declined in condition, that the slightest scratch produced ulceration, and that if taken ill it was a serious matter with them. When we paid in the price of a pound of rice and the people could procure dry grains at a cheaper rate, they managed to get on, but where the rule was strictly enforced, and the price of the cheapest grain ordinarily consumed by the laboring classes was paid, the effect was marked and unfavorable.

I served through the really severe portion of the famine in districts (Cuddapah and Bellary) where dry grain is the staple food.

The people always purchased this when it could be obtained. If not, they bought ship (boiled) rice. When paid in rice they, where they could, exchanged the whole or part of it for dry grain. The cash part of the wages was spent, as far as it would go, in condiments, betel, and tobacco. I found that young women and children were apt to waste their money in sweetmeats of coarse kinds. I never looked into the actual quantity of food purchased by laborers during the famine excepting condiments. I knew what they received and what the prices were and consequently what they could obtain. Dry grain was a little cheaper than rice, but (I have no accounts to which to refer) that the coolies ever got more than $1\frac{1}{2}$ lbs. of dry grain for the price of the one pound of rice which was served out to them. The price of the standard kind of food on which the wage was based was fixed by taking the retail bazaar price at the head-quarters of each taluk. Government permitted, for a time, a slight addition to be made for villages more than 12 miles from the cusbah. I am altogether opposed to a wage test, but if it is desired to employ it, there are two modes by which to fix it.

Mr. McWebster.

The Professional Agency wage is—

The Civil Agency rates are—

If the Professional Agency coolies do not perform a proper task, their pay is reduced to "Civil Agency" rates.

Malingerers and idlers of the latter class are supposed to have their pay reduced to a camp diet rate which does not exceed 20 oz. of raw grain and 2 oz. of dholl, with condiments.

Mr. McWebster—continued.

Owing to their being no task for such coolies the penalty is very seldom inflicted.

The physical condition of laborers who have for some time, *i.e.*, for over six months, been on the "Professional Agency" wage, is decidedly good, and is better the longer they have been on it. When the distinction was made in September 1877 between "Professional" and "Civil Agency" coolies, those who were classed as "Professional" had been for some time on relief works and were in a tolerably fair condition. They have since rather gained than lost in condition. The "Civil Agency" coolies were originally not in such good condition and do not seem to improve so much as the "Professional Agency" coolies.

The children under seven years of age are generally not in a good condition, but the condition varies much under different maistries. My experience is that the children fed on contract are the worst. The only change I would recommend would be to reduce the rates of wage for women as it is high in proportion to the rates for men, and higher than the wage in ordinary years, though of course in a year of distress it does not purchase so much food.

I have devoted much attention to the quantities of food required by laborers; and I am deliberately of opinion that one pound of cleaned grain for adults and half that quantity for children under ten years of age is ample. I take the following data abstracted from a mass of information collected by me in the districts of Nellore and Kurnool during the famine.

A family of the best farm-servant class earns daily in ordinary times—

The man	1½ lbs. grain.	According to Sir Richard Temple's scale	Under Government Order,
Wife	1½	this would stand—	24th September 1877,
Mother	1½	Four lbs. in grain and	the earnings would stand
2 children	1	3 annas in the	as follows:—
	5 lbs. and 5	higher scale, or 1	Four lbs. in grain and 5
	pies in	anna and 6 pies in	annas on Professional
	money.	money according to	Agency works, or 3 an-
		the lower.	nas and 6 pies on Civil
A Mussulman bandy-		Three lbs. + 2 annas	Agency works.
driver in Kurnool		6 pies by the higher	
town has a wife and		or 1 anna and 3 pies	Three lbs. + 4 annas on
two girls aged 6 and 4		by the lower scale.	Professional Agency
years. Total earn-			works, or 2 annas and
ings daily enable him			9 pies on Civil Agency
to buy 3 lbs. of grain			works.
which leaves him 1			
anna and 3 pies for			
other expenses.			
Another village-cooly		Four lbs. + 3 annas	
along with a wife,		and 6 pies by the	Four lbs. + 5 annas and
father and two child-		higher, or 1 anna and	6 pies on Professional
ren earned daily the		9 pies by the lower	Agency works, or 3 an-
value of 3 lbs. 5 oz.		scale.	nas and 9 pies on Civil
grain and 1 anna and			Agency works.
9 pies in money.			
Another village-cooly		Three lbs. grain and 2	
family, consisting of		annas 9 pies by the	Three lbs. + 4 annas on
a man, wife, girl aged		higher or 1 anna and	Professional Agency
10, girl aged 8, a boy		6 pies by the lower	works, 3 lbs. + 2 annas
aged 5.		scale.	9 pies on Civil Agency
Total earnings equal			works.
daily 2½ lbs. grain			
and 8 pies in money.			

Mr. Crole—continued.

The condiments actually used by families of any of these classes are somewhat as follow :—

	PIES.
2 oz. salt	1
1 lb. greens or equivalent in vegetable	1
2 oz. dholl... ..	2
$\frac{1}{2}$ oz. tamarind	1
Chillies, tobacco, betel and nut	2

Total... 7 per diem.

for the whole family, leaving a considerable daily unexpended balance under any scale of relief wages.

I have had under my own personal observation in the Nellore District large bodies of coolies on the "Sir Richard Temple's lower ration," and their physical improvement was in general steady and marked, so much so, that I was in the constant habit of drafting coolies so improved from Civil Works to the Buckingham Canal.

Those on the higher wage, introduced by Madras G.O., No. 2847, Pated 24th September 1877. either turn out in families and earn far more than they ever did in their lives before, or else the members on works support the rest of the family who stay at home. Rupees 15 to Rupees 20 a-month is not at all an impossible sum for a family to earn. In point of fact, instead of being a mere subsistence rate, the scale has turned out to be a wage which leaves a handsome margin. I have had repeated complaints of the present wage preventing ryots from obtaining laborers for their fields.

With my present experience I should certainly not exceed the rates recommended by Sir Richard Temple.

The subject has been much obscured by theory and sentiment. We are bound, however, to pay heed to facts. State relief is, under any circumstances, very expensive and somewhat wasteful. It becomes doubly incumbent, therefore, to prune away every excrescence over and above the bare sum required to save life. Hardship we can do nothing to relieve. The people must bear this as their share of the famine trouble. I believe that the data abstracted by me above give a true representation of the ordinary food consumption of the classes who mostly fall on the hands of Government during a famine. I am aware that medical opinion is against the sufficiency of such a dietary; but that is little to the point where it can be proved that the people do actually, as a habit, in ordinary times subsist as I describe. The Government cannot be called on to give them more food during a famine than they are accustomed to in times of plenty, merely on a theoretical plea of insufficiency; otherwise, it is hard to see how the duty could be considered to cease

NOTE.—With reference to this matter please also refer to answer to Question 9, Chapter I.

there. It would be absurd to assert it to be a duty permanently incumbent on the State to supplement the food of the population up to the ideal standard of sufficiency.

Mr. Grose.

My observations lead me to believe in the accuracy of Dr. Cornish's calculations as to the amount of food absolutely necessary to sustain life.

The rates of wages which have been in force from time to time are laid down in the orders of Government on the subject.

The finally resolved wage, viz. :—

Man, price of 1 lb. grain <i>plus</i> 1 anna.	
Women " 1 " " " $\frac{1}{2}$ "	
Child " $\frac{1}{2}$ " " " $\frac{1}{4}$ "	

Mr. Grose—continued.

was too small in theory, but it was palliated by the grant of Sunday wages, the three-pie allowance to children, allowance to pregnant women, &c., which made the total expenditure much the same as before. I remarked no falling off in the physique of laborers under the reduced wages, but those who came under my observation were in bad condition to begin with and continued so. When wages were first reduced the danger was great, but the evil was lessened by rain bringing fish, &c., and patches of dry grain were scattered all over the country. Even when these resources were exhausted, the palliatives, viz., the Sunday wages, the three-pie allowance to children, &c., were in force, and proved, so far as I could see, sufficient to prevent a catastrophe.

The laborers are supplied generally by traders who carry the food the people want to buy to the places where they are at work. At the Buckingham Canal where there were immense bodies of laborers, and the markets were few and small and in rare instances elsewhere, during the famine the supplies failed, and then grain had to be supplied through the interposition of the district officers.

Tahsildars ascertain the prices of grain weekly (at first they did it fortnightly) and send a list to the officers in charge of works and the wages are fixed accordingly.

I think the adult's wage should be sufficient on an average to support himself and a young child. Many of them support people too old to work who eat almost as much as they do. The usual amount of grain eaten by an adult daily is about two pounds, that by a child from 7 to 12 one pound, and that by a child from 0 to 7 half a pound; accordingly, I think subsistence wages should be—

Man,	price of 2½ lbs. grain, plus 6 pies (for condiments).
Women "	2½ " " " 6 "
Child "	1 " " " 3 "

Mr. T. M. Horsfall.

The wages given in this district fluctuated extremely. Eventually the price of a pound of second-sort rice (the only grain really obtainable, but not the grain on which relief-laborers generally feed in ordinary times) was taken as a basis, and money was given extra. This did not work well for the reason that the coolies could not buy their grain at the rates given in the taluks. They were cheated by petty dealers, many of whom came to the works in the evenings and sold small quantities of grain at most exorbitant rates. Many coolies preferred buying of them at these rates rather than go to the village, say three or four miles, to buy in the bazaars there. The wages given just kept the coolies alive, that is to say, they remained much in the same state as when they came on the works. In this district the nominal price of grain was fixed in the taluk eusbas once a week.

Mr. Fawcett.

The only remark I have to offer on this question is that the coolies on works when I joined the division in May 1877, though generally not in bad condition physically, with the exception of the older people, had a great deal of sickness amongst them, and were not able to do good work. They had then been on wages of Annas 1-5 per man, Annas 1-2 per woman, and Pies 9 per child for about six weeks. In consequence of the weakness of the supervising establishment they had not been kept properly at their work, and often did little or nothing. Had they been kept hard at work on these wages, I am confident they would not have been in nearly such good condition. Great improvement in their work, appearance, and health was noticed

Mr. Fawcett—continued.

from the date of the increase of wages in June. I do not think any respectable work can be got out of people receiving less than the wages afterwards paid, viz., 1 lb. of grain + 1 Anna per man, 1 lb. of grain + $\frac{1}{2}$ anna per woman, and $\frac{1}{2}$ lb. of grain + $\frac{1}{2}$ Anna per child.

Mr. P. Soobien.

The system on which I conducted relief-works was this: the laborers were allowed some choice in forming the gangs according to their inclination, and were required to execute the amount of work which they should do, at the ordinary rates, for the wages they receive which were the bare subsistence wages. For instance, if the rate of wages was 2 annas per head and thirty persons formed a gang and the ordinary labor-rate was 1 anna per cubic yard, then the gang was required to execute sixty cubic yards of earth-work, and was paid at the rate of 2 annas per head. This system had the advantage of enabling weak members also of a family to earn wages, provided there were other members of it in the gang strong enough to make up the deficiency of the weak persons; and this is why some indulgence was allowed them in forming gangs according to their own way. If by a great increase in the rate of wages which depended on the price of the food-grains, the quantity of work to be executed also greatly increased, then discretion was used in exacting only so much work as it was reasonably expected could be performed. Of the various points on which information is sought in the queries from 6 to 22, I have answered only such queries as my experience with relief-works conducted on the system above explained enables me to answer.

Different rates of wages were given at different periods of the famine, and they were on all occasions sufficient to purchase the requisite quantity of food with a small margin for condiments. But I know by experience that the physical condition of the laborers was not improved by the different rates of wages given at different times, and no laborer who went to a work returned home from it with improved strength, but, on the other hand, he brought home only reduced strength. The reason for this in spite of the fact that at all times the rates of wages were sufficient to purchase the quantity of food requisite for one individual is to be found in the fact that the laborers had to divide the food bought with their individual wages among the members of their family which necessarily diminished the quantity required for one individual. True, the laborers had in several cases their wives working with them or elsewhere and earning wages, and that a small allowance was given for children if they were shown at the work (which was not always done, however); but they had generally some old or infirm member or members of their family or children at home who shared the food bought with the laborers' wages. Rice was the only grain available in this district when relief-works were started and executed, and laborers used this kind of grain only. The price was ascertained in the local markets and the wage fixed accordingly.

Mr. Pinto.

I would abolish the wage test altogether. The wage should be proportioned to the value of work done, or, in other words, should not be less, but more, than the normal rate according to the rise of prices of grain. This will enable the people to support their children and dependants unable to work whom, under the wage test, the Government has to provide for. The internal economy of families

Mr. Pinto—continued.

should be left to their respective working members; any attempt to interfere with it unsettles families. Members become separated and placed under different shapes of relief. They act in uncertainty and without concert, and a general demoralisation results. The Government may pay every man for value received, and leave him to manage his own business, setting its face against any other shape of relief. A few exceptions to this rule would, however, be requisite as regards principal towns where poor-houses on small scale and hospitals should be established.

Mr. Jones.

The scale of wages has been fixed by Government in their Order, No. 329, of 31st January last. The assumption was the value of 1 lb. of grain in case of men and women and of $\frac{1}{2}$ lb. in case of boys and girls with an addition of 1 anna for men and $\frac{1}{2}$ anna for women and children in Scale 1 and half those money-rates in Scale No. 2. Scale 1 was the rate at which laborers on the relief-works under me were paid, and it was sufficient to keep them in good condition.

Mr. Kitts.

Two scales of wages have been tried. The first gave to each adult male a money-wage equivalent to 1 lb. of 2nd-sort rice plus 1 anna for condiments; the second gave a money-wage of half anna less. Though the difference is nominally in the amount given for condiments, the practical difference was that all through the famine, a man on the higher rate was able to get $1\frac{1}{2}$ lbs. rice and a few condiments. On the second scale of wages I found that some coolies increased slightly in weight, while others decreased. Their future health usually depended on their bodily condition when they came on the work: hence, this scale is more risky than the higher, after regular work on which the coolies invariably improve. The lower scale has also a deterrent effect in keeping off the works men who really want work. Through their own fear of insufficient remuneration for work to which they are unaccustomed and disinclined, they hold back too long. And when a man who has already felt incipient starvation comes to the work, there is always a danger that he will spend too large a part of his wage upon condiments, thus staying his faintness without increasing his strength. Again, when a family comes to the work on the lower scale of pay, there is also danger that the parents will stint their wage-earning children. The laborers at two works (at Puttoor and Ranegoonta, respectively,) on second scale wages were weighed on 4th May and 1st June 1877. One set went down in weight; the others increased: I can only find the figures for the second set. They show that in the case of 264 coolies present on both occasions there was—

- | | |
|-------------------|--|
| (1) For 124 men | a nett increase of 269 lbs. or 2-16 lbs. per head. |
| (2) " 75 women | " of 61 " or 81 lbs. " |
| (3) " 65 children | a nett decrease of 27 " or 41 lbs. " |

To a woman the second scale of wages gave the price of 1 lb. rice + 3 pies; the first scale gave the price of 1 lb. rice + 6 pies; this was subsequently raised to the price of 1 lb. rice + 9 pies. The first rise of wages effected an improvement in the general condition of the female coolies, but no further improvement incident on the second rise was noticeable. Suckling women require to be paid at men's rates. Children from 7 to 12 have always received half a man's wage. On the first scale this is ample; on the second, it depends on the age of the child. Children under seven were paid 3 pies each; this was subsequently altered to a food allowance of 8 oz. rice. The

Mr. Kitts.—continued.

improvement was immediate and marked: the children had been stinted of food before; they now picked up flesh.

The coolies here, especially the lower castes, buy ragi when it is to be had. It is cheaper than rice and as nutritive.

The wage-table should be formulated thus:—

<i>For a</i>	<i>The price of</i>
(1) Man or suckling woman ..	1 lb. standard food + 1 anna.
(2) Other women	1 lb. + $\frac{1}{2}$ anna.
(3) Working children	$\frac{1}{2}$ lb. + $\frac{1}{2}$ anna.
(4) Children under 7... ..	$\frac{1}{2}$ lb. of cooked food with condiments.

Major Baynes.

I know that many of the relief coolies did not spend their earnings on the purchase of wholesome grain, to which fact a large proportion of disease amongst them may be attributed. They were in the habit of buying parched Bengal gram and unripe gourds. By eating a few handfuls of the grain and by drinking water at the same time, a feeling of repletion is quickly obtained at a small outlay; this is created by the action of the water on the grain causing it to swell, and so the stomach becomes distended. The reason assigned for this practice was that at the end of the day's work they were either too hungry or too tired to wait for their meal to be cooked, or to take the trouble of cooking it. Under ordinary conditions of life all the women of a household are not employed out-of-doors during the entire day; some remain at home to prepare the evening meal against the return of those members who have been out at work; so that they have only to wash and eat. On relief-works, however, the wage of each individual only suffices for his or her own wants; therefore, every able-bodied adult member of a family has to work all day, and, consequently, when they return to their huts in the evening they have neither their food ready nor the energy to prepare it. There is only one remedy for this evil, which is to adopt the piece-work system on small contracts; in which case, the gangs would consist of families or friends, and between them they would make their own arrangement as to a cook, whose share in the outturn they would make up by a slight extra exertion. Natives cannot be formed into messes; and if they could, I do not see the way to prevent endless disputes as to the amount of ration received by each individual, unless each mess was a self-formed one, and then you must adopt the piece-work system, as it would be impossible to keep nominal rolls on the task system for the large number of petty gangs which would then come into existence.

This was fixed by the quotation of prices officially published by the Tahsildars of the different taluks, and it was directed that the price quoted for the cusbah should be taken as the standard of the whole taluk; this arrangement was, I think, inadvisable as its action was so unequal. Prices varied considerably in different parts of the taluk, that at the cusbah was usually the lowest. I have known laborers march 24 miles between knocking off work on Saturday and Monday morning to buy rice at the cusbah.

(For remarks on other points connected with this question see Appendix.)

Mr. Weekes.

It has been assumed during the Madras Famine—

- (1) that the price of 1 lb. grain + 1 anna was sufficient for a man, the same less 6 pies for a woman, and the value of $\frac{1}{2}$ lb. + 6 pies for a child, if the task were 50 per cent. of ordinary rates;

Mr. Weekes—continued.

- (2) that the above rate should be reduced 6 pies for men and 3 pies for women and children; and,
- (3) that the first rate was sufficient for those doing 50 per cent. of an ordinary day's work, and that for those doing 75 per cent. of an ordinary day's work the money addition for a man should be increased to $1\frac{1}{2}$ annas, for a woman to 1 anna, and for a child to 6 pies.

Before the Madras Famine the quantity of food, which had been given and found sufficient, was as follows:—

	Adult man.	Child over 10.	Child under 10.
Flour	16·3	12	9
Vegetables	4	2	2

and for women something less than for men.

In Chumparun when rice was selling at about 11 seers, and if paid in money alone, a wage of $1\frac{1}{2}$ anna for a man, 1 anna for a woman, and $\frac{1}{2}$ anna for a child was considered sufficient. In the Irish Famine $1\frac{1}{2}$ lbs. bread or 1 lb. biscuit was considered sufficient. In the Orissa Famine 1 lb. rice for a man without work, but an additional allowance when substantial labor was exacted.

In Chumparun, when rice was selling at about 11 seers per rupee, I was paying for men $\frac{2}{3}$ of an anna, and for women $\frac{1}{3}$ of an anna.

This gave the men about $1\frac{1}{2}$ lbs. without condiments, and the women about $\frac{1}{2}$ lb. less or $1\frac{1}{4}$ lbs.; but I believe there was grain cheaper than rice procurable, though not generally so easily as rice.

I know nothing about the exact weight of nitrogen, carbon, hydrogen, &c., contained in so much grain and required to be eaten or assimilated daily, and doubt if any one does.

My impression is that for famine and mere subsistence allowance Rates Nos. I and III are somewhat excessive in the condiments allowance.

I cannot believe it is necessary to eat so much of chillies, tamarind, ghee, curry-powder, onions, garlic, meat, besides dhol and vegetables, as are recommended as necessary for people in relief-camps even (*vide* G.O., No. 1648, of 5th May), and I conclude the Medical Officers would recommend more as necessary for working laborers.

Some laborers that, to my knowledge, did *over ordinary** rates of work on Rate No. II did certainly, some of them I say, look too thin; but they were, I think, rather over-worked and this told on the weaker of them; but I should hesitate to say Rate No. II was evidently insufficient. To my mind the unwillingness of the people to go to Nellore was responsible for much of the low condition of some of the people in May.

There is one thing to be said, that I believe the people of this Presidency† are in ordinary times better off and better fed and clothed and more particular about their food and far more devoted to the use of condiments, especially those of a burning pungent kind, the taste for which must be as unnatural and acquired as that for spirits and tobacco.

I should myself have thought salt alone sufficient condiment, and perhaps a little sugar. I have sometimes inquired and been told by men on Civil Agency works that they have purchased only one pie worth of salt and spent all the rest on cholera.

At about the worst time of the famine in Cuddapah, say the 14th July, raggi was selling at 7·59 seers per rupee (and cholera the same

* The work was done below the Department of Public Works estimate, which was made on inspection and examination of the work done.

† But Sir T. Munro, who knew the people well, allowed in famine two chillies to each person; that and salt, I presume, would be quite enough and cost less than one pie a-day.

Mr. Weekes—continued.

in the preceding week). At this rate six pies would buy almost $\frac{1}{2}$ lb. of raggi, and I should think if a man were starving on 1 lb. grain, he would prefer an additional $\frac{1}{2}$ lb. of the food he is accustomed to, to half anna worth of condiments. And I should say if he spends the six pies on condiments, then the 1 lb. grain is not insufficient. If he does not spend it on condiments he gets more than a lb. of grain. I take it that the rate is intended to be merely a subsistence rate. I would allow more where any thing like ordinary work is given and taken. As I said before, I would try to put great works, which are worth doing at any time, more on a level with ordinary works and rates. The price of horsegram is given in the Gazette. It was cheaper than cholum or raggi in July 1877; but the price of Bengal gram, which was *much used by the people* (parched), has never been given. Laborers would often purchase rice, because (1) it requires no cleaning or pounding or grinding, and away from their villages they cannot grind grain; (2) because when diarrhoea is prevalent, they prefer it. They also eat all sorts of things, *e.g.*, figs, leaves, Bengal gram, sugar. The price of the standard kind of food is ascertained on market-days in the principal town of the taluk or tannah.

I consider the wage test must depend on the physique, antecedents and habits of the people concerned.

I would consult and compare the normal rates for labor in different parts of India; and reduce the normal rates of daily wages slightly, not much, for any thing under full work, and give almost ordinary rates for labor on great works. But by normal rates, I am far from meaning what the Department of Public Works give. I mean what the ordinary employers of labor give. Natives, as a rule, are paid according to their work, and they ordinarily work *comparatively few hours a day, and not every day in the week*. I consider it to be *against their nature for men, women, and children to work six days in every week for nine hours a day for many consecutive months*.

Mr. Oldham.

(1.) The Wage Test.—The best answer to these questions will be by the following description of an experiment:—

(2.) In Adoni in July last, I formed a gang of 300 adults of whom 180 were women. Nearly all the members of the gang were in fair condition, and none were in an emaciated state, though the condition of some was considerably below par. A special subordinate was deputed to pay and to supervise the gang. It worked under my own eye, and each member of it was instructed to bring any grievance at once personally to my notice.

(3.) The pay of each laborer in the gang was the exact buying price of one pound of cholum of the cheapest sort, *plus* one half anna. They were paid daily in the morning, on Saturday getting the wage for both Friday and Saturday, and on Monday getting paid for Sunday; but they did not work on Sunday.

(4.) The gang consisted of people of the ordinary agricultural and laboring class, and included a few Mussulmans and a few out-castes.

(5.) They came from different places, but at the time of the gang's formation, they were all living or lodging in Adoni. They began to work about two miles from there, and were employed in digging side channels and strengthening them with single blocks of stone or revetment work and in patch repairs on a stony road. They worked by task, the task exacted being about 50 per cent. of an ordinary day's work at the Public Works Department rate, and short work or misconduct in the gang was punished by fine from the daily wage.

Mr. Oldham—continued.

(6.) When their work had carried them to the 6th mile from Adoni they hutted themselves without any assistance from me among the rocks by the roadside, and continued their work on to the 10th mile, when at the end of October, they were made over to the Public Works Department. At that time their numbers had sunk to 210, but still included all the poorest members of the gang. The rest had left for the harvest then in progress, or for their homes. At the time that they were handed over, each member of the gang was in excellent condition.

(7.) The deduction is that a relief-laborer can not only keep in good condition, but can improve in condition, can give a fair outturn of work, and can also stand a distance test, on the wage which these people got, provided always that it is ensured that he gets this wage regularly and all to himself, and that the amount of grain to buy which its rate is fixed is procurable within his reach. In fixing the rate at this scale for large bodies of people scattered over extensive works and at great distances, both these considerations are apt to vary much; and if the former be secured, it is sometimes impossible to ensure the latter being so also.

(8.) The price of the standard kinds of food on which the wage is based is to be ascertained at the nearest market from the dealers themselves; the results of the reports on the subject being checked by the officers in person. I have not found that information on this point was defective or erroneous.

(a.) I would formulate the conditions of a wage test on the experience above described, enjoining particular care in adopting a sliding scale of wages to the rates at the nearest markets. In Adoni these markets were on or close to, and in many cases created by the works themselves.

Mr. Cook.

The assumption as to the quantity of food to be given to laborers, &c., and the extra allowance for condiments is what would be actually sufficient to keep a man in health while working, and the best data by which to test this is to ascertain what a cooly or a laboring man eats in ordinary times. A man in working order will eat 3 lbs. of grain per day at two meals—this is his usual quantity; a woman will eat about $2\frac{1}{4}$ lbs., and a child $1\frac{1}{2}$ lbs. I have ascertained this from inquiry in the villages. If cholum be the standard grain, for every 1 lb. of grain half more must be added for wastage, as when grinding this quantity will disappear. About half an anna is the usual amount for condiments. If, therefore, we take this standard, it will give us, as the proper cooly per man, woman, and child, annas $3\frac{1}{2}$, annas $2\frac{3}{4}$, and annas 2, respectively, provided the rice is selling at 16 lbs. or 8 small measures a rupee. At the beginning of the famine I paid my coolies at the rates of annas $1\frac{1}{2}$, annas $1\frac{1}{4}$, and pice 9 per man, woman, and child, respectively. This was in accordance with Sir Richard Temple's instructions. I found it insufficient; the coolies deteriorated in physique, cholera broke out, and many perished. When the wages were raised to annas 2, annas $1\frac{1}{2}$, and anna 1, respectively, the people improved, and cholera had not such an effect on them. This wage was barely sufficient to buy the quantity of food requisite for laboring men, but I found it just kept them in health when working; it did not fatten them. This was not intended however.

Laborers, as a rule, prefer cholum and cumboo as it is more strengthening and suitable than rice.

The price is ascertained weekly by the cost of grain in the local markets.

Mr. Cook—continued.

I would formulate the conditions of the wage test that the individual should get enough to keep him in health, and which he would usually eat in ordinary times, and for this wage he *should do a suitable task-work*. The task-work should be left to the discretion of the supervising officer, as he is the best judge as to what amount of work a man can really do.

Major Ross.

I think the scale laid down in the G.O., Madras Government, of the 24th September 1877, is as nearly correct as any scale could be.

I have found that emaciated persons coming into camps before all hope of their recovery was gone by reason of impairment of the digestive organs regained strength and flesh on the camp ration of 20 oz. of grain and condiments. I consider that the cooly receiving the Civil Agency rate of value of 1 lb. of grain and 1 anna—total 2 annas—would be in about the same position; as a rule, they do not purchase fire-wood, but pick up small sticks during the day while they are at work.

The laborers on the Professional works decidedly improved physically on the wage of 2 annas and 6 pies. That sum would purchase *in the height of the famine* 1 lb. and 11 oz. of rice.

Mr. Travers.

As far as I could learn, about 6 pies per day of the wages was spent in condiments, including in the condiments, dried fish, the whole of the balance being spent in grain; the grain principally used being rice and raggi.

The wages on relief-works in Cuddapah were—
For adults—
Value of one pound of grain, + one anna.
For children under 12 and over 3 years—
Value of half pound of grain + 6 pies.

I consider the wages paid in Cuddapah to be at a fair rate; I do not think it could be reduced and at the same time I found that the coolies who had remained on the works any time were in good physical condition; those who came on to the works in good condition retained their health and strength; and most of those whose physical condition was somewhat reduced when placed on the works gradually improved; I found this to be the case both on Civil Agency and Professional Agency works. There were Professional Agency works in the Budvel Taluk.

The price of the standard kind of food was sent weekly by the Tahsildar to the divisional officer in charge, the Tahsildar obtaining the information from the Comaties or grain-sellers in the cusbah villages.

Major Mead.

The wage on the two famine relief-works for those that did a full task was that laid down by Government:—

	A.	P.	
Man	1	6	+ value of 1 lb. grain.
Women	1	0	+ " " "
Boy or girl	0	9	+ " $\frac{1}{2}$ "
Children in 7	0	0	" $\frac{1}{2}$ "

It is a very liberal wage, and the coolies on it, and those on the lower rates who come to the works emaciated and evidently suffering from a period of starvation, improved after having been in the receipt of this wage; in a fortnight or a month they showed no signs whatever of starvation. I also noticed many of the women who had been on the works for some time had procured bangles and new clothes.

Lt.-Colonel J. O. Hasted.

I do not think my experiences of the wage test and labor test are worth recording. I saw one case (and I believe there were many such) of a man who came to the works, was dissatisfied with the bare subsistence allowed, left it, and died on the way: and I saw others evidently in distress, who would not work, and who could only be punished by reduction of wages at the risk of their lives. It will be economical in the end that wages sufficient for subsistence should be offered for piece-work, to all comers, when a work is opened for relief.

Major Ross Thompson.

The wage should vary with the amount of work turned out—should in fact be the value of the *piece* executed.

The value of the piece should again depend on the value of grain. The rate given per piece being such that it would enable a laborer to procure as much plain food as would keep him in health and leave a margin over to enable him to provide for infants, sick, or cripples of his family, and thus avoid the inevitable demoralisation consequent upon giving gratuitous relief. By working on the piece-work system a whole family may take their share in the work, the old and young, the strong and weak. Payments are immensely simplified, and the harder the people work the more do they benefit themselves.

Lt.-Colonel Prendergast.

For some time past, the work-people on the Palar Channels have received the last authorized scale, of the value of 1 lb. of grain, added to 1½ Anna for men and 1 Anna for women, with ½ lb. value of grain and 9 Pies for children. The people are in good physical condition after being for some months on the work, but taking a family of a man, his wife and three children, their aggregate wages for a month of twenty-six days come to Rupees 7-11-6, and if the price of a lb. of grain be 8 Pies, as has been common lately, the value of the allowance for grain amounts to Rupees 2-11-4, so that the total receipts are Rupees 10-6-10; besides, if there are any young children, they are fed at the nursery. Thus a famine cooly, being relieved of feeding infants, is for the time better off than a servant of Government who receives 10 Rupees salary. The price of the standard kind of food is regularly ascertained from the nearest Revenue authority. I think the recent wage test has been sufficient and suitable.

Captain Awdry.

The quantity of food given (in money value) and money for condiments, firewood, &c., has been—

Men and nursing mothers	1 lb. of second sort rice + 1½ Annas.
Women... ..	1 lb. of do. + 1 Anna.
Children over 7 and under 14	½ lb. of do. + ¾ Anna.

I have no actual data as to the quantity of food bought with the money, but the physical condition of the coolies has improved considerably on these wages.

The price of second-sort rice is always communicated every week by the Tahsildar to the Public Works Officers or subordinates in charge of works in each taluk, and the wages for the week are paid accordingly.

From my experience of the past famine I do not consider that the men receive too much, but judging by the proportion of wages in ordinary times between men and women, and the extraordinarily large percentage of women as compared to men who are on the works, I should say that the women's wages are too high and recommend their reduction by ¼ Anna of the amount for condiments. With this

Captain Awdry—continued.

alteration the amount of the wages laid down as above will form a very good standard for the future. The condition of receiving the wage should be for the able-bodied that a normal day's work of nine working hours is turned out; the morning muster-roll should be called at 7, and the evening one at 6, and a two hours' rest should be allowed in the middle of the day.

Mr. Nordman.

The Wage Test.—I consider the ("Professional Agency") wages hitherto paid, viz.,—

For a man—1 lb. of grain and 1 Anna 6 Pies,

For a woman—1 lb. of grain and 1 Anna,

For a child— $\frac{1}{2}$ lb. of grain and 9 Pies,

just sufficient; I have noticed people improve in condition on these wages, within a couple of months.

On the other hand, the (lower) "Civil Agency" wages, given to people who require strengthening before they can work much, viz.,—

For a man—1 lb. of grain and 1 Anna,

For a woman—1 lb. of grain and 9 Pies,

For a child— $\frac{1}{2}$ lb. of grain and 6 Pies,

has been barely sufficient to keep body and soul together; and the improvement in these people's condition at this rate of payment has been, if it took place at all, scarcely perceptible. The prices of the staple kinds of food are ascertained monthly from Taluk Tahsildars.

To remedy the insufficiency of the "Civil Agency" wage, and yet not encourage people to remain in that category, but induce them to endeavour to work hard so as to be promoted to the "Professional Agency" rate, it would perhaps be advisable to raise the grain part of both rates by say twenty per cent. But in that case, tasks ought to be more rigidly enforced than is frequently the case at present among the "Professional Agency" gangs; and no people to be admitted to these gangs except they can and will do the full task.

Mr. J. W. Rundall.

The Wage Test.—The wage must of course be on a sliding scale with reference to the price of grain. The wage laid down by the Government of Madras, in their Order of the 24th September, is on a very fair scale.

I have no data to test the accuracy or error as to the assumption made as to the quantity of food required. The people now on relief works on Civil Agency rates do not expend all their earnings, but hoard some or give to relatives who come and collect it; such people continue in low physical condition. The price of food is ascertained by the rate at which grain is sold at the weekly market at the cusbah of the taluk in which the work is situated.

Mr. Leggatt.

Wage Test.—I would give the full wage ordinarily prevailing in the district, plus the difference between the ordinary price of the standard food and the prices prevailing at the time of famine.

Mr. Cotton.

It appears to me that the wage should be no more than the price according to the market if enough to support life together with an extra allowance for condiments. That this should be the first wage,

Mr. Cotton—continued.

and that there should be no actual tasking, but that they should be informed that they are required to do some thing, and that they should be encouraged to move to the second wage which should be real remuneration for a good task.

On these works the orders of Government as to amount of wage have been carried out.

On first arrival all coolies are placed on the Civil Agency rates:—

		E.	A.	P.
Men 1 lb. of uncooked food	... ..	+ 0	1	0
Women do.	... ..	+ 0	0	9
Children over seven years do.	... ..	+ 0	0	6

This has proved sufficient to keep them in health, and they even improve slightly in condition. On this test they are given a cloth and their children under seven years are fed in the nursery, but they must be paid daily.

Those who are determined to be idle and are paupers in every sense of the word never leave this wage. But most, as soon as

* A gang consisting of ten men and twenty women and children should do this amount.

they have picked up a little strength, ask to work under the higher wages which is as follows:—They are supposed to do a task of 40 cubic yards daily.*

Professional Agency works—

		R.	A.	P.
Men 1 lb. of grain	... ..	+ 0	1	6
Women do.	... ..	+ 0	1	0
Children above seven do.	... ..	+ 0	0	9

This wage is ample, perhaps it might be slightly less. I may remark, however, that the woman's rate is too high in proportion to the man's and might be reduced to nine pies; children of eleven and twelve years do quite as much as the women. Good work can be obtained from laborers on this wage, but the full task must be

† Prickly-pear clearance is difficult to task, but I have found that the following can be demanded:—Three days work for the same constituted gang, first day to dig a pit of 70 to 90 cubic yards (contents) and second and third days cut the prickly-pear, carry it, and fill the pit and finally cover it over the pit.

insisted on; they can do it, and if enforced it will induce them to labor only until they feel they require it and no longer, and that they can then return to their homes. The task required from them under the above wage is 70 to 90 cubic yards from a gang consisting of eight or ten men and twenty-two or twenty women and children working together. This is an earthwork.†

Captain Maitland.

The wage test—

		Rice.	
Man	... ..	1½ lb.	} + nine pies to one anna for condiments.
Woman	... ..	1 lb.	
Boy above seven	... ..	1 lb.	

seems a fair wage for Madras for a full day's task, but I would always adopt piece-work for able-bodied paupers; it was most successfully carried out in this district, the rate depending on soil, work, &c. In Madras one anna per excavation, three pies for twenty yards lead, and two pies per yard lift for every cubic yard was given. The price of grain was ascertained weekly through the Civil authorities.

Captain Morris.

The rate of wages to be paid to laborers was laid down in G.O., F.R. No. 2847, dated 24th September 1877, and the instructions therein contained were strictly adhered to. This wage was

Captain Morris—continued.

based on the ruling price of a given quantity of food; and was, I consider, ample. Laborers, who had for some time been paid at that rate, certainly improved in physical condition, though not very rapidly.

Mr. Ruthnasabapathi Pillay.

I have often referred to low wages; by this it was not meant that the people should be paid by the day on low wages, but rather that they should be paid by the task on lower rates of wages. The needy may be classed into—

1. Adults, males of 17 years of age and upwards.
2. Grown up women; Boys from 12 to 17 years of age.
3. Boys from 7 to 12 years of age; Girls from 7 to 10 years of age.
4. Children unable to work.

The wages given were as follow for full task :—

		R.	A.	P.
(1)	Value of 1 lb. grain	+	0	1 6
(2)	Do. 1 lb. do.	+	0	1 0
(3)	Do. $\frac{1}{2}$ lb. do.	+	0	0 9

For Civil Agency coolies, the wages were—

		R.	A.	P.
(1)	Value of 1 lb. grain	+	0	1 0
(2)	Do. 1 lb. do.	+	0	0 9
(3)	Do. $\frac{1}{2}$ lb. do.	+	0	0 6

The children got cooked food to the extent of $\frac{1}{2}$ lb. of grain.

The relief wages adopted were those given in G.O., No. 801 W, dated 28th September 1877, and it was found that the coolies subsisting on them had gradually gained flesh, except in places considered somewhat unhealthy, when they were only able to keep up ordinary health. The standard kind of food-grain in this division is raggy or cholam, and second-sort rice, which was generally dearer than those grains and fixed upon as the standard, brought them sufficient food. The rates are obtained from the Tahsildars, and, according to these, payments are regulated.

Mr. Abdul Khareem Khan.

Value of one lb. of grain + $1\frac{1}{2}$ Anna for each man, one lb. of grain + one Anna for each woman, and $\frac{1}{2}$ lb. of grain + $\frac{3}{4}$ Anna for each child will constitute a fair day's wages. This has been ascertained from experience. The physical condition of the laborers who have subsisted upon the above scale of wages had been found improving and tolerably well; for a long time the value of rice and raggy having been nearly the same the laborers had been purchasing rice, they generally prefer raggy and other dry grains to rice. The price of grain on which the wage at the time of payment is based is taken at the retail price of the grain ruling at the cusbah of the taluk on the previous week.

Mr. Mooneappa Pillay.

In the late famine coolies were paid as follows :—

The value of 1 lb. of grain + As. 1 6 for each man.

Do. 1 „ of „ + „ 1 0 „ woman.

Do. $\frac{1}{2}$ „ of „ + „ 0 9 „ child.

The physical condition of laborers who have subsisted on the above wage has been so fair that they were sorry they had to leave their camps when abolished. The wages amounting to Annas $2\frac{1}{2}$, 2, and $1\frac{1}{2}$ respectively, supplied a quantity of $\frac{1}{16}$, $\frac{3}{4}$, and $\frac{9}{16}$ Madras measures. The actual kinds of food purchased by laborers with

Mr. Mooneappa Pillay—continued.

their wage was rice, cholam, and raggy at $\frac{1}{6}$, $1\frac{1}{4}$, and $1\frac{1}{8}$ Madras measures, and they have saved a little too out of their wages.

Sergeant Stewart.

The Wage Test.—I beg to submit that this also is unsuitable, and only tends to increase the gratuitous relief of old people and children, sick and cripples; the great majority of whom would be more cheaply and better supported by the working members of their families, if these working members were themselves in receipt of proper wages, that is the normal wages *plus* some addition as compensation for dearness of provisions. I found it so on the Kalahasti-Maderpauk new road. On taking it over in February 1878, the whole coolies had been for some time on Civil Agency rates only, and about one-third were people not fit to do proper task. The two facts reacted on each other, with the result that no work was being done even by those of full strength, and the whole work disorganized. By raising the wages and exacting proper work, a good result in outturn of work was obtained, and I fully believe the same people were supported, though the disabled persons did not appear on the work to hinder and disorganize the others. The rates of cooly were, men 2 Annas 2 Pies; women 1 Anna 8 Pies; and children fit to work, 1 Anna 1 Pie—the price of rice being 10 Pies per lb. and raggy 8 Pies. The works continued in full progress for about four months, and the laborers seemed and were in good condition and good spirit to work throughout.

Surgeon Gray.

The coolies employed on the Gooty road near Peapali, Kurnool District, were paid according to the following scale:—

CIVIL AGENCY WORKS.

	A.	P.	
Man	1	9	} At the period this enabled a man and woman to buy respectively three-quarters and five-eighths of a seer of rice, i.e., 24 and 20 oz. The price of rice was one anna and six pies per three-quarters of a seer, or two annas per seer.
Woman	1	6	
Child above seven years...	1	0	
Child under do.	0	5	

PROFESSIONAL WORK.

	A.	P.	
Man	2	3	} At this period this enabled a man and a woman to buy respectively one seer and three-quarters of a seer.
Woman	1	9	
Child above 7 years	1	2	
Child under „	0	5	

I was not on the spot to ascertain how much grain the Professional coolies really purchased; but the Civil Agency laborers generally bought from half to three-quarters of a seer. I think that the wages are ample. Most of these coolies bought rice, strange to say, though cholam was cheaper by two pies per seer. They preferred rice.

I have made some experiments on the amount of food necessary for a cooly doing a fair day's work. This I will record in answer to Question 26, under Gratuitous Relief, Section 2.

The price of the standard kind of food on which the wage is based is ascertained from the Taluk Tahsildar who finds out how that grain is sold in the bazaars of the principal villages.

It is my opinion that Sir R. Temple's allowance of 16 oz. of grain and half an anna is quite sufficient for Civil Agency coolies, who do scarcely any work or less than 50 per cent. The coolies working here near Peapali have done up about 10 per cent. and some even 0 per cent. These coolies gathered and broke stones. If the coolies

Surgeon Gray—continued.

are strong and are expected to dig earth, *i.e.*, do hard work, then I think that the men should be allowed a wage to enable them to buy 20 oz. of grain, and the women 16 oz. with half an anna each.

Mr. Macartney.

After giving considerable thought to the subject of wages, I had worked out a scale equivalent to one-and-a-half pounds dry grain and six pies for a man and to one-and-a-quarter pound of grain and five pies for a woman as being in my opinion the lowest wage which could be safely offered on Civil Agency works. But on subsequently reading G.O., No. 2847, of 24th September last, I found that the scale there laid down was exactly equivalent to the one that I had worked out. I therefore fully approve of the Government scale. I would maintain strict discipline, fine for idling during working-hours and for late appearance at the work, but would make the above the minimum for all honest labor. I know that a seer of dry grain or thirty-two ounces is a by no means uncommon daily ration among healthy vigorous men in these parts, and I could point to men of large physique and in the prime of manhood who would not be satisfied with less than forty ounces with condiments. It was my lot to witness the effect of the experiment of the 1 lb. grain + 6 pies per man and 1 lb. + 3 pies per woman ration, and I regret to have to record my opinion that the result was most disastrous. A gradual process of wasting went on until a large number of laborers were unfit for work; and when, by His Grace the Governor's orders in Council, a more liberal wage was given, while a fixed amount of work was insisted on, I weeded out from my somewhat over 3,000 laborers no fewer than 850 in one day and sent them to the relief-house as the only place for which they were fitted. The Collector inspected them a day or two after and expressed his entire approval of my action in the matter. When the minimum wage was given, the coolies were in the habit of cooking their allowance of grain in the form of conjee with a view to increase the quantity and thus give a feeling of fullness; and I am not quite clear that serious and fatal attacks of illness did not result from this ration in connection

* When wages were 2 annas per man and 1 anna 6 pies per woman, I have ascertained that the following was purchased:—

- a 1 anna 8 pies wheat.
- 4 pies condiments.
- b 1 anna 8 pies cholum.
- 4 pies condiments.

For a woman—

- 10 pies cholum.
- 4 pies chenna.
- 4 pies condiments.

with the exposure and labor during so many hours. It is to be feared the evil did not stop here, for, although the wage allowed by G.O., No. 2847, 24th September 1877, was probably sufficient to keep a healthy working man in good condition, yet in the case of those whose strength was already reduced and who had to work up to their full strength, it is questionable whether the wage was sufficient to have a recuperative effect, and, if not, many of the laborers must ultimately have drifted into the relief-house.*

Major Clarke.

The wages first offered to the famine relief coolies employed on the Buckingham Canal were based on the value of one pound of rice *plus* one anna, which was added to cover the cost of other articles of food. This sum was sufficient to meet the mere cravings of a hungry man or woman when two or three of one family could put together their little all into the common purse to meet their daily consumption, but it was not, as a rule, sufficient to develop the strength of the native pauper, nor to improve his worn-down constitution.

Quality and quantity of food purchased by the laborers with their daily wage differed widely in each locality, but I was led to believe

Major Clarke—continued.

that they were not able to buy the normal quality of rice, &c., and the laborers were, for the most part, imposed upon by the merchants or dealers. In my opinion the coolies should receive their wages every evening about 4-30 or 5 P.M. if such an arrangement can be made.

Mr. Hurry Row.

The staple food-grains of India are rice, wheat, jowry, raggy, &c. I know that in wheat-eating countries, an adult requires 2 lb. weight of wheat-flour, $\frac{1}{4}$ lb. of dholi, and about $\frac{1}{4}$ Anna for condiments. In rice-eating countries 3 lb. of rice and $\frac{1}{4}$ Anna may be found enough.

QUESTION. 7.—What is the best way of paying wages, daily or less frequently; at morning before work begins, during the day, or at evening when work is over; by calling out nominal rolls or by tickets, or by a combination of these? To whom should the payment of wages be entrusted? Explain the system of supervision most approved by experience, of checking payments, and of preventing laxity and fraudulent practices in the disbursement of wages? Have laborers been paid in grain, or partly in grain and partly in money? Under what circumstances is this desirable, and, if necessary, how is it best arranged? Have wages ever been paid by tickets, on presentation of which at a trader's shop food would be delivered? What would you advise in this respect?

Mr. Longley.

The best way of paying wages is to pay daily, if possible, in the evening when the work is over. I have never seen payment made by tickets, and cannot therefore speak about that mode of payment. Whatever system is least complicated is the best.

2. Wages should be paid by special cashiers, and such cashiers could not pay more than 500 coolies in an evening. The continued supervision of the European officer on the work is the only guarantee for payments being properly made, but, if the overseer who measured is present with the cashier who pays, fraud is less likely to occur unless both combine, and even then the coolies cannot be much cheated if the European officers on the work do their duty.

3. The laborers were never paid in grain.

If there is no bazaar near the work (which has not yet occurred anywhere in the district) grain payment will become necessary.

4. I object to tickets for food, which introduce the "tack" system. The cooly should be allowed to spend his money where, and as he likes, the only duty of the officer in charge being to see that a bazaar of sufficient size is handy to the work.

Mr. J. G. Horsfall.

In Ganjam in 1866 I paid wages daily, the early morning following the day for which wages were due. The laborers were divided into gangs varying from 20 to 50 persons, the gangs selected their own headman for each gang, and to him the wages were paid leaving him to distribute. This system was consonant with the habits of the people, and it was very rare indeed that I had any complaints of non-payment. Each headman received one anna extra per diem. He furnished each morning the numbers in his gang—male, female, and children—and again in the evening. These were noted down at once by the gumatah or clerk employed by me for the purpose compared with the nominal

Mr. J. G. Horsfall—continued.

register and checked twice during the day and the results furnished to me every evening; thus for Berhampore loop road the returns received every evening would be as follows:—

Gang No. I. Name of headman.

		RS.	A.	P.
20 males at 2 annas	...	2	8	0
15 females at 1 anna 3 pies	...	1	2	9
12 children at 9 pies	...	0	9	0
		4	3	9
One anna extra for headman	...	0	1	0
		4	4	9

and so on with all the gangs. Once a week at least, and generally much oftener, the work done by each gang was measured and tested by me and fines imposed for short work by reduction in that day's wages.

Thus gang No. 1—

		RS.	A.	P.
Wages due for 17th May	...	4	4	9
Deduct short work as per measurement 35 cubic yards	...	2	3	0
Balance paid	...	2	1	9

I must note that only in extreme cases was the full value of short work deducted, less than twenty per cent. deficiency being usually passed over. This system of fining whenever measurements were taken produced some dissatisfaction at first, and not infrequently half the gang would disappear for a day or two, but after the first month it was submitted to as inevitable. The work extended over nearly nine miles of roads but all in the immediate vicinity of Berhampore, and with two horses I was enabled to inspect the whole extent and pay the wages between 6 and 10 A.M. The stoppage of work for payment did not occupy more than two minutes for each gang. The numbers then present were invariably counted by me and noted in my book for reference and check of the clerk's daily return. When unavoidably unable to attend personally payments were made by the clerks, the only difference being that they were not allowed to take on fresh applicants for work. I had none but money payments, but when grain was not procurable in the bazaar and I received a supply from the then Collector, grain was supplied to the work-people at a fixed rate very little lower than that nominally current in the bazaar.

Payment in grain is very onerous, and I prefer the system adopted by me of selling to the work-people. Each headman took his gang to the depôt and was allowed to purchase not more than a limited quantity per head, and as the gumastah deputed to sell moved along the road, each gang was occupied but a short time in the purchase of as much as they were allowed.

I believe Mr. Martin, Sub-Collector, Dindigul, tried payments by tickets when works were first commenced in the Palair Taluk in Madura District, but the system was soon discontinued. It did not commend itself to me at the time, and of this I informed him.

I think money payments preferable to any other. If necessary, grain-depôts may be established where Government grain may be sold at the bazaar rates.

Mr. Fawcett.

Wages were paid every second day in this division until the transfer of the works to the Public Works Department, and so far the plan adopted was found to answer very well. One mistake, however, was committed, I think, *i.e.*, paying in the evening, instead of in the morning. I shall endeavour to put down what I think are the advantages and disadvantages of each.

In favor of paying in the evening it may be said—

- (a.) There is sufficient time during the day to get the money and grain brought and got ready for payment when work stops; while if payments are made in the morning before work begins there will often not be time, so that if payment is made the coolies begin work late. This defect in morning payment could generally, however, be easily remedied by better arrangements.
- (b.) If payments are made in the evening the coolies have less money about them in the day time and have less inducement to go away and leave their work. This, however, can be easily prevented.

On the other hand the advantages of paying in the morning are—

- (a.) It has the effect of making coolies come punctually to their work.
- (b.) There is plenty of light to pay away the money, and consequently less danger of the paymasters appropriating any part of it. It was noticed here that those road superintendents who could not be depended on, and the paymasters, always tried to make their payments as late in the evening as possible.
- (c.) The payments are made more regularly, as they must always be made before the time for the coolies to begin work.
- (d.) When payment is made after work in the evening, and is delayed till late for the reason referred to above, the coolies are kept up later at night than they need be. This affects their health.

The only objection to morning payments of any weight—the former of the two given—is one that could generally be got over easily by having a small depôt and treasury close to each work, besides the larger one for the range, and the three points of superiority over evening payments that the system possesses are, I think, evident.

Payments were made here according to nominal rolls kept by the gang maistries. These nominal rolls were called over in the morning on commencing work by the gang maistries, who marked each person absent or present as the case might be, and payments were made three times a week according to this nominal roll. The system finally adopted to check the gang maistries was that they all had to send in their nominal rolls immediately after marking the people as absent or present to the officer in charge of the work, who was thus able to step down at any moment and see if the entries were correct. Until this plan was adopted, gang maistries used frequently to make incorrect entries, and correct them when they saw any one coming to inspect them.

If this system be strictly carried out there is not, I think, any danger of absent people being marked as present; and that being so the only thing that remains to be provided for is that all the people present are paid. This can only be ensured by the presence of a European officer at the time of payment. If any one complains that he has not been paid it is easy to find out then whether he is speaking the truth or not. At any subsequent time it is generally impossible. If the system I have mentioned of securing the nominal rolls after roll-call in the morning be followed strictly, and if a European officer is always present at the time of payment, everything must go right—no matter who pays the money away—

Mr. Fawcett—continued.

and each gang maistry may be allowed to pay his own gang. If on the other hand the nominal rolls are not secured, people will turn up late in the day, or perhaps just before the time of payment and by making a bargain with the gangman get part of a day's wages; while, unless a European officer is present, some people who have worked all day will probably not get paid at all, and it will be impossible afterwards perhaps to ascertain whether their complaints are true or not. In either of these cases a much more expensive agency is needed for making payments.

Laborers were, during the greater part of the time here, paid partly in grain and partly in money, an arrangement found to be necessary on account of the scarcity of grain in the local markets. Wages were never paid by tickets presented at a trader's shop.

N.B.—My answer to this question refers solely to the time the works were under the Revenue Department.

Mr. Price.

I consider twice a week quite sufficiently often. Once a week, if payment is *regularly and punctually* made, is, generally speaking, quite frequent enough. I prefer paying in the evening. It is in accordance with established custom, and between pay time and supper time the coolies have plenty of time to make their purchases. Paying in the morning, or during the day, would, I consider, induce straggling. I have always paid by nominal rolls. I would certainly not do so by tickets as, in the first place, the nominal rolls remain as vouchers, showing exactly to whom payment has been made, and, in the next, tickets can be sold or transferred. Combining nominal rolls and tickets might, perhaps, lead to the detection of a few petty frauds, but the double system would give very much more trouble than it is worth. I prefer paymasters under the orders and supervision of the Superintendent or chief officer in charge. There is no effectual check upon payments of which I know or can suggest, excepting constant supervision and inquiry of coolies regarding the payments made to them. There is no paper check which cannot, in practice, be avoided. I always let the coolies know exactly what their pay was, and told them to complain if they received anything less. This they were by no means slow in doing. I have paid laborers in grain alone and partly in grain and partly in money. I think it a costly process and would resort to it only when sufficient supplies are not available in the neighbourhood of any particular work and perhaps when coolies are at first taken on. The mode of which I approve is to have a store-house on the works, for the Superintendent to indent on pay day for the quantity required for each gang of his party, and to have this taken either by cart or coolies, as may be most convenient, to the usual pay place. It should there be shot out on a mat and served out. I always measured the grain without paying for so doing, by taking, at haphazard, two coolies from the gang being paid, one using the small and the other the large measure. This prevented cheating and quarrelling and was entirely approved of by the coolies themselves. I have no experience of paying by tickets to be taken to any particular shop. I do not approve of the system. Tickets can be sold, stolen or lost, and there is the further chance of the shopkeepers, not only cheating in the measure or weight, but in the quantity of the provisions supplied. The system which prevails in the normal state of the country, *i.e.*, giving the coolies their wages in money, appears to me the most desirable.

Mr. McC. Webster.

"Professional Agency" coolies should be paid every three days, and always up to the end of the previous day. "Civil Agency" coolies should be paid daily for the first fortnight of their admission; then every other day for another fortnight, and then every three days as "Professional Agency" coolies.

Both should be paid by calling out nominal rolls.

(b.) To whom should the payment of wages be entrusted?

To a subordinate officer of the Public Works Department other than the officer who measures and checks the work and prepares the nominal rolls. I think that the duty of keeping the nominal rolls, measuring the work and making payments should be entrusted to three different officers. The maistry in immediate charge of the gang should keep the nominal rolls. A Sub-Overseer should check the work and sign the nominal roll as passed for payment, and the overseer (if possible) should make the payments, occasionally measuring up work. They even would thus be a check one upon another, and, owing to a division of labor, payments could be made more frequently and with greater regularity.

Mr. Crole.

The best time for payment is the evening. It should be made by mustering each gang and calling the roll. For feeble coolies, daily payments are necessary. The others should be paid bi-weekly. The duty of payment should be entrusted to the Revenue Department. Wherever the Public Works Department have had the payments in their hands, one of two things has happened. Either the coolies have not been regularly paid, owing to excessive attention devoted to tasking defective management or weak establishments, or else the whole time has been devoted to making payments, and the work exacted has been next to nothing. The officer entrusted with it should make the payment to each gang according to the amount endorsed on the roll by the Public Works Department officer. Payments in grain are a mistake. They disturb trade, are bulky and difficult to make, and do not leave the person relieved with sufficient liberty to buy what food suits him.

Mr. Grose.

Wages should be paid twice a week at least. The best check is supplied by nominal rolls not tickets. If possible, the gangs should be paid when they cease work, and give up their tools in the evening.

I have had no personal experience of the management of works; but I am sure supervision is the great want here, as, in all other famine operations. Laxity and fraud in the payment of wages can only be prevented by sufficient supervision.

When enough grain has not been brought near by traders, wages have had to be paid partly at least in grain. This is undesirable, for payment in money fosters trade, and if that ceases, the efforts of the State must fail.

Wages have never been paid in this district by tickets convertible into food at a trader's shop. I dislike the system, for the craving for intoxicating liquors or tobacco or something of that sort is sure at some moments to surpass the craving for food, and this must lead to traffic in the tickets.

Mr. Austin.

New arrivals on relief works should in every case be paid daily for the first few weeks, after that bi-weekly payment is all that is necessary. The most convenient form of making payment is

Mr. Austin—continued.

throughout the day. Gang after gang should be called up, paid and sent back to their work. Payment by nominal roll is, I think, the best. Payment must, I think, be made by Pay Inspectors, and these should not be appointed or liable to dismissal by the department supervising the work. Our present system of A, B, and C forms check frauds in payments as far as they can possibly be checked. If Pay Inspectors, head coolies, maistries, and overseers combine to commit frauds it would be practically impossible to prevent the coolies being swindled. Unless they combine, any attempt at cheating the coolies would be easily detected, provided the coolies complained and even in many cases if they did not. In the sub-division laborers have been invariably paid in money. The ticket system has never been tried. Half wages are given to those who have only worked for half the day. Work for broken periods of the day has never been allowed. If the wages are paid throughout the day, it rarely happens that a cooly is absent and cannot be paid. The practice is, if a cooly is absent, to pay his wages to any near relative he may have on the work. If not, it is held in deposit till claimed by him.

Mr. Knox.

The present system of paying coolies on works is this. Money is placed in different treasuries at the disposal of the Department of Public Works. The Executive Engineer, when money is wanted, gives the overseer a cheque for the amount and the latter officer gets this cheque cashed at the treasury but has to bring the money to the works, sometimes a considerable distance off, on his own responsibility. I think that this plan might be altered with advantage, and that the Revenue authorities might give some assistance.

It should be, I think, the duty of the Revenue Department to forward the money to the residence of the overseer, in whose favor the cheque is drawn, under proper custody. A list of overseers and their residences and copies of their signatures might be supplied to all Treasury Officers. The cheque should be drawn on that treasury which was nearest the place where the overseer lived, and a memorandum should always accompany the cheque mentioning what coins were required. On the money being received by the overseer he would have to give a receipt for it which would be taken back to the Tahsildar or whatever official sent the money.

As regards actual payments to the coolies, that is done now by the overseers and their assistants; there are no doubt now and then frauds, but, unless the money was paid by European gentlemen, it would be hopeless to prevent occasional peculation. European agency for the work is impracticable, and there is no use in changing the Native Agency. Overseers are generally men of some standing and respectability, and probably they are the best class of persons to entrust with this duty.

Provided that no injury is done to the coolies, the less often that payments are made the better; as every payment involves a certain amount of account work, it takes up a good deal of the overseer's time and it stops work. Once a week I think would be quite enough for a very large proportion of the coolies. A certain number of the weaker people who had lately come on the works would perhaps require to be paid daily. These should, as far as possible, be formed into gangs by themselves and be placed nearest to the residence of the overseer.

Mr. Knox—continued.

A great deal too much paying work is, I think, thrown upon overseers and their assistants, consequently time is wasted especially when gangs are widely spread over a long line of road, so that if payments are made in the morning there is great delay in getting the coolies to work, and if in the evening, the people are kept out an unreasonable time. About 1,000 coolies if close together, say in two miles of road or less if they are far apart, is quite enough for one man to do, and would probably take him two hours. The weekly payments should commence at 3 P.M. on Saturday after-noon, and the payments to the week on other days at about 4 P.M. This arrangement would not interfere with the work, and the people could get home in good time; as it is now, I have heard of payment so late as 9 P.M.

The simplest way of making payments is to call out the nominal roll; tickets would be troublesome and useless. Coolies have sometimes been paid in grain, but it was found to give a great deal of unnecessary trouble both in conveying the grain about the country and in measuring it out to the people. No way of payment is so expeditious as giving money. I do not think that the plan of giving tickets on traders would answer. Wherever there is paper and writing fraud comes in, and the poorest and most ignorant people would most certainly be cheated in some way or other.

Mr. H. T. Ross.

My experience has been that *daily* wages are necessary whenever the laborers are *bonâ fide* "famine" subjects. I tried less frequent payments, but found that starving coolies, who were allowed a bare subsistence of 1 lb. a-day, could not, when they got several pounds in hand at once, resist the temptation of eating more than 1 lb. a day, and so ran out of food altogether before next pay-day came round. I have also found the best plan in making daily payments to be to pay during each day for the previous day's work, the process of payment, if there were many coolies, taking several hours, but being so arranged in detail as not to interfere appreciably with work. The arrangement in detail was as follows:—Each gang on task-works consisted of fifty persons. Each "group" on piece-works consisted usually of from three to eight persons. Each day's work was invariably paid for on the succeeding day on nominal rolls, in each of which the measurement of work done by each gang or group was first certified by the Public Works Department subordinate who was professionally supervising the work. Each morning when the civil paymaster commenced payments he first called up gang or group No. 1, *all other gangs or groups continuing to work*, paid them on the certified nominal roll and sent them back to work. He then called up gang or group No. 2, paid them while all others were working, and sent them back to work as soon as paid. And he repeated this process with each gang or group until he had paid every one of them. Thus there were never more than fifty people on gang works, or about eight people on piece-works, who were taken off work at one time, and these were only detained for a few minutes. In arranging for grain-payments I found the best plan was to attach a regular store to each work, and to have the bags required for the day's payment carried to the work in the morning, and payments made there on nominal rolls exactly in the same manner as money-payments.

Mr. P. Soobien.

The wages must be paid daily and at evening when work is over by calling out nominal rolls. The payment of wages should be

Mr. P. Soobien—continued.

entrusted to the responsible officer in charge of the work. The system pursued was that the officer in charge of the work prepared in the morning a statement showing the numbers of the laborers and sent it at once to the taluk. In the evening a nominal roll of the persons who were actually paid wages that day with the necessary explanation for any difference between this list and the one sent in the morning is prepared and sent. With the morning list in his possession the famine divisional officer will now and then visit the work about evening, and see if the persons entered in it are really at work and thereby verify the correctness of the list. By making inquiries from time to time of the laborers regarding the regular payment and the proper amount of the wages any malpractices on the part of the disbursing officers were brought to light. This system worked well. In this district the laborers were always paid in money and never in grain. The system of paying wages by tickets on presentation of which at a trader's shop food would be delivered was tried for about two weeks by another officer in the district, but as it did not work well it was discontinued. I would recommend that the laborers be paid their wages in money and left to make their own arrangements regarding the purchase of food.

Major Baynes.

In framing a scheme for the distribution of wages the objects to be secured are, first, the regular recurrence of the payments; secondly, the full receipt by the payees of their respective dues; and, thirdly, the prevention of fraudulent charges against the employer. The first object is easily attained, because it is simply dependent on a matter of detail in the organisation of a sufficient number of measurers and payers, and in proper arrangements to secure money in sufficient quantity; but to secure the two latter is impossible if they be entrusted to ordinary Native agency, however well supervised. The only method of securing them is to employ the direct agency of European Officers; but as that would probably be considered too costly, we must be content with arriving as closely to their attainment as the use of European agency in general supervision, and the institution of a system of checks on the Native payers will admit.

Weekly payments do not appear to me practicable for reasons hereafter given; if they be so, then they are much to be preferred to daily payments, because they diminish the number of paymasters, they require a more simple system of accounts, and they lessen the opportunities for robbing the coolies and for defrauding the Government, and also because they remove the necessity for carrying large quantities of copper coins for payment to the coolies; this last advantage is a great one. Assuming the classification I propose in page 11, a gang of 100 laborers would probably consist of fifteen men, forty-five women, twenty lads and girls, and twenty children; with rice at one anna two pies per pound and with the same rations as hitherto adopted, the daily pay of such a gang would be Rupees 12-10-1 on working days and on Sundays Rupees 9-10-3. If this gang be paid daily—

<p>then 350 half anna bits 140 quarter anna bits 890 pies</p>	<p>} would be required for the seven payments;</p>
<p>and if paid once in seven days, then only— 105 half anna bits 20 quarter anna bits 200 pies</p>	<p>} would be required;</p>

Major Baynes—continued.

such a diminution in the bulk of copper coinage would effect a considerable reduction in the cost of bringing and of distributing wages to 4,000 persons.

If famine coolies arrived at a work with a sum equivalent to a week's wage in their possession, there would be no hindrance to the adoption of weekly payments; but as unfortunately they present themselves in a state of impecuniosity and of hunger, and as being strangers to the locality, they cannot obtain credit with the local shopmen, they require to be put in funds at once. It appears to me that the amount thus given to a laborer on arrival must not be styled an "*advance*," for it is certainly *irrecoverable*; and that the total sum thus given to him must equal the wage for the intervals of payment obtaining on the work, in addition to the subsistence wage he may or may not receive on day of arrival; that is, if payments be made once in a week, then the laborer will require seven days' pay on arrival; if they be made daily, then one day's pay unless he were in the first case to receive daily an advance of one day's pay during the whole time he remained on the work. My reason for proposing to make the advance, or whatever it may be called, in a lump sum on arrival, is to prevent confusion of accounts and peculation. Reference to pages will show the respective duties of the clerk who registers admissions, and of the paymasters of gangs on nominal rolls; and if the payments of the latter are not strictly restricted to payment of *wage* for days worked and outturn shown in the nominal rolls, it will be impossible to check peculation, and to prevent confusion in the accounts. Payments on nominal rolls are debitable to cost of work, but advances of this description, as I shall show, must be free gifts if the principle of the wage test be maintained, which limits a day's earning to a day's expenditure.

For example, B arrives on Wednesday the 14th at a work on which payments are made every Saturday; he receives in addition to his subsistence wage for day of arrival (supposing him to be entitled to that wage) an advance of wage for seven days; that is, up to the next Wednesday the 21st inclusive. Saturday the 17th is the next pay-day after his arrival; on that his position should be as follows:—he should have spent his advance for the 15th and 16th, and should have money to meet expenditure up to 21st inclusive, but the next pay-day will be Saturday the 24th, and he has no funds for the 22nd and 23rd; but as he worked on the 15th and 16th, the paymaster will pay him for those two days on the nominal roll closed on the 16th; he will then be in funds up to the 23rd; but on Saturday the 24th our laborer will be in exactly the position he was on his arrival; that is, bankrupt; but the paymaster will pay him on the nominal roll closed on the 23rd from 17th to 23rd inclusive; and then he will be started; for he has been paid in arrear, and has funds in his possession to carry him on to next pay-day, the 31st, and so on; but he will have received double wage for eight working days and for one Sunday, which, stated in terms of money, means (rice being 1 anna 2 pies per pound) that he has received Rupees 2-14-0 instead of Rupees 1-7-0, or exactly seven days in excess, which is the sum he received as an advance on first arrival.

If the payments be daily, he would receive only one day's working pay in addition to his subsistence wage on day of arrival. Example, B arrives as before on Wednesday the 14th; the next pay-day is Thursday the 15th; but as the payments are in arrears the gang

Major Baynes—continued.

paymaster will have nothing to give him; consequently, he receives his working pay for Thursday on arrival. On the 16th he will again be bankrupt; but as he is entered as working on the 15th, he is paid over again, and then he is clearly started; but he has also been paid twice over for the 15th; that is, he has received 5 annas 4 pies instead of 2 annas 8 pies. The daily wage being only sufficient to provide for that day's wants, it is obvious that the laborer can never save to repay his advance except by living on a portion of his pay, or, in other words, by starving himself either to incapability for employment or to death. The necessity for the advance has been shown to be caused by the condition of the laborer and by the payment in arrears on outturn. The necessity for the separation of the advance account from the account of payments on outturn has been shown to exist through the confusion of accounts, and the large amount of peculation which would be caused if paymasters of gangs made advances as well as the Register Clerk, whose special duties are given in detail in Appendix A.

On page 7 it is stated that laborers received a day's subsistence wage for every ten miles or fraction in excess. Issue of subsistence Wage. Therefore, the fact of any sum being due on this account to a laborer is determined by a comparison between the distance he has come to the work and the amount paid to him by the issuer of the ticket.

If dependence could be placed on the laborers that they would not abscond on the receipt of a week's wage as a *retaining fee*, it might, for reason given in page 7; be an actual gain in the long run to make to them this present; but as such reliance cannot be placed in them, the idea is not even worthy of consideration. Biweekly payments possess no other advantage than that of reducing the amount of advance; but as they necessitate a double number of nominal rolls, I would recommend the daily payment system. Daily payments can be carried on as a running account (to be adjusted weekly on some fixed day) when measurements are taken and the sums due to the coolies are calculated; but when the work of a gang is measured up for final payment, the nominal roll on which such measurements and payments are made should be sent into office for check and record; biweekly payments would, therefore, double the number of rolls and of measurements and of necessary calculations for payments to be made upon them.

I have already stated that to secure an honest distribution of wages the agency of European officers is necessary; failing this, I can only suggest the employment on high salaries of Eurasians or Natives of well known and respectable families—strangers to the district, and unconnected with the Department of Public Works. They should be so well paid that any sum which they could make by petty robberies from the coolies, or fraudulent charges against Government, should be as nothing when weighed against loss of reputation and present emolument. A paymaster with eight gangs of 100 members to pay daily has full occupation; the amount of money which would pass through his hands in a month would be about 3,400 to 3,500 Rupees. I think that a man to whom so much responsibility is entrusted should not receive less than 100 Rs. per mensem. I would suggest the frequent interchange of paymasters on the works in a taluk or district, as this manœuvre is preventive of collusion between overseers, gangsmen, and paymasters.

Major Baynes—continued.

Payments at all events should not be made by the same person who measures the work for payment.

Coolies are liable to be defrauded in many ways. The most common are, short payment or withholding of wages actually earned on a fictitious outturn; deduction from amount of advance given on arrival at the work; and direct robbery by intimidation. The first method is simple, and only to be detected by measurement made by a European officer on the same day as by the overseer. The overseer in collusion with the gangster informs the gang that they have done half a day's pay short work; but the real work done is entered in the nominal roll, and the proceeds, Rupees 6-5-6, are shared between the paymaster, the overseer, and the gangster; if one day's pay be deducted only once a-month from each gang, the proceeds of eight gangs would amount to 100 Rupees which would make a tolerable addition to their respective pays; again, when a cooly arrives at the work, if he receives an advance, it may be, I fear, considered a certainty that he will have to pay his footing. Again, the coolies are openly robbed by the gangsters; they threaten some member of the gang with expulsion on account of idleness or incapacity, or that they will report him absent or late, and so get small contributions from them to avert the greater evil.

Government is defrauded by false measurements in excess of actual outturn. The payments to coolies being made on the correct outturn, no one complains; and the overseer, gangster, and the paymaster share the surplus. As before stated, these petty peculations cannot be *certainly* stopped except by the employment of a European officer to measure and see payments made; but I think the expedient suggested (above) would do so to a great extent. The only checks in way of supervision are to personally question the coolies as to the sums they have received; but the officer must be acquainted with the vernacular to do this. There is no use doing it in the presence of the paymaster or through an interpreter, for the coolies will never speak out under those circumstances. And the other is to make frequent check measurements on measuring up days.

Gangs should be paid on the places where they are at work. They should receive as a minimum the wages laid down in page . One paymaster should be able to pay eight gangs or 800 persons daily; each member of a gang should receive his exact due into his own hand. The practice of giving a rupee to a member of a gang to pay to others fractional parts of a rupee due to them is very objectionable; for it is the source of frequent disputes. Disbursements of wages should be attested in the nominal rolls by the initials of the paymaster and gangsters. As payments are made daily, on an account which is closed weekly, a certain day in each week must be fixed for measuring up and adjusting the pay of each gang. The most convenient day for measuring up is Sunday, as, then, the coolies are off the works, and they are not delayed by the overseer while taking measurements; but this prevents Eurasian or European overseers from getting a day of rest, though in famine times no one should think about *rest*; another good day is Friday, as then the coolies are paid upon Saturdays, and Sunday can be appropriated to scrutiny of the rolls in office. However, this is only a matter of detail; the only principle is, that the recurrence

Major Baynes—continued.

of the pay-day must be strictly regular. On the day previous to that fixed for payment, the overseer authorised to measure up should go round his gangs in the afternoon, and should enter in the nominal rolls the amount of work done since his last measurement, as also the values of the different species of works done. The roll should then be taken to the paymasters by the gangsmen, the paymaster will compute each individual's pay and disburse on the next day. The limits of deduction to be made daily from any individual's pay are given in page , but should their aggregate sum cause any member's pay to be issued on the weekly adjustment to be less than the full pay of the class next below that in which he is employed, then an equivalent amount of stoppage must be deducted, so as to raise it to that amount. On works of Class II this system must be slightly modified. On roads the overseer will go down his length a day before the paymaster, and the gangsmen will await the arrival of the paymaster on the next day. After payments have thus been made in weekly adjustment, the nominal roll will be retained by the paymaster for submission to the cashier as vouchers for his payments, and the gangsmen should have a fresh roll prepared, which the paymaster should verify as a correct copy of the names on the roll he retains. The fact of his having done so will be attested by his initials at the bottom of the name column.

At the very commencement of relief operations this system was in force for a short time. The value of condiments appears to have been sometimes given in coin, but it is, in my opinion, an objectionable one; it involves intricate accounts, and it does not possess any advantage over payment in money, unless the Government are able to bring grain to the works at a cheaper rate than the local dealers, and even then I would not pay in grain. I should simply lower the wage to the reduced price of my grain, and leave it to the coolies to buy at the cheapest market; but this must not be done spasmodically; if begun, it must be carried through to the end; for if you supply grain for two or three months and fail, then the local dealers will not be prepared to meet an extraordinary run upon them, and moreover they will recover all past losses by future exorbitant prices.

This system was never adopted in my taluk, nor would I recommend its adoption; it would entail much extra writing, because the tickets would have to be filled up from entries in the nominal rolls, which have first to be represented in money and then expressed in terms of grain, and so any amount of discrepancies would arise. Moreover, it would not commend itself to the natives, because some might have a small private store of rice or condiments, and might not find it necessary to spend the whole of their earnings every week on the purchase of provisions.

Payments made in grain or partly in grain and partly in condiments.

Wages paid by tickets on shops.

Mr. Oldham.

The payment of wages would vary under Public Works Department and under Civil Officers. The following was my system.

Special arrangements were made for persons who had newly joined the work and who are not entitled to a full day's wage.

The regular gangs were paid daily and in the morning, not before work began but while at work. As each gang was paid separately its withdrawal from work was no hindrance to the rest.

I insisted on daily payments because accidents often occur to interfere with the pay day, bad weather, death, flight or arrest of

Mr. Oldham—continued.

paymasters, non-arrival of remittances. With a bi-weekly or weekly payment any such interference tells hardly, probably fatally, on laborers on a subsistence wage. I insisted on morning payments for the same reasons. Evening payments were often interrupted or deferred.

The payment of wages was entrusted to a staff of paymasters who were subordinate to the Treasury and Account Department and not to the superintendents of the work. They were much lower in position than these last officers, and as they could be reported on by them were generally in some degree under their control.

The laborers were in gangs of fifty under a gangman or head cooly, who was one of themselves and worked with them. Five gangs were grouped together under a gang-writer who kept the nominal rolls. All these subordinates were directly subordinate to the superintendent of work. To each paymaster were allotted eight gang writers' gangs to pay.

The coolies were paid in the morning for the preceding day's work. In the afternoon the gang-writer made out a slip, or abstract, specifying the number in each gangman's gang, with a memorandum of any fines or deductions made by the superintendent during the day, and noted in the gang-writer's permanent nominal roll, and handed it over to the paymaster. The latter parcelled out the pay of each gang according to these abstracts. Next morning he and the superintendent briefly checked each gang by counting them, resorting to the nominal roll only in cases of doubt, and after adjusting his parcel of money if necessary, made it over to the gangman or head cooly who distributed it there and then, and while the next gang was being checked. The delay at each gang from the beginning of the check till the last number had been paid was not over five or seven minutes. It was a particular rule that no money was ever to pass through the hands of the gang-writer, who was generally a Brahman. The gangman was a fellow-villager and workman of the laborers themselves.

Thus the superintendent, who was generally a British non-commissioned officer, and the paymasters were the only subordinates trusted; while the gang-writer was not trusted at all. The distribution by the head cooly or gangman took place in the presence of the paymaster and superintendent, and regarding it I never heard a complaint by the laborers.

The Superintendent had to report the numbers of the laborers, and the paymaster had to send a daily bill for the numbers under each gangman whom he had paid, and this bill, as checked by the superintendent's report, was accepted as a voucher for the payment; and the nominal rolls which were kept on the works and with the gang-writers in a permanent form were not called in except when a particular reference was necessary. Of course, when superior officers inspected the works, one of their chief duties was to compare on the spot the numbers as ascertained from the nominal rolls with the paymaster's bills, and also to test the latter's and the superintendent's system of check.

This system, which was in force on works under Civil Officers only, is the best which I can devise for dealing with enormous numbers with a very inadequate supervising staff, *e.g.*, one superior European officer with 50,000 relief laborers. With more manageable numbers the officers of the Public Works Department used to retain the paymasters as cashkeepers, and with one of them in attendance, would, after personal examination, issue a payment order for a certain section of work on which were a certain ascertained number of laborers, themselves retaining in their own

Mr. Oldham—continued.

writing a record of the work done and the payment ordered. In this case, too, the payment for the gang was distributed by the gang's own spokesman or head cooly. But even with such small numbers as 4,000 laborers to one officer of the Public Works Department, the latter, if the work was over five miles long, was not able to pay on this system oftener than thrice a week.

Briefly, the best system for ensuring an honest and punctual disbursement of wages, is to have the disbursing agency separate from the subordinate agency for supervising work; to let the returns of the one agency be a check on the bills of the other; and not to overburden the work-supervisor with more than 3,000 people whom he has daily to muster, or the disburser with more than 1,500 whom he has daily to pay. Further, to leave the distribution of the pay to each individual to the work-people themselves, that is to their representatives, and not to a gang-writer or high-casteman who can tyrannize over them by reporting them for fines, for late attendance or for idleness, and so extort from them when he pleases.

No wages were paid in grain in Adoni last year. Both in Orissa, in 1866-67, and in Chumparun in 1874, I have paid them in grain wholly, or partly in grain and partly in money. The grain-payments had to be made by measuring out to each laborer the quantity to which he was entitled in the presence of a superior officer. In Kendrapara (Orissa) in 1866-67 I used to pay thus 6,000 people at a time every evening for a considerable period. The payment used to occupy two hours and was got through without confusion or disorder. This method of payment seems only desirable for some special reason, as the best way of using surplus grain on hands, or when copper coin is deficient, and so on. I have never seen wages paid by tickets, though the rupee brass token was used by the Public Works Department Officers in Chumparun in 1874. With great numbers of laborers whose sole support was a subsistence wage on relief works I should think it a bad plan, leaving much room for fraud and pressing hardly on the ignorant and unobtrusive and weak.

Mr. Weekes.

I would pay wages once a week, and through an Assistant Collector, who should pay as many as possible every day, say so many thousands on Sunday at A, so many on Monday at B, and so on. He should travel with a money chest; and the Department of Public Works or other officers in charge of the works should have the nominal rolls ready with abstracts and coolies all arranged in their gangs ready at the time and place fixed.

The Assistant Collector should not be above paying his or her wage to each laborer singly with his own hands. As the wages seldom differ much in a gang, it is easy to calculate, as should be done beforehand in the abstract, how many laborers there are at each rate; and so many piles of coin at each rate should be made on a moveable table to be carried down the line of coolies and distributed as the names and wages are called over. The wage should be, as far as possible, paid in silver coins, as they

* Besides payment in copper disarranges the money market; besides entailing great trouble and cost of carriage on Government. It is amusing to read Captain Blair's account of the influence of the famine in Tonk State

are more valuable to the laborer and are not subjected to a discount by the money-dealers and grain-dealers as copper coins are. They are not likely to be at a discount, because they are more acceptable to trades-people, and there will always be a portion of the wage which must be paid in copper coin.*

Mr. Weekes—continued.

on the price of copper. He writes, "The influence of the famine on the price of copper coin is worthy of note. Sixty-one to sixty-two native pice now run to the Imperial rupee, whereas in ordinary times the number varies from about 48 to 54 pice. This may be attributed to the circumstances that the present pressure on the bulk of the people has not only checked the purchase of copper vessels, but has thrown a large number of old utensils into the market, lowering the price of copper very materially." I think the said utensils are generally brass, and that the depreciation of copper coins is due to payment in that coin. I noticed great variation in Chumparun where the Gornekpore or Nepalese dumpy copper coins are generally used.

Laborers' wages should *never on any pretence whatever be paid into the hands of head coolies or overseers*. It would be quite easy for an Assistant Collector to pay several thousands in one day. I have often done it myself. He should not spare himself the trouble or be induced to believe he is wasting his talents on details. It is of honest attention to detail that Government is in greater need than of clever brains in famine times. Only in this way would I believe that the money spent was duly spent. Of course there may be a predetermined agreement between the laborers and the overseers for the former to pay some part of the wages to the latter, but the above method of payment would in that case require that the money should actually pass from the hands of the laborer, and render detection easier than where it never reaches the laborer at all.

I have had laborers in Chumparun paid in grain and had bamboo cups (choonga) made to hold a man's, woman's, and child's wages, respectively. Money wages would have been utterly useless in Maubhum where no grain was to be purchased. It does not take long to ladle out grain-wages with bamboo cylinders. Wages have been paid with tickets or famine tokens, but I do not think this system desirable. Every system is less preferable according as it deviates from ordinary modes. There should be very great advantages to counterbalance any such deviation. Money and grain payments are both common and well understood, one as much as the other. I would not pay in grain if money would purchase grain; *certainly not* on large works where the merchant's weight take advantage of the method and put grain at a discount compared with money or other articles. There are other disadvantages besides. On small works near the villages of the laborers, there is less reason to apprehend any objection of this kind.

I should mention that in practice, with large masses of people, payment on work days is almost certain to break up and most seriously interfere with the day's work, and I cannot recommend it. Large numbers cannot be paid in the morning or evening except by agents who cannot wisely be trusted. It is a matter of perfect indifference to the laborer, and, I should think, to Government which day is kept as an off-day, and I see no objection whatsoever to one batch of some thousands being given a rest-day on Sunday, another on Monday, and so on, through all the days of the week. The laborers would prefer being paid on one fixed day. The Department of Public Works or other officer in charge should be held responsible and required to see that the nominal rolls presented for payment to the Assistant Collector are real and not merely *nominal* rolls. The Assistant Collector will be able to see that certain living men and women and children are there present in the flesh, if all the gangs are drawn up and counted at the same time. The Department of Public Works Officer should be able to ascertain that none of these are people brought in only for the day to represent what are called "paper coolies." My plan is designed to counteract the popular native plan of organising "paper coolies" as much as ordinary fraud.

Major Ross.

It is impossible to pay wages daily without sacrificing a great deal of time, which otherwise might be spent on work. Twice a week would be the best way of making payments to the regular workers in gangs, but it would be necessary to make a minimum daily payment for a week to new laborers on works who came direct from relief camps or villages, until they settled down on the works and became known to the grain-sellers.

I think nominal rolls is a sufficiently satisfactory way to adopt in making payments. If tickets are issued, the holder would be more likely to act independently; the gangs would not attend in a body, and the work of payment would be much increased.

The overseers on works where a large number of coolies is employed have scarcely time to make payments in addition to supervising and seeing to the measuring of work. I would have a paymaster of known good character on good pay, and from whom security should be taken.

I have not had any experience of payments having been made in grain. I do not think it necessary, and, if the unit of wage is made the price of a pound of grain, the laborers prefer making their own arrangements.

Lieut.-Col. Prendergast.

Daily wages should not be given, except when people first come to work, quite destitute. The best way is to pay gangs, in succession, during the day, by nominal rolls. The payment of a large number of people at once is very tedious, unless there are a great number of payers. An Overseer or other Superintendent, above the class of sub-maistry, should be present, when possible, to check fraud in the disbursement of wages.

Laborers have never been paid in grain; always in money. I think this is the best system. I have found that the people prefer weekly payments to more frequent payment: the reason is, that at the nearest village, there is a weekly market, and they buy a week's supply at a slightly-reduced rate from that which they would give when purchasing casually on other days. This would not be the case in a town; but quite large villages have their special market-day once in the week, and in small villages especially, supplies are brought in on these occasions.

Mr. J. W. Rundall.

Wages should be paid every third day in the evening. Wednesdays and Saturdays have been the usual days since I have been in charge of relief works. The payments to be made by the overseer; the coolies to be mustered twice daily and their work checked by the overseer every 3rd morning. The only way of checking payments and preventing fraud is constant supervision over each detail by an European officer. No coolies have been paid in grain on works of which I have held charge. I would not advise the use of tickets as long as there is plenty of small coin and copper coins available. If the disbursing officer is properly assisted by a shroff to do the mechanical work of counting, the payments can be quickly got through. If tickets are used, a shroff must be kept to cash them when presented, and the cooly is likely to be cheated either by a grain-dealer or the shroff himself, and get less than the proper value of the ticket.

Major Mead.

When the work is first started coolies should be paid daily or have grain served out to them; this must also be done in the case

Major Mead—continued.

of newly arrived coolies. Afterwards they should be paid twice a week. The coolies are told off in gangs of about sixty each under charge of a head cooly. The disbursing officer should himself go to the coolies' working place, and pay them individually gang by gang by having the nominal roll called out; this causes no interruption to the work; it should be done in the morning, afternoon or evening as most convenient. All payments should be made by or in the presence of the officer or subordinate in charge of the work. When a work is in charge of an overseer one payment in each week should be made in the presence of the Assistant Engineer or Supervisor in charge of the work.

Should it be found that the bazaarman is selling grain to the coolies at a higher rate than right, grain can be procured and served out to the coolies. This was done on the Coleroon bank with advantage; it was not necessary to continue it.

When this is done it must be treated as a payment, and done under inspection. If not convenient to pay newly arrived coolies grain should be served out to them. I do not approve of the ticket system.

Mr. Nordman.

Wages should be paid daily to emaciated people on their first admission to the works, for a week or two; afterwards, they can be paid twice a-week. Able-bodied laborers need not, as a rule, be paid more frequently than once a week. Wages should be paid by calling out nominal rolls, in the evening after work; and arrears brought up on Sundays. Payment may be entrusted to special paying Goomastahs, who should deposit security, and whose chief duty should be to keep the accounts and pay.

Captain Awdry.

Wages should be paid daily for the first fortnight after coolies come to a work, and then, as a rule, not less frequently than twice a week. I have known a case of the coolies preferring to be paid once a week, so that they could procure their food at the weekly markets. I, however, consider that twice a week payments should be made, one payment on Thursday for the work of Monday, Tuesday, and Wednesday, and one payment on Saturday evening for that and the two previous days; to this Saturday evening payment I attach considerable importance, for—

- (1) it necessitates the accounts for the week being made up;
- (2) it allows the coolies an uninterrupted Sunday for rest;
- (3) it removes all arrears, so that coolies can go free to their homes and not return if they are disposed. Nominal rolls are called out; in the roll is the name of the cooly's father *which is not called out*; when he comes for his wage on his name being called he is asked his father's name; if he answers correctly, he is paid.

Wages should be paid as far as possible by special cashiers for the purpose.

In one instance some coolies were paid in grain, but this was because the Collector had a small stock of Government grain which had to be used up. It is undesirable to pay in grain where a bazaar can be established near works.

Wages have not been paid in tickets presentable for food at a trader's shop. The system might perhaps be a good one provided the coolies understood distinctly what the tickets would procure, and that efficient check could be exercised over the trader.

Major Clarke.

Nominal Rolls wherein the coolies' names are inscribed.—Nominal rolls are, in my opinion, a great mistake and useless documents, entailing a considerable amount of clerical work without offering compensating advantages.

I have always, for fifteen years past, made use of tickets, and have generally found that system preferred by the subordinates as well as by the native laborers.

The payment of wages can only be entrusted to *well-paid* native subordinates.

System of Tickets.—The system I have pursued is this: "The tickets are all printed documents about $1\frac{1}{2}$ " square, each ticket having a separate number printed on it, commencing from 1, &c. The pay agent notes the date of month on each ticket in ink, and the 'gangers' present each cooly at the close of the work with one, which the cooly presents at the cash-table for payment;" thus the paying operation is rapidly proceeded with, and the tickets, which are taken away by the pay agent, are kept by him as vouchers for his disbursements; these he submits daily with the tickets to the officer in charge of the work.

Subordinates are responsible for outturn of work, &c.—The subordinates in charge of the several gangs are made responsible for giving the correct strength of their gangs or parties to the pay agent, who issues accordingly the correct number of tickets to each subordinate. By this system, unless one and all of the subordinates form a party of collusion and enter into a compact to cheat all around, the paying of relief-gangs can alone be carried out expeditiously and justly.

As the gangs increase, the number of pay agents must be raised proportionately, for no one man can possibly pay (say) more than 1,000 workmen of all sexes, for it is of importance that the operation of paying coolies should not occupy the pay agents until dusk, for under the shades of evening imposition on a greater or lesser scale is sure to be tried on.

Tickets are not "Paper Money" as Paper Currency.—Tickets in no case should be regarded as "paper money," and no tradesman should be allowed to accept any ticket with impunity; when discovered, such a practice has, and always will, lead to the laborers being imposed on, and in many instances that came to my notice the work-people only received about 60 per cent. "in food" of the money-value of their ticket from the vendor of rice, &c.

Gangers.—The gangers or head coolies of small parties should be made responsible for the number of his party at work, and should always be sharply dealt with if he ever allows any one to play the truant or any outsider to creep into the gang a short time before the doling out of the tickets takes place in order to obtain one of them under false pretences.

The names of those, if only one or two, who might be accidentally absent at the time of ticket-giving could be taken down, and their tickets given to them subsequently.

Captain Morris.

With a system of piece-work I should not consider it necessary to make daily payments, they might be made every other day; but if task-work is insisted on, payment should be made daily. The best time for this purpose is the middle of the day, when work should be stopped for a couple of hours, say from 12 to 2, to enable the laborers to have their mid-day meal, and advantage can be taken of this break to make payments. To pay in the morning

Captain Morris—continued.

before work begins would necessitate work being commenced rather late, and it is most desirable that it should be commenced as early as possible, so that the bulk of the task may be completed before the hottest part of the day. If payment were deferred till work was over in the evening, it would often, if not always, be dark before it was completed, and this might cause confusion. Payments by tickets would probably lead to the introduction of forged tickets on a large scale, and as payment must be made on or near the work, it appears as simple to pay in money at once, as to issue a ticket for payment.

The most simple method of payment where the numbers are large (and whatever system be adopted, it must be one applicable to large numbers,) is to divide the laborers into gangs of equal strength, to appoint one man as the head of each gang, and to pay through him. The strength of the gangs can easily be fixed so that the pay of each will amount to a round sum in rupees daily. At mid-day, or at whatever hour is found most suitable, the laborers assemble in gangs, on their tasks; the overseer then goes round and pays the amount due to each gang, to the head man, who distributes it to the individuals. This occupies but a short time, and there is ample time for the overseer to hear any complaints, of which, judging by experience, there will not be many. The introduction of task-work necessitates the division of the laborers into gangs, and it seems only natural to take advantage of this, in deciding on the method of payment.

No laborers have ever in this district been paid in grain, either wholly or in part, and I do not think such a system of payment advisable so long as grain is procurable in the markets.

Mr. Ruthna Sabapathi Pillay.

For the first week or fortnight daily wages may be necessary, but subsequently it is to the advantage of the coolies to pay them weekly. In these parts fairs or shandies are held weekly at certain places; at other places it is almost impossible to get any thing; even in places where shandies are held, except they be towns, on other than fair days nothing can be had. As fixing the price of grain at which it should be sold discourages trade, and people have not sufficient inducements to take grain to the camps, and we have one of the week days a holiday, weekly payments are good. Then two and three of the gangsmen join together and buy things and divide among themselves. Retail dealers take a longer time in selling the same quantities than a wholesale dealer, and has more trouble to undergo in the bargains. He must consequently sell at greater profits; and the cooly cannot, therefore, expect the same quantities when he buys for two annas as when he buys for a rupee. Daily payments are, therefore, embarrassments, detaining people from work, generally they have to go a distance to buy food, and even when they do go, not unfrequently they are disappointed. When payments are made on work spots, it does not matter when they are paid. As they are working, each gang may be called, paid and sent back to work.

The system now adopted is by calling out from nominal rolls mustering the gang, and each member required to say out his or her name and then marking in the nominal rolls. I am not certain whether issuing tickets will be of any great use. Some time ago I am informed that payments by tickets were tried. It appeared to work well, so long as weekly payments were not found possible. But when arrangements for frequent payments have been introduced, the issuing of tickets was found of no use. The coolies

Mr. Ruthna Sabapathi Pillay—continued.

having had to keep the tickets till the shandy day, or if they wanted to sell them earlier they had to pay discount. The payments must be entrusted to pretty well paid individuals of good character, and it is advisable to take deposits from them for their good conduct. The best way of making payments should be that those who examine the work and certify that certain persons are to be paid should have little to do with payments. The last being made by other officers, who will inquire as they make payments as to what amounts are due to them. If there be fraud in paying, the coolies will naturally complain to the overseer, and if more are certified to be paid, the cashier will complain against the overseer, and thus, unless there is a conspiracy to plunder public money, much fraud cannot be done. The overseer and cashier must be independent of each other, and each subordinate to a different man, as the division officer.

Payments were made all in money. In places where traders cannot be induced to go, grain must be bought and conveyed and paid for wages. There should be a stock at the head-quarters of the division or sub-divisions, and distributed to the care of cashiers as money.

Mr. Russell.

It is best to pay wages daily, if possible, as it is found that daily payments are much appreciated by the majority of coolies.

Where there is cashier on a work, *i.e.*, an individual whose sole duty it is to make payments, payments can best be made during the day while work is in progress, as in this case the cashier, who has no other duty to perform, can go along the work, and pay at leisure each gang of coolies. Where, however, an officer or subordinate has to pay the people on a work, payments can be best made in the evening after the work is over, as payments made while the work is in progress would unduly interfere with the numerous other duties which the officer has to perform. I do not recommend payments being made in the morning before work begins, as in the early hours of the morning much more work is done than later on in the day, and it is also the usual time for inspections of work being made by an officer.

The payments of wages should, in the first instance, be entrusted to an officer or trustworthy subordinate, and should be by them paid into the hands of every working cooly, if possible. Where, however, the number of working coolies is large, and it is, therefore, impossible for the paying officer to pay each individual, the coolies should be divided into gangs numbering not more than fifty, and each gang should be told to elect from their number one or more headmen, to whom the total wages due to the gang will be paid, and who will in turn disburse the wages due to each individual in their gang. On no account, however, should the paying officer select a Brahmin maistry or other non-worker to act as a paymaster under him, but each gang should be allowed to choose their own paymaster from among their number, who, in addition to being a *bonâ fide* working man, is also of the same caste as the coolies in his gang.

Surgeon McNally.

Daily payment of wages is desirable, but it does not appear to have been practicable during the last famine. Weekly payments were the rule; sometimes they were biweekly, sometimes fortnightly. I have witnessed a large amount of suffering in consequence of this, and the numbers in receipt of gratuitous relief and

Surgeon McNally—continued.

the mortality from famine must have been increased thereby. Here is an extract from a letter, written to the Collector of Cuddapah in July 1877, in reference to this subject: "Arrangements to take on destitute people at relief-works on the day they arrive appear to require attention. At Tanakul and other places I found people kept starving for several days without being taken on the works. New arrivals at relief-works also appear to require some provision for their maintenance until the next pay-day after their arrival. It may perhaps be possible to issue daily pay to an incomplete gang on each large work."

The last sentence alludes to the fact that applicants were sometimes kept waiting until there was a sufficient number to form a gang. Such applicants were often far from their homes and entirely destitute. "*Qui cito dat bis dat*" is most true in famine relief.

I have no experience of payments in grain or by tickets for food. My opinion, however, is that the greater part of the wage ought to be paid in grain, for the following reasons: (1) there would be little attraction for people not really in need of food; (2) laborers would, to some extent, be prevented from starving themselves in order to hoard up their wages; (3) the supply of wholesome food would be certain and constant, and there would be less inducement to purchase bad food at a low price; (4) importation of, and payment in, grain would lessen the State expense. In the case of money-payments the food-market is left entirely in the hands of local traders who force up the price (and consequently the relief-wage) for their own advantage. Thus the grain merchants, who are perhaps the wealthiest class in small towns, are enriched by State assistance which is intended for destitute laborers.

Rev. Newport.

The advisability of paying daily or less frequently depends very largely on the proximity of bazaars or markets to the place of payment. If the work is in the vicinity of a daily bazaar, it will be for the convenience of the people to receive a daily wage. They will daily purchase their daily supply of food, and never have a store either of money or supplies to tempt thieves. If a daily bazaar does not exist in the near neighbourhood, there will certainly be a weekly market near. In that case the wages should be paid weekly on the day preceding the market, or on the morning of the day itself if practicable. There may, indeed, be two markets—one on each side of the work—held on different days. In this case payment twice a week to suit the market will be advisable and convenient to the people. It is not expedient that the people should have a large supply either of money or food-stuffs in their huts. This attracts thieves and creates disputes whenever any thing is missing. It also renders the coolies improvident and leads to drunkenness.

In my opinion, *cash* payments to coolies are preferable to any form of the "truck" system.

Mr. Hurry Row.

The best way of paying wages is daily and in the evening and by tickets. The payments of wages should be entrusted to the best lower subordinates, and these should be held responsible to show at least approximately, that the amount disbursed is equal to the amount of work done. If possible, a head cooly should be allowed to be elected or appointed for a gang and a certain quantity of work allotted to it, each cooly being given a ticket. No definite rules for such minutiae should be laid down as a good manager drawing

Mr. Hurry Row—continued.

a handsome salary or an honorary citizen who would take up such management would be able to do these things well with reference to local circumstances and requirements. No wages should be paid in grain, but shops should be attached, if necessary, to the relief-works where grain should be procurable. For this purpose grain should be bought by Government in the market as any private individual would do, and allow it to be sold in these shops at a small profit, say, one or two per cent. on the cost. The wages may be paid by tickets provided that tickets are convertible into money in shops on the date of the tickets and the next day only.

QUESTION 8.—What system do you recommend to prevent frauds by persons on the works, such as the receipt of wages by those who have not worked? What steps should be taken in the case of persons who have been absent at any of the roll-calls, or who have worked part of the day, but not all of it, or who, having worked during the day, are accidentally absent when wages are paid.

Mr. J. G. Horsfall.

I have no system other than that I personally practised in 1866 as sketched above. The one requisite is constant personal supervision and check. Under that I believe it was impossible for people who had not worked to receive payment. The gangs were checked twice a day, and any shortcoming in quantity of work actually done deducted from their wages. They were, in fact, paid a fair day's wage for a fair day's labor.

A person absent at roll-call will be marked absent and mulcted in a half day's pay; that is, half a day's pay will be deducted from the amount paid to the headman; absence at second roll-call would similarly entail the loss of the second half of the day's pay, the roll-call being always taken during working hours, but not at fixed hours. The headman receives the wages of the laborers of the previous day, and he never, so far as I could learn, failed to pay.

Mr. Price.

I consider that the best means of preventing frauds of the kind mentioned is to have roll-calls, at the least three times a day, and to make that between the morning and evening muster at irregular hours, dealing severely with any cases of absence not satisfactorily accounted for. It was a very common trick for a man or woman to appear at morning roll-call, go off directly afterwards, and return in the evening to be paid. These persons were, of course, often detected by the second and unexpected muster. I found that paying the absentee for the day and deducting the amount of his wages from that of the head cooly, who ought to have looked after him, was a very efficacious remedy. To prevent personation, which was by no means uncommon, I would enter caste and age in the nominal rolls. I would call morning roll at a certain fixed hour, allow an hour's grace, and, after that had expired, admit no one for that day, and of course stop his or her pay; in the case of those absent at the day muster, I would allow no pay unless they were satisfactorily accounted for, and to those who were present at the two roll-calls, but not at the last, I would allow half a day. In the case of those who had done their full day's work, but who were accidentally absent when pay was disbursed, the rule observed by me was that they received it next day.

Mr. Longley.

Those who have not worked are in no danger of receiving wages on any work under Department of Public Works officers, except when

Mr. Longley—continued.

the cashier, the overseer, and the cooly are in collusion, and supervision of measurements would prevent this from going on to any appreciable extent. The difficulty felt is to ensure that those who have worked shall be paid, which does not necessarily follow.

Those who have worked part of a day should be paid proportionally, except when absent owing to sickness, when they should get at least Civil Agency rates, or be sent to hospital. Those accidentally absent at paytime should be paid as soon as possible after they appear. An efficient cashier can manage this without difficulty; but where advantage is taken of this to be irregular in attendance when the pay roll is called, some notice should be taken of it. Such cases will be rare. Those to whom money is due will, as a rule, come for it, and a friend in the gang will generally take charge of the pay of those absent, and I should not hesitate to trust the honesty of a native in such matters.

Mr. Grose.

The careful organisation of gangs, regularity in keeping nominal rolls, &c., and the activity of the officers in charge (if in sufficient numbers) must make fraud difficult.

When persons are absent at the roll-calls, they should be referred for payment to some officer superior to the ordinary paymaster, and he should pay after inquiry according to equity. Short work or absence at the time of payment should be punished by small fines ratified by the officer in charge.

Mr. Knox.

Every maistry of a gang should have a nominal roll containing the names of those on the gangs with columns for the days of the week and a remark column. The roll should be called without fail every morning as nearly at 8 o'clock as possible, and every one present marked "p" in the column of the day, and every one absent marked "a." This should be insisted on, and failure to do this should involve punishment. The maistries should not be allowed to put in hieroglyphic marks of their own, which they afterwards explain as they like. If a cooly was late for roll-call and came any time before noon, under the letter "a" or in the column of remark might be entered half, which would indicate that he was only entitled to half a day's pay, but nothing should be allowed to a person coming after that time. No one should be allowed to leave the works except in the case of sickness, and then the fact should be noted in the column of remarks. Works should cease at about 4 o'clock, and if thought necessary an interval of an hour might be allowed in the middle of the day. If the maistry did his duty no one could be paid who had not been on the works, and the best way to keep the maistry up to his work would be for the overseer and other superior officers at their inspection to frequently examine and call the rolls.

Under the present system no persons should be received on the works newly without a list from a Revenue Officer; this course no doubt is advisable, and steps would have to be taken to prevent the rule being infringed. The best way, I think, would be that, when such persons were originally put on a gang, their names should be initialled by the overseer after comparing the roll with the Civil Officer's list. Subsequent fraud could not take place without being liable to detection on a comparison of two successive rolls. There might of course be instances of false personation, but there would not be many and probably would very likely be discovered before long.

It is important, with a view to prevent indiscriminate fining without sufficient cause, that the overseers or others who were entrusted with this power should note at the time on the roll of the gang the

Mr. Knox—continued.

amount of the fine and the cause for which it is inflicted. I have known instances in which there was a strong suspicion of embezzlement by overseers, and they explained discrepancies by saying they had inflicted fines, which however had not been recorded at the time.

Mr. Jones.

I believe there is nothing so effectual in the prevention of fraud as to secure trustworthy agency and to exercise the most careful supervision. No system could be devised to render fraud impossible. The men who are responsible for the working of the laborers should not be entrusted with the preparation of the accounts, and the men who prepare the accounts should not be charged with the duty of making payments. Separate men should be employed on these several duties. Men who have worked half the day should have proportionate wages, and men who have worked during the whole day but are accidentally absent at payment should have payment when they attend.

Major Baynes.

(a.) The only checks on this fraud are frequent mustering of gangs by the European Officer in charge; but this is not absolutely satisfactory, as a cooly may be absent temporarily. There is another check, and that is the fear entertained by the gangster that some member of the gang may object to the introduction of an outsider, as thereby not only is the total earning of the gang diminished, but the share of the balance also.

(b.) In determining the degrees of fines from the pay of the other members, according to the magnitude of the offence committed, such an amount of detailed calculation would be necessary that I would suggest there should only be two fines,—the half or the whole of the different margins, see page 10.* The former might be levied for absence under two hours, the latter for any absence exceeding that period.

If a laborer was absent when I mustered his gang, I should, if he was a recent arrival whom I had never seen, verify the reality of his membership by inspecting his ticket, see page 22; if he had joined, he would simply fall under same rules as other absentees.

But the exaction of these petty punishments entails an amount of calculation and trouble which is hardly conceivable when dealing with large masses; for it must be remembered that in the gang and task system the infliction of a fine on an individual offender affects all the members unless these special fines are allowed for in the calculation of amount due on outturn. Reference to the specimen form of the nominal roll will give some idea of the trouble they cause the supervising staff.

Mr. Oldham.

The best plan for preventing the receipt of wages by those who have not worked is to make the whole gang the unit from which taskwork is exacted, thus giving each member of it an interest in the sum to be paid the gang, and in detecting and complaining of idlers. In fining a gang for short work I used by preference to fine the men, as they were able to make the women and children work, apart from the fact that the women are, on relief-works, by far the most conscientious laborers.

The framing of rules regarding the treatment of absentees at roll-call or at paytime depends entirely on the amount of supervision

* *Vide* Major Baynes' special observations on the wage test published in the Appendix.

Mr. Oldham—continued.

available and consequently the extent to which refinements of detail can be carried. At Adoni last year, with overwhelming numbers, absentees from whatever cause were struck off the roll and left to gain readmission to the work under the system for readmitting all new comers, who could only be admitted into gangs in course of formation and not into those which had been formed and the rolls of which had been so to speak stereotyped. Considering how bad the class of men who act as gang-writers generally are, I would not be disposed to grant them any discretion on this point, or to relax the rule above described. It cannot cause much suffering.

Mr. Weekes.

In my last answer I have touched on the question of a system to prevent funds, such as the receipt of wages by those who have not worked, and by overseers for coolies who have no existence. I think no system so effective as the presence at one time of all the gangs, which there can be not the slightest difficulty in counting. This secures that as many people are present in the flesh as wages are paid for. The Department of Public Works or other higher officer in charge should be responsible that those so assembled have all worked, and if he signs nominal rolls as he should be bound to do daily after personal calling over of the gangs at some time of the day as a check, the only link required is the trustworthiness of the officer; and this there should be no difficulty about, as my system requires the officer to be in command of only as many coolies as an Assistant Collector could pay in a day. The officer's duties in this respect should never be entrusted to any one else except in cases of serious illness to be certified. I should also require a certificate of the amount of work done, for which the payment is the reward; specifying the gang and the exact locality, the same to be tested by an independent Inspector of the Department of Public Works. I have often paid the wages of those accidentally absent to known and recognised (by the gang) neighbours of the absentees, in the presence of the whole gang. This is sufficient. It is better to be strict than to allow of exceptions in the case of persons not present at roll-calls. The grant of exceptions would be too liable to abuse.

Mr. Cook.

If a certain portion of work be allotted to a gang and it is known that the portion requires that amount of people to do it, we have a check on the supervision; for, when the paymaster comes round and finds that he has to pay more men, he naturally asks where the work is. If this is not forthcoming, either the supervisor has been trying to cheat, or else the people at work have been idling. The paymaster, I should add, checks the supervisor's measurement, and on that pays each gang. If this system be rigidly carried out, and the District Officer be constantly on the look-out, fraud will not and cannot prevail easily.

If the gang system be in force, the gangsmen will not let any one idle by working only half a day, for he will be fined, as his gang must do a certain amount of work per day. Should, however, any one be away at the roll-call or is accidentally absent when wages are paid, and it has been proved that he worked properly all the week, then his pay is kept back till next payday, when, if he be still absent, it is credited to Government.

Mr. J. W. Rundall.

The only system to prevent frauds by persons on the works is the frequent checking of the coolies at muster time by European Overseers and Officers. Any one absent at morning roll-call should be fined half a day. Very few are absent when wages are paid.

Major Ross Thompson.

The system of piece-work which I have advocated above obviates all danger of fraud to any appreciable extent.

Lt.-Col. Prendergast.

To prevent fraud in the way of receipt of wages by those who have not worked, we cannot help depending a great deal on the head coolies of gangs, subject to the supervision of a maistry who looks to some ten gangs. If wages are paid out of working hours and people are accidentally absent, the money is put away to give to the people afterwards; but if laborers are absent, when summoned from work, the half-day's pay should be deducted; or the whole day's pay if the people have been absent at both forenoon and afternoon roll-call.

Captain Awdry.

The prevention of frauds is very difficult, but by making each man responsible for *separate* work it is, I think, reduced to a minimum; thus the head cooly points out which the individual idlers are in a gang, the maistry calls the rolls and makes out the nominal rolls of those present, and the sub-overseer or overseer measures the work done, and enters the quantity on the back of the nominal roll; the orders of the officers in charge have to be taken in regard to the punishment of the idlers, and a cashier makes the actual payments.

Those who come more than an hour after the morning roll-call should, unless they complete their whole task, be paid only at Civil Agency rates; those who have worked for the day but been absent when payments are made should be paid in full if they apply at or before the *next* payday; otherwise the money should be forfeited.

Mr. Nordman.

To prevent frauds, the closest supervision and scrutiny are required from everybody, high or low, in authority on the works. Without the most vigilant supervision, frauds are certain to flourish; with such vigilance, fraud can be prevented.

When people are absent at the time of payment, their names should be scored out in the nominal roll, and the roll closed and totalled up after all present have been paid. The absentees' names should then be entered on a supplemental roll to be attached to the original one, and payments entered in the supplemental roll as they are made. Persons who have worked only part of the day should only be paid for a part, *i.e.*, a quarter-day, half-a-day, or three-quarters of a day.

QUESTION 9.—What wage should be given to those who are prevented from working by sickness, (1) when there is a hospital attached to the work, (2) when there is none?

Mr. Knox.

If there was a hospital on the works any person prevented from working on account of sickness should be sent to it, and while under treatment should receive no wages, but should be dieted under the orders of the Medical Officer. While in this hospital his name should be kept on the roll and his expenses charged to the work. A sick person should not be allowed to remain here more than a few days, a week at most, but should then if not recovered be taken to the nearest large hospital or camp, his name being then struck off the roll.

Mr. Knox—continued.

If there was no hospital on the works the only way would be to send the sick person with a note to the nearest hospital for treatment. If he did not return within a week his name might be struck off the roll. During the time his name was on the roll his expenses should be paid to the hospital on presentation of a bill from the Medical Officer.

Mr. Price.

I would give no wages to the sick when there is a hospital attached to a work. I would make them go on to the hospital strength and diet them there until fit to go out to work. When there is no hospital I would allow the coolies, if found to be really sick, and if they remained on the works, their pay until they could be sent to the nearest poor-house for treatment; but if they left and went to their villages, I would stop it altogether. There would of course be cases of the latter class in which hardship might be occasioned, but unless considerable strictness was exercised, and quitting the works was made punishable by complete stoppage of pay, there would be no keeping the coolies together.

Mr. Longley.

I do not contemplate any large work being without a hospital. If there is one, those sick should be sent there if their ailment prevents them from working. Those sick on smaller works, when there is no hospital, should be sent at once to the nearest camp.

Mr. Grose.

When there is a hospital attached to the work sick paupers should be supplied with food there, and paid no wages. If there is no hospital the wages in so far as they are subsistence wages ought to be continued, but to prevent paupers from malingering, they will have to be slightly reduced, say, by the amount of the fine inflicted for under-work.

Mr. J. G. Horsfall.

On this Mr. Sewell, my Head Assistant, who was for some time in the district, and also in the Trichinopoly District, writes: "If people are prevented from working by sickness they ought to receive sufficient food just as they receive medicine, but no wages at all. I would apply this whether there is a hospital or whether there is none. The Medical Officer in charge to prescribe the diet."

Major Baynes.

On works of Class I there must of necessity be a hospital. Patients under treatment would be divided into in and out patients. To the latter I should on medical certificate give their full pay, subject to the limitation laid down in page 22*; to the in-patients I should not give pay, because they would be gratuitously fed by the Medical Officer. On works of Class II, there would not be a hospital. To a laborer of that class I should allow pay for three days on a sick certificate. On the production of this certificate he would be paid by the paymaster along with the other members of his gang. In the event of his sickness extending over three days, the Munsif should report the fact to the Village Inspector, who, at his discretion, would either temporarily put him on his village kitchen list or send him to the poor-house hospital. If the sickness be such as to render either of these courses impracticable, the Inspector will place him on his money-dole list till he sufficiently recovered. To admit of them being adopted in either case, the laborer will be struck off the labor

* See under Question 14.

Major Baynes—continued.

nominal roll from date of reporting sick, and be transferred to the gratuitous list; the Inspector will report this fact to the gangsmen for information and guidance of the paymaster.

Lt.-Col. Prendergast.

When there is a hospital, people should receive their food there and no wage; when there is none, the ordinary wage may be paid, if the gang perform the required task, for a day or two; but sick people should after that time be sent to the nearest hospital.

Captain Awdry.

Those who are prevented by sickness from working and are sent to hospital should be given the prescribed hospital diet; those who remain on works should be relegated to hospital as soon as possible, but until that is done they should receive the same as if they were in a relief camp.

Mr. Nordman.

Those who are really prevented by sickness from working should only receive 75 per cent. of their wages. If they are sick for more than a couple of days, they should be sent to hospital, where they get food but no money. Where there is no hospital, they should be sent to the nearest relief camp.

Mr. Weekes.

(1.) In hospital, hospital rations; (2) where there is none if the patient is absent in the village, no wages. If present the case should be reported to the chief officer who should make a separate note of such cases if satisfied of their genuineness, and give the usual wages, less a fine for short work. This is necessary to prevent wholesale shamming.

QUESTION 10. *The Labor Test*.—What are the principal descriptions of work on which fixed daily tasks are applicable, and what tasks have been insisted on; how are the laborers classified according to their physique; by whom and in how many classes? What steps are taken for raising laborers from one class to another, according as their physique improves, or *vice versa*? How are they ganged, and into how large gangs? How is their work measured up; by whom, and how often? How are they punished for not completing their tasks? What steps should be taken to test the report of the measuring official, to secure that the laborers are justly punished or deservedly paid in full? What steps are necessary to compel persons receiving relief to work? In those sorts of work on which it is impossible to apply the task test, what test can be applied to ensure that the laborers earn their wage properly?

Sir W. R. Robinson.

“Labor Test” simply means efficient management of works in progress; and where persons are fit for labor, a day’s work is fairly given for a day’s wage without “test.” Piece-work is doubtless a good form of administration. Where physical fitness is not present—where we are working emaciated, and women, and half-grown children in exposure, and on what is called subsistence diet, the low condition of life and prospect of its lasting to the end had better not be put to a severe, hard-and-fast test in the hands of task-masters who are more or less without pathological experience or judgment. The perilous theory that the object of famine administration is practically a hard contract between the perishing and the State has to be removed from the executive mind. It is true that the Government does not mean unreasoning severity under the circumstances; but a

Sir W. R. Robinson—continued.

responsible executive—with completion certificates and stern questionings as to assumed inadequacy of results from the labor employed before them—is practically driven to become exacting as respects their less considerate subordinates, and the whole thing is in danger of assuming a character which traverses the object in view, and has sometimes been cruel; and the test results in mischief and peril to life. When we have organized well-supervised works, we have applied the labor test; and we must leave the executive to make the best of it under the circumstances, assured that neither labor nor executive will largely fail. The Commission can scarcely deal with tasks and punishments, more especially as feeble men on subsistence wages do not present much margin for the latter. The stick in the hands of reckless low-bred gangers should be strictly forbidden. If the Commission pursue their inquiries on Question 12 in this Presidency, they will find that both shelter and clothing have been (unduly so in some seasons and localities) deficient on famine works, as a rule, throughout. But the cost of clothing is great and may be fairly kept low in most seasons.

Mr. Price.

Excavating gravel, spreading and tamping earthwork, and collecting and breaking metal are the principal classes of works to which tasking is applicable. In this district tasking appears never to have been attempted. In Bellary and Cuddapah it was, and a scale was drawn up there by me. My system of tasking was per gang of fifty persons composed of 20 men, 20 women, and 10 children and allowance made in fixing the task for the gang containing persons in good, indifferent, and bad condition. Subsequently when the famine grew worse we found the state of the gangs such that they could not perform the tasks imposed, and we had therefore to divide into light-work gangs which had no regular task, and ordinary gangs made up of the strongest, who still had to turn out the usual task. There were only the two classes, and the classification was made by the European officers. This classification is not to be confounded with that made when examining into the physique of laborers on works, in view to a special periodical report for which Government called. When these latter classes were five, viz., "good," "fair," "indifferent," "bad" and "very bad," "good" and "fair" formed one set of workers, "indifferent" and "bad" the other, and the "very bad" were sent to the poor-house.

The coolies were frequently mustered and examined by the officers in charge, and transfers from time to time made. My system was to gang the fifty people previously mentioned under a head cooly, then to place eight such gangs under a head maistry, three of such gangs under a maistry and to put a party of 4,000 under a Superintendent, he having, when this number was

* I enclose copies of the Proceedings to Board of Revenue, embodying orders which I issued on the subject—(Printed in the Appendix).

exceeded, an Assistant Superintendent.* In Bellary, where I had a good staff, I measured up every day before the coolies were paid. In Cuddapah this was done as often as possible, but we had so very few hands and so many coolies that to turn out anything regular was simply impossible. In Bellary I used to strike off quarter and half-a-day's pay when only three-quarter or half-a-day's work was done, and when under half was turned out, the coolies concerned got nothing. After a fortnight of this system they gave little or no trouble. It was however put a stop to by Government when the one pound of rice wage came into force, and we were permitted to fine only up to the extent of condiment allowance, and then not more frequently than for a fixed number of days.

Mr. Price—continued.

The only way to test the reports of measuring officials is to take check measurements oneself, or to have them taken.

As regards enforcing work, I would certainly carry out the system which we had in Bellary; it may appear severe, but half measures are not advisable when one has to deal with large bodies of people. Where persons who are strong enough and able to turn out a definite and easy task deliberately neglect to perform it, they should suffer in a way which they can appreciably feel the effects of doing so. If they do not care to exert themselves in the very moderate degree which will ensure their obtaining their wages, the conclusion to be fairly drawn is that they do not require them. I cannot say what test, other than the task test, when that is inapplicable, could be employed. The Department of Public Works, where work which cannot be tasked is dealt with, have certain scales by which they calculate and these could, I presume, be used in the case of famine works.

Mr. Grose.

The Department of Public Works have prescribed the full task for the various descriptions of works. Half of it is, I think, enough for non-able-bodied laborers.

We have not attempted to do more than classify laborers as able-bodied or able to do the full task, and non-able-bodied or not fit to do it. No stricter classification is possible without more supervision than we had or are ever likely to have at such a time. The Civil Officer does this amount of classification when he gives or refuses an order requiring the admission of a pauper to one of the smaller works. Works to which the work-test cannot be employed should not be made relief works.

Mr. Longley.

Daily task is most easily applied to earthwork.

The tasks in the earlier part of the famine were light, and were not uniformly enforced. Since the Government Order of the 24th September they have been gradually raised for able-bodied coolies to a full task.

Laborers have only been divided into two classes—those able-bodied and the reverse. The classification was partly made by the Civil Officers, who, in sending coolies to the Public Works Department, sent them to Professional Agency works if able-bodied, and to Civil Agency works if not able-bodied, but the Department Public Works Officers have again reclassified them remitting some to Civil Agency from Professional Agency works, and sometimes setting aside on Professional Agency works a section for those not able-bodied.

If any steps were taken for raising laborers from one class to another, this was done by the Department Public Works Officers, but I doubt if this was ever done systematically, and the tendency has been either to laxness in permitting the employment on Civil Agency works of able-bodied coolies or to over-severity by exacting a full task from all irrespective of strength.

Coolies were punished for not completing their tasks by only getting Civil Agency rates. The only effectual measures to test the reports of the measuring official are to provide a sufficiency of trained European supervision in the Engineer Department. To see that coolies are justly punished very little is required. The tendency is quite the other way. To see that they are *not unjustly* punished, and that they are paid, a full abundance of the European element for supervision in professional details is needed, and this element must be

Mr. Longley—continued.

subordinate to the Covenanted Divisional and District Officers, who should indicate the principles on which, or the circumstances under which, punishments may be awarded, the Department Public Works Officers *giving effect* to the same and carrying out the details independently. Department Public Works Officers should furnish when asked information to Civil Officers as to the tasks of the different gangs, the rates at which they were paid, and the extent to which punishments were made in order to enable the latter to ascertain the truth or otherwise of the complaints of short payment, &c., made to them in their tours. If this is done, there can be no cause for friction.

To compel persons receiving relief to work, nothing beyond careful supervision, punctual payments, and no distance test above five miles for a Civil Agency work and ten for a Professional Agency work is needed.

I cannot conceive any form of relief-work which it is impossible to measure and so apply the task test, but, if it should happen that there is such a work, daily wage must be paid.

Mr. J. G. Horsfall.

Famine relief works in this district were carried on under the Public Works Officers, and the question will be answered, I presume, by them.

In Ganjam the only works carried out by me were road works. Two annas were taken as representing a fair day's wage for a fair day's labor, and upon this calculation the rates then in force in the district in the Public Works Department were allowed for each work according as it was sand, clay, gravel, or stone.

No distinction was made in Ganjam. There would be fair percentage of persons in each gang deficient in physique. Those not fit to work were drafted off to the relief camp after personal inspection. I do not know what system was practised in this district.

In Ganjam gangs were never allowed to exceed 50 or to be less than 20.

The work was measured by the maistry daily, if possible; but it frequently happened that he could not measure until after two or three days, and the measurements were tested by me every bathday or oftener. Occasionally a supervisor was lent by the Public Works Department at my request to measure completed portions. After relief works ceased, the entire work done was measured and value thereof estimated by the Public Works Department. Whenever deficiency was discovered the value thereof, or a suitable amount as fine, was deducted from wages paid that day.

Constant personal supervision and personal testing at least ten per cent. of his measurements, and by personally testing measurements in cases in which the gang complains of short measurements on the part of the measurer. I found that payment of the gang's wages to the headman sufficiently ensured payment to the individuals and practically had no complaints.

No person able to work should be allowed gratuitous relief.

Mr. Fawcett.

Fixed daily tasks were drawn up by the Collector and the District Engineer and coolies were not to be paid unless these were performed. These tasks were first about forty per cent. and afterwards raised to fifty per cent. of those done by ordinary coolies. This held good till the publication of G.O., No. 2847, of the 24th September 1877. The only work on which tasks could not easily be exacted was clearing jungle on the Mantrala Kanama done by

Mr. Fawcett—continued.

Chintsus. Laborers were not classified according to physique till the publication of the Government Order.

In this division laborers were put in gangs of one hundred each, that is about 25 men, 60 women, and 15 children between seven and twelve years old, though these proportions varied according to the nature of the work. To each gang there was one gang maistry receiving double the pay of a cooly, and two kolkars who only got cooly's pay. The gang maistry kept the nominal roll, and he and the kolkars kept the coolies at their work. The work was measured out for each gang in the morning by the gang maistry, and this was checked by the road superintendent or officer in charge whenever he came during the day. After the work was finished it was measured up in the evening by the gang maistry, and again by the officer in charge of the work before payment if possible.

The above arrangement ought to work very well where there is sufficient supervision. Where there is not the coolies do little or nothing.

Mr. Jones.

Earthwork in road-making and picking and breaking stones for metalling roads have been the descriptions of work on which daily tasks have been enforced. Not less than 50 per cent. of the work which at the Department of Public Works valuation would be an equivalent for the day's wages has been the task insisted on. The able-bodied have been set to work averaging 75 per cent. of the full task, while the weaker have had only 50 per cent. to do. The gang maistries have in the first instance picked out and arranged the laborers, and their classification has been checked and revised by the superior officers in charge of the work. Each gang consisted of twenty-four coolies and a maistry or head cooly. Each gang had a furlough, and over each mile or eight gangs there was a mile maistry, who measured up the work daily with the help of the gang maistries. The sub-overseer in charge of the road tested the measurements of the mile maistries daily.

Major Baynes.

(a.) If considered expedient, on all special works, except in rare instances. The minimum outturn on all works I have fixed at 75 per cent. of ordinary outturn under my scheme, see page 15.*

On what works can fixed daily tasks be exacted.

(b.) The number of classes has been limited to two, and the qualifications of the members have been described in Chapter II, all subsequent transfers should be effected by a relief officer; on arrival at a work, Class I, the applicant would be medically inspected, see page 22,† and afterwards weekly; so that if deteriorating in condition, the Medical Officer in charge of the work according to his discretion would either rest him in hospital, or report him to the Relief Officer for employment on Class II, or for relief on the gratuitous list.

Classification of laborers.

(c.) The exact ratio of men to women, or of diggers to carriers, depends so entirely on the lift and lead that it is impossible to give a complete reply to this query; but gangs should always be composed entirely of *castemen* or of *pariahs*; otherwise, it will be impossible to make satisfactory arrangements for hutting them; the total number of a gang should not exceed 100 members; to each gang would be appointed a gangman, see page 24 ‡

Composition of gangs.

* Vide paragraph 4 of Major Baynes' remarks on Chapter III, Section (i) in the Appendix.

† See under Question 14.

‡ See under Question 17.

Major Baynes—continued.

(d.) This duty should be undertaken by the Department of Public Works. Measurements once a week will suffice, but the recurrence must be invariably regular; none but the most extraordinary obstacle should interfere with this essential of a well-conducted work.

Measurement of work
by whom made.

(e.) Supposing a gang on a work, Class I, to consist of 100 persons and to be constituted and paid as described in page ———, then their total wage for the six working days would be Rupees 75-12-6; for this wage, they would have to give 909 cubic yards of earthwork and at twelve yards per rupee. On measurement it is found that they have only done 837 yards. The deficit of 72 yards is worth 6 Rupees; which latter sum most closely approximates half a day's pay of the gang; then each member of the gang would be fined half a day's pay. Notice is not taken of fractional parts of a day, other than one-fourth, one-half, and three-fourths. This example is, of course, a very simple one; as it assumes that none of the members suffered special fines, that none were absent or in hospital as out-patients. Reference to the specimen form of the nominal roll will show what ought to be done, if the fines are to be justly inflicted. I do not say this delicacy of detail was ever entered into, because we had not the time; but it is evident that if in the calculation of outturn credit is not given to the gang for an amount of outturn equal to the aggregate sum of special fines and payments to out-patients, not only will those who have been fined be again punished, but the earnings of those who have worked regularly will be diminished by that amount.

Method of inflicting
punishment by fines.

Mr. Weekes.

Digging and carrying earth, gravel, rock, sand, spreading ditto, consolidating ditto. I obtained the district rates from the District Engineer's Office; and, as I found no one seemed to know anything at all or to be aware that the distance carried or height raised make much difference, I calculated and made a table of the rates payable for earth, gravel, rock and sand quarried and carried, which I give below as an example. It was the more necessary to do this, as in the black cotton soil fit materials for repairing roads had sometimes to be carried half a mile or even much more. I had this printed and distributed among all the overseers and road superintendents with a few remarks on the necessary knowledge to be imparted downwards in the scale of overseers and maistries to as far as it could be appreciated. I had found that all measurements were made by the running foot which was taken as a cubic foot. This I have seen done even under the Public Works Department.

Height raised Yards.	Average distance carried in Yards.																			
	Yards.	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255		
1		10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
2		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
3		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		
4		13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
5		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
6		15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		