INDIAN FAMINES

THEIR

HISTORICAL, FINANCIAL, & OTHER ASPECTS

CONTAINED

REMARKS ON THEIR MANAGEMENT, AND SOME
NOTES ON PREVENTIVE AND MITIGATIVE MEASURES

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PREFACE.

THE object of the following pages is to afford to the English public an opportunity of forming opinions upon a subject which has hitherto received but little general attention. I am aware that the topic is not an inviting one, and that it possesses few elements calculated to make it popular.

I consider that hitherto the public have depended too much on the daily press for information upon the true state of affairs; and that they have therein perused the articles on, and narratives of, the present famine, as so much ordinary newspaper intelligence, because they have no other grounds upon which to base

their opinion, or enable them to criticise the information given. If the intention of these pages is fulfilled, the public will in future be able to weigh statements and figures, and to judge for themselves on the subject as it is represented to them from time to time, a necessary consequence of which should be that the press generally will be somewhat more tolerant in future in their criticisms of the management of Indian famines.

It has been insinuated that Indian officials are apathetic in the case of famines; that the throwing overboard of the "useless gear" is a matter of indifference to them; and that they fatalistically assume the inevitable death of a large proportion of the population during such disasters. I do not know that these pages will prove absolutely that such insinuations are altogether groundless; they have not been written with the object of proving any one innocent: but I hope that they will show clearly the many difficulties surrounding the matter, and prove the importance of making all allowance for

those connected with the management of similar calamities, except where gross misjudgment, miscalculation, maladministration, or culpable neglect, can be brought as a specific charge.

While in India during the two previous famines, I was struck by the comments of the English press on this subject. I then considered that both the information given and the criticisms passed were misleading; and I have come to a somewhat similar conclusion from the perusal of English newspaper articles on the present famine. The idea of penning these pages therefore suggested itself to me. thought that all the information which could be brought together on the subject would be of use; and being on duty at the India Office at the time, I had a very favourable opportunity of collecting my materials.

As a whole, these pages have been written for home reading only; the intention of the book is not to give rules for guidance in actual practice.

The first two chapters are of a historical

nature, and have been written with the object of affording a basis for contrasting the action taken during famines in past and present times. I may add, that a full historical account of Indian famines still remains to be written; but, at the same time, I may as well express the opinion, that the benefit to be derived from such a work would never repay the trouble required to search out the materials for it. The few instances which I have cited suffice for my present purpose. Chapter III. gives such details of financial results in past famines as I have, up to the present, been able to trace. The table in this chapter exhibits some singular facts. Chapters IV., V., and VI., deal with criticisms on the management of famines. Chapter VII. concludes the subject, with remarks on preventive and mitigative measures.

In general, I have preferred quoting known writers—as likely to carry more authority—to giving abstracts or narratives, and making statements founded on my own personal experience.

I may conclude by saying, that I desire to offend no one in these pages. In noticing press criticisms, I could not avoid alluding to the correspondent of a daily paper, and my remarks may therefore appear more personal than I wish them to be; but I can only regret it if they are looked at in this light, because such is certainly not my intention in making them.

GLENFOOT, TILLICOULTRY, August 1874.

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INDIAN FAMINES.

CHAPTER I.

TRADITIONAL AND HISTORICAL FAMINES.

As a general rule, it is not desirable to introduce a subject by commencing with its history, because in most cases it is unnecessary. But in giving a historical sketch of past famines in India, my intention is twofold,—(1.) to afford a means of comparison between such measures of relief as were adopted in former days, and those now in existence for the purpose of mitigating the effects of the present famine in Bengal; and (2.) to give the public an idea of the frequency of the recurrence of these disasters, and of the many difficulties surrounding their management.

Experience, in famines as in all other instances, should tell its own tale; but in contrasting results, the public must forget its European stand-point of view. What we call civilisation has advanced gradually throughout the West; but in the East it has gone by "forced marches," with all the leaps in the dark naturally attached thereto; and the question therefore arises, whether our experience in India has been developed in a ratio corresponding to our apparent advancement.

I have not succeeded in devising to my satisfaction a method of comparison between former and recent famines. To contrast them effectively, I should have wished to exhibit in parallel columns the respective details of the two famines. Unfortunately this was impossible. Up to the latest (1868-69) of our previous famines, we have no reliable statistics even of the mortality; and if such important data are not available, it may be presumed that all other information is of an equally vague character. All that can be done, therefore, is to give as clear an account of the various famines as the state of our records will permit, and ask the reader

to bear in mind the leading features of each. The result we must look for in a famine is the mortality statement. No record of mortality is absolutely accurate; but we may fairly assume that the inaccuracy is not such as to interfere materially with its value for purposes of comparison. This principle of pinning our faith to a mortality statement has, however, been questioned by one of the daily papers, in which the writer says that a nation cannot be roused to the proper pitch of sympathy and energy by the mere operation of statistics. This assertion, however, we may in our turn also question. A practical result establishes a standard that can be appreciated by every one, which no amount of distress-painting can do, as the writer referred to would wish to infer.

I need hardly preface my remarks by saying that a country without an indigenous history is not one to look to for a satisfactory account of any event whatever. In India there are masses of written material, but scattered, desultory, and unconnected. The best portions of these have been utilised, and are now appearing in detail under the title of the 'History of India as told

by its own Historians.' The late Sir H. M. Elliot, in his preliminary book on this subject, entitled 'Historians of Muhammadan India,'* says that the "native chronicles of the time" were "for the most part dull, prejudiced, ignorant, and superficial"—that they abstained from giving anything "which would illustrate the condition of the common people, or of any rank subordinate to the highest, as too insignificant when suffered to intrude upon a relation which concerns only grandees and ministers, 'thrones and imperial powers." The burden of each narrator's song is the praise of his hero; and to such an extent is this carried at times, that the praise lavished becomes fulsome. The documents. moreover, are written in the usual flowery and allegorical style of oriental literature, thereby requiring much careful winnowing to separate wheat from chaff. As geological data leave many gaps in the landmarks of time, so the lapse of ages no doubt also robs us of historical records. In India, the many destructive elements peculiar to a tropical climate have to be added to the usual list which the ravages of

^{*} Sometimes called the 'Biographical Index.'

time are generally credited with. Again, we have the many dialects spoken, and the material changes in the language itself during 1000 years, to contend with. I have no doubt that records of many more famines than those I shall mention might be found after very careful and minute search; but I think the reader will find that enough have been mentioned to answer the purpose here intended. In fact, the trouble of tracing them, and the time required to read the accounts, would be out of proportion to the benefit to be gained from a knowledge of them. It is not until we come to the days of our own rule that records of passing events are available; and even of the memorable famine of 1770, which occurred shortly after we undertook the fiscal administration of Bengal, specific details are to a great extent wanting. In the absence of these records, it is impossible to say with any certainty whether modern famines are of greater intensity, or, rather, whether they naturally would be so if not artificially prevented, than those of former days, and vice versá. We have no reason to suppose that the natural causes of these disasters have changed in any way; and we may therefore presume that we have similar effects to contend against. India has been, and still is, in a chronic state of famine,* and ever will continue so. The nature of her climate and soil cannot be altered, but the disadvantages attached thereto can fortunately be mitigated; and it may be that in time they will be altogether neutralised by artificial means.

In addition to the famines of which I am about to give some account, there are a few others noticed in official reports; but beyond the simple enumeration, there is no other information given respecting them. A full list of all famines known to be mentioned by any authority will be found in the Appendix.

As before remarked, reliable records are only available from the date of our rule in India; and it will be seen, by referring to the list of famines just mentioned, that subsequent to this time these disasters have been very frequent. It will also be noticed that the later the period the oftener they appear to recur. This

See the long list of famines, hereafter referred to, in the Appendix.

by no means indicates that famines are really more frequent nowadays than formerly; it is only that our system of recording events is more perfect. Similarly, because this account begins with the famine of 942, it does not follow that that calamity was the first great misfortune of the kind in India; and for the same reason it must be assumed that very many other famines, intermediate between those noticed, have occurred. I may here add, that of famines known to be entirely the result of disastrous policy, or of invasion by an enemy, I give no account.

I would, before proceeding to give a sketch of past famines, beg to acknowledge the sources whence I have derived my information. For famines previous to that of 1770, I am indebted, with one exception—that of 1396—to the 'History of India,' by the late Sir H. M. Elliot, already referred to; and to Professor Dowson, who is editing the posthumous works of that author, I am particularly indebted for his courtesy in affording me information on the subject. From the Orissa Famine Commissioners' Report I obtained the greater part of the

information regarding the 1770 and 1866 famines; and Girdlestone's official report on "Past Famines in the North-Western Provinces" afforded the material whereon the accounts of the famines of the present century, up to that of 1861, are based. The list of authorities quoted and examined will be found elsewhere, and generally their names are also given in loco.

The first mention of actual famine which I met with in consulting the translations * of native authors is that of 942; but before giving any account of it, I wish to draw attention to an interesting description of the manner in which native rulers were in the habit of storing grain, as a provision against such misfortunes as famine, invasion, &c. If the methods adopted were at all applicable to present circumstances, I would delay the mention of them until I dealt with preventive and mitigative measures; but this system of relief is so superficial that it will not bear inspection by the light of modern political economy: and I therefore think, that as this plan of grain-stores will be frequently noticed

^{*} Elliot's History of India.

hereafter, that this will be the most appropriate place for a description of them. The only value which they possessed in former days arose from the fact that communications were bad, and that, therefore, export and import on a large scale in an emergency were next to impossible. The converse is the case now: communications are good, and trade requires export and import, and renders a large standing grain-store an impossibility.

Such a measure as extensive storing of grain of course only afforded local relief: but• in mentioning this fact, we should remember that a Sultan's country was not then of the vast extent that British India now is, and that he was surrounded by chiefs and tribes who were as foreign to him as China is to India at the present day; and that, therefore, his policy would be regulated by the principle that "charity begins at home."

Sultan Alá-ud-din, during his reign (1296 to 1317 A.D.), was harassed with a want which is by no means unknown even in modern days—he wished to maintain "a large and permanent army upon a low scale of pay." His

advisers informed him that his ideas were impracticable; but that "if the necessaries of life could be bought at a low rate, the idea which your Majesty has entertained of maintaining a large army at a small expense might be carried out, and all apprehension of the great forces of the Moguls would be removed." The Sultan then consulted with his most experienced ministers as to the means of reducing the price of provisions without resorting to severe and tyrannical punishments. His councillors replied that the necessaries of life would never become cheap until the price of grain was fixed by regulations and tariffs. "Cheapness of grain is a universal benefit." To this end several regulations respecting the sale of grain and other necessaries were accordingly made.

Regulation I. fixed the prices of all grains, and this tariff lasted throughout the reign of the Sultan. Regulation II. described the methods for ascertaining that the tariff was adhered to. Regulation III. provided the ways and means for the accumulation of corn in the king's granaries. It is worthy of transcription.* "The

^{*} From Elliot's History of India.

Sultan gave orders that all the Khālsa villages of the Doab * should pay tribute in kind. The corn was brought into the granaries of the city of Delhi. In the country dependent on the new city, half the Sultan's portion (of the produce) was ordered to be taken in grain. In Jhain, also, and in the villages of Jhain, stores were to be formed. These stores of grain were to be sent into the city in caravans. By these means, so much royal grain came into Delhi that there never was a time when there were not two or three royal granaries full of grain in the city. When there was a deficiency of rain, or when, for any reason, the caravans did not arrive, and the grain became scarce in the markets, then the royal stores were opened, and the corn was sold at the tariff price, according to the wants of the people. Grain was also consigned to the caravans from the new city. Through these two rules grain was never deficient in the markets, and never rose one dang above the fixed price." Regulation IV.—"The Caravans. The Sultan placed all the carriers of

^{*} The province lying between the Jumna and the Ganges rivers. Literally, Doab means "two waters."

his kingdom under the controller of the markets. Orders were given for arresting the head carriers, and for bringing them in chains before the controller of the markets, who was directed to detain them until they had agreed upon one common course of action, and gave bail for each other. Nor were they to be released until they brought their wives and children, beasts of burden and cattle, and all their property, and fixed their abodes in the villages along the banks of the Jumna. An overseer was to be placed over the carriers and their families on behalf of the controller of the markets, to whom the carriers were to submit. Until all this was done, the chiefs were to be kept in chains. Under the operation of this rule, so much grain found its way into the markets that it was unnecessary to open the royal stores, and grain did not rise a dang above the standard."

Three more regulations were provided for the supply of corn, the result of the whole of which is thus described by the chronicler: "All the wise men of the age were astonished at the evenness of the price of the markets. If the rains had fallen (regularly), and the seasons had

been (always) favourable, there would have been nothing so wonderful in grain remaining at one price; but the extraordinary fact of the matter was that, during the reign of Alá-ud-din, there were years in which the rains were deficient, but instead of the usual scarcity ensuing, there was no want of corn in Delhi, and there was no rise in the price of either the grain brought out of the royal granaries or in that imported by the dealers. This was indeed the wonder of the age, and no other monarch was able to effect it. Once or twice when the rains were deficient, a market overseer reported that the price had risen half a jital, and he received twenty blows with the stick. When the rains failed, a quantity of corn, sufficient for the daily supply of each quarter of the city, was consigned to the dealers every day for the market, and half a man* used to be allowed to the ordinary purchasers in the markets. Thus the gentry and traders who had no villages or lands used to get grain from the markets. If in such a season any poor reduced person went to the market and did not get assistance, the

^{* 40} lb.; a man = 80 lb.

overseer received his punishment whenever the fact found its way to the king's ears."

If more was wanting to bring home the fact that such doings were entirely oriental, and emanated from the will of a despot, the mention of the punishment awarded for defrauding by giving short weight would certainly do so. We are told that on short weight being detected, "an equal weight of flesh was cut from the haunches of the seller and thrown down before his eyes." As might be expected, fraud accomplished by short measure was soon cured, and an excess weight was the normal state of affairs.

The Sultan who devised these regulations was succeeded by his son, and afterwards by his grandson, both of whose reigns were short; but they enjoyed and appreciated the advantages, such as they were, of the provident measures of Alá-ud-din, which is more than can be said of his third successor, Muhammad Tughlik. During the reign of the latter Sultan, more than one famine is recorded; but we must observe chronological order, and first notice that of 942, already referred to.

"In 330 a.H. (941-42 a.D.) a comet made its appearance, the tail of which reached from the eastern to the western horizon. It remained in the heavens eighteen days, and its blighting influence caused so severe a famine that wheat the produce of one jarib* of land was sold for 320 miskāls of gold. When the value of a spike of corn was esteemed as high as the Pleiades, conceive what must have been the value of wheat!"

"The famine in the land was so severe that man was driven to feed on his own species, and a pestilence prevailed with such virulence that it was impossible to bury the dead who fell victims to it." †

We now revert to the reign of Muhammad Tughlik. It appears that, primarily, the famines which occurred during his life were artificial, being the result of maladministration. He issued several edicts, by which he hoped "to bring the whole of the habitable world". . . .

^{*} A measure now applied to our "chain."

⁺ Elliot's History of India. To this is attached a note on the probability of this comet being an early visit of Halley's comet, but it is admitted to be a weak hypothesis.

under the rule of his servants; but, in so doing, he promoted the dismemberment of his empire, and materially helped to arrest the progress of cultivation." This disastrous policy continued for some years. Meanwhile prices rose, and a failure of the rains occurring, severe famine intervened. The date of this famine I have been unable to fix, but Girdlestone puts it "in or about 1345." Of this famine we have, strange to say, the evidence of a foreigner, who was an evewitness of the distress. This person was Ibn Batūta, a native of Tangiers, Africa. He travelled all over Asia, and landed in the Punjab some time in 1333. Of him Elphinstone, in his 'History of India,' says: "He could have had no interest in misrepresentation, as he wrote after his return to Africa." We may therefore put more faith in his description than in the native chroniclers. Ibn Batūta writes: "Distress was general, and the position of affairs very grave. One day I went out of the city to meet the wazir, and I saw three women who were cutting in pieces and eating the skin of a horse which had been dead for some months. Skins were cooked and sold in the markets.

When bullocks were slaughtered, crowds rushed forward to catch the blood, and consumed it for their sustenance. . . The famine being unendurable, the Sultan ordered provisions for six months to be distributed to all the population of Delhi. The judges, secretaries, and officers inspected all the streets and markets, and supplied to every person provisions for half a year." These relief measures are also confirmed by Barni, a native chronicler. It would appear from his description that "registers of the people in the different streets were made," and from these lists each person received a six months' supply; it would therefore seem that this system of relief was no make-believe.

The next famine of which we have any account is that of 1396, or rather that which may be said to have commenced in that year. I have been unable to discover the name of the native author from whom James Grant Duff, in his 'History of the Mahrattas,' quotes; but as my researches at the fountain-head have ended in meagre and unsatisfactory results, I consider that the fact of the authority remaining unknown here is of little consequence. I now quote Duff:

"In 1396, the dreadful famine, distinguished from all others by the name of the 'Durga Dewee,' commenced in Maharashtra. It lasted, according to the Hindoo legends, for twelve years. At the end of that time the periodical rains returned, but whole districts were entirely depopulated, and a very scanty revenue was obtained from the territory between the Godavery and Kistna for upwards of thirty years afterwards." No doubt this was one of the most severe famines ever experienced—that is, if these legends can be trusted,—which is rather doubtful, since they affirm that the rains failed for twelve years running—a fact unprecedented in Indian history.

The Akbar-namah mentions that during the first year (1556-57) of the reign of Akbar there was a great scarcity in Hindustan. "In some districts, and especially in the provinces of Delhi, it reached a most alarming height. Though men could find money, they could not get sight of corn. People were driven to the extremity of eating each other, and some formed themselves into parties to carry off corpses for their food."*

^{*} Professor Dowson.

Again, during the year 1596 "there was a scarcity of rain throughout the whole of Hindustan, and a fearful famine raged continuously for three or four years. The king ordered that alms should be distributed in all the cities; and Nawab Sheikh Farid Bokhari being ordered to superintend and control their distribution, did all in his power to relieve the general distress of the people. Public tables were spread, and the army was increased in order to afford maintenance to the poor people. A kind of plague also added to the horrors of the period, and depopulated whole houses and cities, to say nothing of hamlets and villages. In consequence of the dearth of grain, and the necessities of ravenous hunger, men ate their own kind. The streets and roads were blocked up by dead bodies, and no assistance could be rendered for their removal." *

Of the great famine of 1631, there is an elaborate description in the work of the voluminous writer, "Khafi Khan." Khafi Khan (an assumed name), if he did not himself witness the famine, certainly lived to see the effects of

^{*} Biographical Index.

it. His father was also a historian, and we may therefore place comparative reliance on the description here quoted.* "There was a great deficiency of rain, and the drought was so intense that not a drop of dew could be found. The scarcity became so great that nothing but the herb bugloss was to be found in the shops of the bakers and druggists. The numbers of the the dead exceeded all computation or estimate. Coffins and burial were not thought on in the Deccan. The distress compelled emigration to the north and east; but the poor wretches were reduced to such a state of weakness, that they did not accomplish the first stage. The towns and their environs, and the country, were - strewed with human skulls and bones instead of seed. Men ate each other, parents devoured their children. Bakers ground up old bones, or whatever else they could get, and mixing the dust with a little wheat-flour, sold the cakes as valuable rarities to the wealthy. Human bodies dried in the sun were steeped in water and de-

^{*} I am indebted to Prof. Dowson for having kindly translated this passage and another for me, in anticipation of his own work of editing the 'History of India as told by its own Historians.'

voured by those who found them. Cities were depopulated by the death and emigration of the inhabitants. No such famine has been recorded in history. The Emperor (Shah Jehan) ordered distribution of provisions to be made in the cities and towns, especially at Burhanpore. Khandesh and Balaghat, with many other districts, were quite depopulated. Sultanpoor remained waste for forty years." The foregoing account refers especially to that part of India known as the Deccan; but the famine was by no means confined to that province-in fact, it is noted in some accounts, that not only did it prevail throughout all India, but that it also extended over the whole of Asia. I have been unable to trace this assertion, as regards the vast area covered by the famine, to its source. It is an important point, and is unique in the annals of famines. It is contrary to all general experience; and, as is noted elsewhere in these pages, famine seldom, if ever, visits a large tract even of India during one and the same year. Girdlestone, in describing the famine, mentions the fact of its having "afflicted not only India but almost the whole of Asia;" and adds, that of the effect on the North-West we know no more than is contained in the remark quoted by the Orissa Commissioners, that money could not purchase bread, and a prodigious mortality ensued. Disease followed famine, and death ravaged every corner of India." The Orissa Commissioners do not quote their authority, so the matter of its geographical extent here rests for the present.

This great famine was closely followed by another of a severe character, in 1661, during the third year of the reign of Aurungzebe. We are still dependent on narrative reports, which deal in generalities, and describe only leading features;—matters that were either notorious at the time, or the more striking cases of distress witnessed by the narrator himself.*

Mill writes of this famine: "The prudence of Aurungzebe, if his preceding actions will not permit us to call it his humanity, suggested to him the utmost activity of beneficence on this calamitous occasion. The rents of the husband-

^{*} I was under the impression that I had read an account of this famine in Bernier's Travels; but on a subsequent glance through the book, I was unable to retrace it.

men, and other taxes, were remitted. The treasury of the Emperor was opened without limit; corn was bought in the provinces where the produce was least, conveyed to those in which it was most defective, and distributed to the people at reduced prices. The great economy of Aurungzebe, who allowed no expense for the luxury and ostentation of a court, and who managed with skill and vigilance the disbursements of the state. afforded him a resource for the wants of the people." The Orissa Famine Commissioners found very little further information. They infer, from the fact that importations of grain having been on a very large scale from both Bengal and the Punjab, that these provinces were not affected by the drought; but beyond this its extent cannot be ascertained. The Commissioners also state that part of the imported grain was distributed gratuitously; and that in consequence of this, and of selling at reduced rates, many millions of lives were saved. Aurungzebe's decided and rapid action in this matter is the one redeeming point in his whole reign; and it was these exertions—as the Famine Commissioners note-that mainly contributed to establish his reputation in the early part of his reign, otherwise totally devoid of humanity, as may be inferred from Mill's sarcastic remark already quoted.

I now pass to the memorable famine of 1769-70, which concerns us in a very different degree from that of any other of previous date. In 1765, the East India Company obtained the fiscal administration of Bengal, and among their first state troubles they found themselves involved in this great famine. To any one who has read up the subject of Indian famines, this one must stand out in such clear and well-defined colours, as almost to persuade him that any repetition of the account of it would be superfluous; but I can too distinctly recall my first, or at all events my first lasting impression of it, gained from reading Dr Hunter's first volume of 'Annals of Rural Bengal,' not to imagine that there are still many who are in as great ignorance of this famine now as I was then.

It is not, however, to be understood, because I have said that this stands out in such bold relief, that we have that detailed account of all connected with it that is desirable. On the contrary, it is but lately that documents bearing on the subject have been brought to the light of day; and even those available only perform the part of the light wind on a cloudy day, which blows away some of the lower fleecy clouds, but still leaves behind a dark impenetrable mass.

We have two accounts of this famine, both of which rest on the same foundation-viz., documents of the East India Company-and they are therefore practically identical. One is Dr Hunter's, to which I have already referred, and to which access may be had by any one. His graphic description of the sufferings of the people would, no doubt, be the popular one, while his appendix cites the principal official documents bearing on the subject. The other account is by Sir G. Campbell, which is appended to the Orissa Famine Commissioners' Report. Besides these, we have five lines devoted to the subject by Mill, in his otherwise generally detailed 'History of India,' which scanty notice is justly complained of by Dr Hunter. Not because it affords us any original information, but for the purpose of illustrating

the fact that other authors besides natives are apt to deal too exclusively with the powers that be, I here quote the five lines: "The first year of his (Mr Carter's) administration was distinguished by one of those dreadful famines which so often afflict the provinces of India; a calamity by which more than a third of the inhabitants of Bengal were computed to have been destroyed." Marshman's 'History of Bengal' allows five and a half lines to the same subject; and for the matter of information, an exact repetition of Mill would have equally answered the purpose.

Sir G. Campbell says: "A minute search of the records of the India Office has not led to the discovery of any special reports, in our modern sense, recounting the whole history of the great Bengal famine. It has only been possible, by completely sifting the general records, to pick out here and there the passages which bear on the calamity. The result is, not to give us its history in any great detail, but I trust that enough has been gathered to put us in possession of its general character."

Bengal, previous to 1769, had been prosperous

for some time; both its physical and moral wants were supplied: but in 1768 a warning note of alarm arose in Behar-first a destructive flood, and afterwards an all but total cessation of the rains from August. In 1769, the rains may be said to have been a total failure throughout, so that the whole of Bengal proper, except the south-east corner and Behar, were laid waste. Orissa at that time was not British territory. Sir G. Campbell remarks that his inquiry furnished him with no information in regard to its condition. Want was felt in Madras at the same time, and therefore the possibility suggests itself that the famine of 1770 had a much greater range than has generally been attributed to it, the probability being that Orissa also suffered severely. Food supplies were obtained from Oudh, and were also obtainable in, but were withheld from, Benares and Allahabad, these places being under native rule at the time. The fact that food was procurable in those districts, of course, proves that the famine did not prevail there-i.e., that our so-called North-Western Province did not suffer.

As, in 1873, we were warned towards the end of autumn of a possible famine in Bengal, and thereafter we were made familiar with its insidious marches; so, in 1769, did the disaster progress in a similar way. The season of 1769 commenced badly, and the rain continued to be withheld. "From September onwards, the march of the calamity seems to have been without abatement, and we have more and more frequent mention of the state of the country, distressed beyond conception, from the late prevailing drought in every part of the province."* On the 23d November 1769, the following letter was written by the Bengal administration officers to the Court of Directors at home. It was the first official note of warning given by them. "It is with great concern, gentlemen, that we are to inform you that we have a most melancholy prospect before our eyes of universal distress for want of grain, owing to an uncommon drought that has prevailed over every part of the country, insomuch that the oldest inhabitants never remember to have known anything

^{*} Sir G. Campbell, in his note to the Orissa Famine Commissioners' Report.

like it, and as to threaten a famine." The previous famine which I have mentioned was that of 1661, and there is no record that I am at present aware of which notes any famine or scarcity intervening between 1661 and 1770. Yet from the expression here used in this letter, it may be inferred that famine was not unknown, and that we may be certain that the unrecorded scarcities to which India has been subject, equal, if they do not very considerably exceed, those now known in history. This letter to the Court of Directors continues: "As there is the greatest probability that this distress will increase, and a certainty that it cannot be alleviated (!) for six months to come, we have ordered a stock of grain sufficient to serve our army during that period to be laid up in proper storehouses; and we have taken and shall pursue every means in our power to relieve the miserable situation the miserable inhabitants must be involved in from this dreadful calamity, but we cannot flatter ourselves that all our endeavours will prevent very fatal results being felt, or that human means can check its baneful influence.

"The consequence of so general a calamity cannot be confined to individuals, and though they most severely feel them, the public must suffer likewise; and we have too much reason to apprehend it will occasion a very considerable diminution in your revenue, to what amount we cannot at present form a judgment; but we deem it our indispensable duty to give this early information, in hopes, by being prepared for such accidents, you may be better able to guard against its effects; and we would take the liberty to suggest whether a considerable diminution in your revenue for so unforeseen and unavoidable a cause may not be a just cause for a proportional abatement to be made from the demands of Government, as well as that of your being dispossessed of any part of your territorial acquisitions and revenue by any foreign power."

Not a word is said about any measures preventive of such calamities in the future!

During the winter of 1769, as in the corresponding season of the present famine, the effects of the drought made themselves more palpable and widespread. "Alarming prospects

of the province becoming desolate," of "the plough standing still, and numbers of husbandmen deserting their homes," were reported. By March it was also announced that the "most affecting scenes of poverty and distress were visible;" that "the depopulation in the interior was now much more rapid than could be well imagined by any one who had not been a witness of it;" and that in Patna no less than 150 died daily. It is further recorded, that Purneah, in the north-east, "which was once a plentiful country, retains now nothing but the name of its former abundance. Multitudes already have and continue to perish of hunger. Never was there in any place before so melancholy a scene." A native official, from whose reports the foregoing is quoted, while contemplating this misery, admits that he was not overruled by his sympathy, and therefore "did not neglect the interests of the Sircar."* evident that if this frame of mind had prevailed to any considerable extent among the Company's officials, we would not have far to seek for the one main reason of the dreadful results.

^{*} The Government.

But I do not think that we are justified in concluding that these are to be attributed to bad policy, as it is possible to infer. However, the action of the officials in this matter is open to severe criticism. In Moorshedabad—a district of which it was reported in July that "the scene of misery that intervened, and still continues, shocks humanity too much to bear description; certain it is that in several parts the living have fed on the dead," &c .- the amount of revenue collections made, countenances the idea that the interests of the Sircar were at all events not forgotten. It is useless to follow up the harrowing details: it will be sufficient to say that the famine lasted till the harvest in December 1770, and that the dire result of this curse of nature was the death of 30,000,000 of human beings! As not unfrequently happens, floods were in some districts experienced during the ensuing rains, and subsequent crops were very good-in fact, there was afterwards a glut of grain in the market.

The next great famine occurred in 1783, but it was principally in Upper India that the severest strain was felt. Northern Hindustan did not belong to us at that period, so we are again left considerably to native reports. The scarcity extended, however, to Bengal also, and with the terrible famine of 1770 still fresh in the memory, it caused widespread alarm, but happily the result was not so bad as anticipated. The famine, nevertheless, raged in the Punjab. and in what we now term the North-Western Province, and Girdlestone believes that it extended to Rajputana. But man was ever prone to take advantage of his neighbour's misfortunes; and so the Governor-General, in writing to the Court of Directors, after depicting the horrors of the famine prevailing in North-Western India, as witnessed by himself, adds that the people are on a migratory move; and hoping that they may be induced to go to Behar (the British territory), he says: "We have ordered encouragement to be given to them for that purpose, both from the humanity of saving them from the inevitable destruction of a famine, and the lawful desire, in such cases, of increasing the subjects of the Company's dominions." This phase of emigration will be noticed hereafter, in the account of a subsequent famine.

In Northern India a drought had prevailed during the preceding year, which added, of course, to the severity of the famine. As early as October emigration towards Oudh commenced, and "death left its mark freely along the road." "Every man's hand was against his neighbour, and the strong ruthlessly seized the portion of the weak, for the struggle to maintain life overcame all scruples."*

Other detail is on record of this famine, but it is of a character which cannot interest the general reader. The fact is, that we are now approaching dates connected with the rule of the British in India, and consequently, the later we come, the more detail we have. As this famine occurred in native states, we have no record of the measures of relief, &c., which were adopted.

The next famine I shall notice in any detail is that of 1837-38, which will be found in the following chapter, as I include it under the term of "Recent." Between the famines of 1783 and 1837, Northern India generally appears to

^{*} Girdlestone. The subsequent accounts in this chapter have been abstracted from his official report.

have been subject to frequent droughts. None of them, however, were intense, and several were of quite a local character; they are therefore not landmarks in history, and so I will merely briefly mention them. Whatever statistical details of them are available, will be found at pages 89, 90; but I regret to say that these are extremely scanty.

In 1790 the district of Delhi was visited by scarcity, but it does not appear to have extended further.

1803.—The "Ceded Provinces" (obtained in November 1801), forming the greater part of our present "North-Western Province," were subject to a severe strain till the autumn of 1804; and it appears that the dearth was partly due to the short-sighted policy of the British Government having imposed, simultaneously with the drought, heavier rates of revenue, which the people were unable to bear. The population had just been emancipated from the yoke of tyrants and of oppressive sovereigns, and they therefore naturally "looked upon a government as their common enemy," hence great dissatisfaction was the result. Of all the

intermediate famines between 1783 and 1837, this of 1803 was by far the most severe, but it was happily limited in area.

1813. — Famine prevailed in and around Agra, and apparently the western states of Rajputana were again affected. Bundelcund, to the south, was also in straitened circumstances. The crops of the previous year, 1812, had been indifferent; but the late rains of 1813 were the immediate cause of this scarcity.

1819, &c.—Famine again attacked the North-Western Province and Bundelcund. Famine or scarcity also recurred in 1825-26-27, and in 1832, chiefly in the North-Western Province and adjacent countries,—sometimes to the south, in Bundelcund—often to the west, in Rajputana—and at times to the north, in the Punjab. It is rather remarkable that the east, Oudh and Rohilcund, appear to have enjoyed comparative immunity from these disasters. It may be that the proximity of these districts to the Himalaya, with the abundant rainfall which is peculiar to these mountains, has a beneficial influence in a dry season.

It will have been noticed that all the famines

as yet mentioned have occurred in Upper India, with the exception of two in the Deccan; but it is not therefore to be inferred that the Bombay and Madras Presidencies are in a better plight than that of Bengal. Of the famines in the Bombay Presidency, I refer the reader to the table in the Appendix: the list is rather appalling; but happily none of those recorded were, so far as I am aware, of the nature of the scourges that have swept Northern India. Of the famines in Madras, I have been unable to procure a copy of the one historical report on the subject. As tending towards the fact just mentioned-viz., the special notice which the famines of Northern India have received—it must be remembered that Northern India was the seat of Muhammadan literature: and that not only does this class of literature exceed in bulk that of Hindu origin, but it also has received the most attention by Europeans. Also-but this may arise from my merely local knowledge-it appears that the official reports on past famines are more abundant in Bengal than in the sister Presidencies.

It will not be out of place here to draw at-

tention to the popular idea on the subject of food in India, as the matter is necessarily connected with the harvests. In Hindustan proper-i.e., north of the Deccan—the boundary of which is the Vindyan range of hills, the staple food of the country is wheat, the harvest-time for which is March and April. In the Deccan, the principal food is jowar and bajra, the harvest-time of which is November and December. "Rice as a general article of subsistence is confined to Bengal and part of Behar, with the low country along the sea all round the coast of the peninsula. In most parts of India it is only used as a luxury." So writes Elphinstone, in his 'History of India.' To this the editor subjoins the note: "It was probably the circumstance of our early settlements in Bengal and on the coast of Coromandel that led to the common opinion that rice is the general food of the country." Any one wishing to gauge the labour-market "up country" would certainly inquire the price of wheaten flour, and judge accordingly. There are two reasons, I think, which account for this distribution of the food-grains: First, and this

is undoubtedly the case, that except in Bengal, along the coasts, and in the Himalaya, in all of which districts the rainfall is abundant, the cultivation of rice is impossible. It is absolutely necessary for its growth, to be actually flooded for a considerable period. A rainfall of 65 inches * may be said to limit its culture except, of course, where artificial irrigation is available to supplement the necessary moisture. The second reason-which I put forward with some diffidence—is, that rice is not a suitable article of diet for Northern India; it centains too much carbonaceous matter for a dry and hot climate. It is much on the same principle that whisky can be drunk with comparative impunity in Scotland, while beer is found more acceptable in England, and light wines still farther south.

^{*} See note regarding the rainfall requisite for the cultivation of rice in the Appendix.

CHAPTER II.

RECENT FAMINES.

In describing, as I have endeavoured to do, a series of famines such as these, it is by no means an easy matter to avoid going over and over the same ground. No doubt the leading features of each are generally similar. may happen that in one case more tragic events have occurred, which are now pointed to as landmarks in history; but, as a rule, to describe the state of society in one famine is to describe it in all other like disasters. There are the sufferings and the mortality of the people from direct want, and there are the fell diseases that lie in the wake of famine, and the subsequent depopulation caused thereby; and there is also the dreadful mortality among the cattle. It is therefore almost unavoidable, in giving a

historical sketch of famines, to repeat one's self occasionally. I will, however, assume that the reader now thoroughly understands that a famine means great suffering and misery, and, under the best of management, some deaths. I will consequently, in future accounts, avoid such details as much as possible. I will endeavour to draw attention to leading features, to show the progressive steps which experience teaches, and to discuss subjects of a more general and interesting aspect than a mere detailed record of passing events would possess. table at pages 89, 90 will give concise results of some details which the narrative avoids. There is one episode which is common in the course of all famines, and which has not as yet been described—viz., the wanderings of the people from district to district in search of food. This practice was more common in former days than at present; but the famine of 1868-70 in the native states of Western Rajputana (which states resemble those of former days more than our own provinces now do under European administration) will illustrate this trait of the native character in a striking and interesting

way. But I shall defer noticing this feature until we arrive at the famine of 1868-70 in its chronological order.

As before remarked, the great famine of 1770 had one characteristic which peculiarly affected the British in India-viz., that it was the first famine which had occurred under our administration; and consequently, in a sketch of past famines, we should look at it from a critical point of view, and compare its results with those of previous dates managed by our predecessors. But the famine of 1770 followed too closely upon our assumption of power to be regarded in too critical a light, whereby we might contrast the efforts made to grapple with such disasters. We were, so to speak, absorbed in the contemplation of our new sovereignty; we had not yet shaken down into a steadygoing old power, accustomed to look at all and any events with the prestige of time to aid us; or rather, we could then only look back to any example which the great law of the land, "timehonoured custom," provided for us, and follow in its footsteps as nearly as possible. In doing so, we had little time to allow reflection to play

its part, and to suggest the many ameliorating influences which it was possible to adopt. But it was different in the famine of 1837-38. at which period we have now arrived. Although this famine did not penetrate to Bengal—the province which the East India Company were appointed to the fiscal administration of in 1765—yet we had been there gaining experience in dealing with the peculiarities of our Eastern possessions. By 1837 we had tided over some seventy years of government in that neighbouring province; and we had been in possession of the "Ceded Provinces," where this famine prevailed in its greatest intensity, since the beginning of the century. Moreover, we had passed through some seven years of scarcity, and therefore we have every right to look for some marked improvement in the management of such calamities.

I shall have occasion to notice several times the frequent recurrence of two or more bad seasons in succession culminating in famine. It may be said of the dearth of 1837-38, that it was not the result of two bad seasons only, but of a succession of indifferent harvests from 1832. No doubt these intermediate, and, comparatively speaking, petty scarcities, were local; but the suffering was slowly accumulating, and reached its limit in 1837, when a season of unexceptional drought ended in famine. In some districts it was considered the worst famine known to any man of that generation. Colonel Baird Smith, a great authority on the subject of famines, concludes, from evidence obtained, that the bad results of 1783 exceeded those of 1837; though Mr Rose, another eminent authority, takes the opposite view. There is no satisfactory method that can be adopted to compare the intensity of these calamities; but it will be sufficient to place that of 1837-38 in the same category as those of 1770, 1783, 1860, 1866, and of Rajputana, 1868. In future famines it will be still more difficult to estimate correctly their relative intensities; and as illustrative of this point, I may cite the difference of opinion which exists in regard to the present famine, the extremes being-(1.) a most intense severity, as evidenced by Government preparations; and (2.) a complete false alarm: and these antagonistic ideas will prevail in a ratio depending on the proportion of the effective arrangements undertaken. There is no reason, however, why elaborate statistics on this head should not be compiled from the vast stores of material which will be available.

With over seventy years of administration in Bengal, and nearly forty in the "Ceded Provinces," our system of rule had developed itself to a considerable extent. Our jails at this period of drought seem to have enjoyed a popularity with which they are seldom credited. It appears that "the destitute peasants became alive to the fact that the commission of some trifling crime would insure them food at any rate."* But the jails, unfortunately, could only hold a limited number, and the perpetration, therefore, of a "trifling crime" was no longer of any service. The lower classes in many districts broke out into open violence, and plundered storehouses, transports of grain, and adopted any other process that was likely to afford relief to the pangs of their craving hunger. The police had to be considerably increased, but matters

^{*} Girdlestone.

were not much mended, and a severe crisis was the result. Lord Auckland, noticing this feature in a letter * to the Court of Directors, wrote: "Large numbers of persons were apprehended on the charge of being concerned in these outrages; the local magistrates consequently became overburthened with work, while Session judges were unable to dispose of the commitments which were made to them." Tranquillity, however, was restored. Such manifest signs of demoralisation were the means of causing the Government to devise effective measures of relief-i.e., effective measures in a relative, not in an absolute sense, as would be understood and insisted upon in modern days. The several Commissioners of the affected districts were authorised to expend a certain sum on relief-works; and this authority, which was gradually extended as the severity increased, developed a system of relief, the basis of which we may say has been adopted in all subsequent famines, and which appears now in our elaborate system of relief. Notwithstanding that the Government recognised this duty of relieving the distressed by providing

^{*} Date 18th Feb. 1838.

work for the destitute people, yet "gratuitous" charity was discountenanced, as involving a policy which the Government could neither beneficially nor generally pursue. The support of the helpless, it was argued, was incumbent on private and not on public benevolence."* European influence was now at work, however, and would not leave the destitute wretches to perish without some effort to alleviate the distress. We have no record in any of the previous famines of any organised system of public charity; or for the matter of that, beyond a few isolated statements that some rich men "fed the poor," have we any record whatever that the principle was recognised in any shape. We have, at all events, in this famine the dawning recognition of a public duty. It may be that it was solely engendered by the force of moral persuasion and example on the part of the English residents in the country; but however that may be, it remains a fact that the principle was at this time originated. Mr Rose reported, as noted by Girdlestone, that "the native officials, following the example of

· Girdlestone

Government, were beginning to subscribe handsomely," and that "so long as the rich zemindars * had the means, they fed their poor neighbours, and even went the length of selling jewels and ornaments in order to raise money for the purchase of food." Mr Rose also writes that "the aid afforded in relief by Government, though scanty, will at all events attain the desirable end of convincing the people that Government was anxious to alleviate their sufferings; and the example thus set forth has, I know, been an inducement to hundreds to bestir themselves on behalf of the starving poor, who never before thought of lending their aid in relieving the distress." In this manner did European influence gradually develop itself. Government undertook direct works of relief, where the labourer could find employment; and private individuals fostered and developed plans of relief for the sick and infirm. The subscriptions were not confined merely to the affected districts, for we find that Calcutta, Bombay, &c., sent very considerable sums for charitable purposes.

^{*} Landholders.

It is, of course, not to be expected that in those days, any more than in our own, all the measures taken to grapple with the famine should have been perfect. It will be seen, from the table given in the next chapter, that the mortality was very great. There are revolting scenes on record, such as have not been witnessed even by the most painstaking of modern correspondents.

The famine continued throughout the greatest extent of its area till the autumn harvest of 1838; but the Meerut and Rohilcund districts were saved by a favourable fall of rain in the spring of that year.

Although Government in this famine would not recognise a duty in providing for the help-less, yet it set a noble example in the matter of revenue remissions. In 1803, as already noted, we not only did not recognise the policy of remission, but actually increased the rate of demand. With the commencement of the pressure of want in 1837-38, Mr Rose, Collector of Cawnpore, initiated the system of remission as early as October, and the result was highly satisfactory. It encouraged the people to look after their fields, and prevented emigration—a

practice which, however commendable in the present day, was then an object to be discouraged by all possible means. The difference of the circumstances arises thus: Formerly the people emigrating might go over to the enemy's camp (see page 34), and so permanently, within certain limits, depopulate the district; but in the present day, it is merely an instance of "robbing Peter to pay Paul." Finding, as we do, a liberal policy of remission thus initiated, it is singular that these enlightened ideas gained no extension, and that the Government was not convinced of the necessity of again adopting a similar liberal policy in regard to "Tuccavee." * But not only was the example of 1804 in this matter set aside, but we find that, "despite numerous applications," the Board of Revenue persisted to the end in refusing to grant this boon.

We now come to the famine of 1860-61, which extended over the North-Western Pro-

^{* &}quot;Tuccavee," advances of money for agricultural purposes—such as for buying seed, cattle, &c., and for constructing wells, &c. It is lent without interest, and repayable by instalments, generally within three years; but the date of repayment is extended according to circumstances.

vince and over part of the Punjab. From this famine onwards, we are, compared with bygone chronicles, met by a whole literature, as it were, devoted to famine-lore, in the shape of official reports and other treatises. The difficulty now is to make our choice in this *embarras de richesse*, to condense our materials into a shape and dimensions appropriate to this work.

With the last chapter we have discarded all description of revolting scenes during famine times, and have ceased to depict the straits to which the people are put to for want of food. I have also promised to endeavour to avoid the repetition of details given in connection with previous famines. But the famine of 1837-38 exhibits almost all the new features peculiar to our improved system of dealing with these disasters; it has left us, however, a perfect mine of wealth, in the shape of records from which we may obtain our information. But this wealth consists principally of minute details, and leads us step by step through the various stages, as well as through the different affected localities. Such information, of course, would be uninteresting to the general reader,

and is only of use to those whose object or duty it is to be cognisant of it.

In studying these details, one of the first points which strikes the attention is the unusual early note of alarm that was sounded by the Government. This was no doubt the result of experience, because in many previous famines it was known that indifferent years had preceded that of absolute famine; and having this warning, together with a present great deficiency of rain to add to the alarm, it was of course natural to predict the worst. In the North-Western Province - in fact, throughout Upper India generally-"the rains" are looked for at any time within ten days of the middle of June. The 15th of June is looked upon as the normal day for their "setting in;" and should they hold off till the 25th. they are considered "late." There is no wonder, then, when up to the 13th July "scarcely a drop of rain had fallen in the Doab," * that the prospects should have been considered alarming. The Lieutenant-Governor, therefore, on the 18th July, wrote a long memorandum to all Com-

^{*} See note, page 11.

missioners* on the state of affairs. directed attention to the unfavourable aspect of the season, and to the distress that would overtake the poor classes "if within the next ten days there should not be an abundant and general fall of rain," he adds, that "should this favourable change not take place, each Commissioner is hereby authorised to provide, in the manner above indicated, for giving employment to all those who are in need." The Board of Revenue were at the same time warned that suspensions, if not remissions of revenue, would be necessary—which suggestion was, of course, acted upon. These arrangements appear natural enough, and of so common-sense a character. that it may seem unnecessary to dwell upon the subject. But compare the date of this sound of alarm with the date on which the Orissa famine of 1866 was recognised. It was not till December of that year that relief-works were inaugurated; and these were in a paralysed state till May of the following year, when food importations were sanctioned. Nay, listen to the sequel of this very famine. By the middle of

^{*} The senior civil officers of a district.

July a beneficent rainfall occurred. Meteorological returns showed an extensive and steady downpour for the week ending 20th July, and appearances indicated a continuance of it. Hopes were not unnaturally expressed that although the rains were late, they would yet prove sufficient. Favourable reports were received from all districts. Enough rain had fallen for the purposes of cultivation; and it now only required an ordinary season, of which there was every prospect, to insure a good harvest. Again, there is no wonder, with such fair prospects before them, that relief-works should have been forgotten. Every man was now busy at his ordinary vocation, and there was no ' cry of destitution in the land. But, alas for human calculations! With July the favourable season passed away; in August very little rain fell, and in September next to none. The delay in commencing relief-works caused by this deceptive fall of rain in July was the source of great suffering, but these works were put in hand as fast as possible when the real state of affairs became apparent. By November, five great schemes of relief-works for the different

affected districts were determined on; the necessary proclamations were published in the bazaars of the country.

Government, in this famine, enunciated four distinct principles on which it intended to act: one of which was, that none but those who were absolutely unfit for work should receive food gratuitously; another was, that as the object of relief operations was to prevent starvation, and not to attract people to the works, the scale of wages was to be the lowest possible. This was a decided liberal advancement on the policy adopted in 1837, for the helpless were not to be left altogether to public charity, irrespective of consequences. Government notified that it would give the equivalent of all donations, subscriptions, and gifts of charity. During this famine, also, the first appeal to the English public was made, and the Lord Mayor of London obtained £30,000 for this object.

One feature is peculiar from its first appearance during this famine—viz., the notice taken by Government of Purdah Nusheen* women

^{*} I.a., hidden from sight.

(i. e., high-caste women), who from want were driven to dire straits, but by reason of their respectability could not be expected to mix in the crowd of labourers employed in the reliefworks. The very name by which they are designated is suggestive of the difficulty that accompanies the case. A committee of native gentlemen was formed, and asked by Government to make a house-to-house visitation, to make the necessary inquiries concerning them. But for this movement by Government, the sufferings of this class, who would prefer death to exposure, must have been very great; and there is no doubt but that in previous famines they suffered unmitigated misery.

Another characteristic point connected with this famine was the appointment of an officer by Government, at a comparatively early date, to inquire into the several disorganised phases of society attributable to the disaster. The origin of the proceeding was due to the influence that public opinion (British and Anglo-Indian) was now obtaining in the country. On the 28th January 1861, the Bengal Chamber of Commerce drew the attention of the Government

to the depressed state of trade between Calcutta and what were generally the flourishing cities of Northern India. They wrote: "It is considered that these markets have, during the last two or three months, taken from Calcutta onethird to one-half only of the ordinary quantity."

On the strength of the letter from which the foregoing is quoted, the Government appointed Colonel Baird Smith, R.E., C.B., to inquire into the causes and effects of this depressed state of trade, and other cognate famine matters. From this proceeding resulted a report, which was the first, and what is now considered one of the authorities extant, on the subject of famines.

There are no other characteristics peculiar to this famine which it will be necessary to notice here. The amount of remissions of revenue and of "Tuccavee" made by Government, show that funds and relief were available without stint. The mortality, no doubt, was fearful; but there is no proof that Government did not act up to the light of the social principles of that day for the relief of the sufferers.

The great famine of 1866 now comes to our

notice. To it principally we are no doubt indebted for the great pressure of English public opinion upon the actions of Government during the present famine. It is now known as the "Orissa Famine." because that district suffered most severely; but the famine extended both to the north in Bengal, and to the south in Madras, where the district of Ganjam was affected. This famine, generally speaking, differed from others in Bengal. Previous to 1865, the crops in the latter province had all been good, or rather had been fully up to the average, the rainy seasons having never failed; nor can it be exactly said that the rains failed in Bengal during 1865. The normal quantity of rain fell, but it came at abnormal periods; it came too early, and then fell too profusely, and it ceased too soon. In Orissa, the rainfall of the season was much below the average, and ceased altogether in September. In Ganjam, drought prevailed during the latter part of 1865 and early months of 1866. In this latter district the rains of the south-west monsoon almost wholly failed, and little fell during the north-east monsoon-nor, indeed, till the month of April 1866, when some heavy showers occurred.* In Ganjam the suffering was increased on account of the two previous years having been also periods of scarcity.

I will confine the few remarks which I intend making on this famine almost entirely to what occurred in Orissa. Any one wishing to read a graphic account of the country, and of this famine which devastated it, should get Dr Hunter's 'Orissa.' There are blue-books, of course, on the subject, but these generally are not available; and, as a rule, there is more matter in them than the public cares to wade through.

The worship of Juggernath, whose abode is here in Orissa, had its influence on the misery produced by the drought; and it is scarcely necessary to add that this influence was not beneficial—the poor pilgrims being the principal sufferers.

The first point that strikes one in connection with this disaster was the almost complete state of isolation in which Orissa was then placed. On the land side it is completely shut in by impassable mountains, and seawards by an inhos-

^{*} Blue-Book on the Madras Famine.

pitable shore. The Orissa Famine Commissioners remark: "The only ordinary mode of communication with the outside world is by the route traversing its length. That, however, is so much intersected by streams, already mentioned, and has been hitherto so little rendered practicable by art, that it is comparatively little used by wheeled carriages. Pack-bullocks still predominate at all times; in the rainy season wheeled traffic is quite impracticable; and when the rains are heavy, even pack-bullocks cannot be used."

Perhaps the next point that should be noticed was the delay of the Government to recognise that there was a famine in the land. The difficulties attending this aspect of an impending famine will be referred to in another chapter. In this instance, it was not till October that any fears were entertained. "It was," the Orissa Famine Commissioners write, "the peculiarity of this occasion that a very few days made all the difference between good crops and the most extreme failure. When the middle of October passed without signs of rain,* the

^{*} I.c., any further signs of rain.

alarm became serious; and when the 20th was passed, the whole country was in a panic." By the end of October, a petition was received from the landowners of one district, "praying for time to pay the revenue, on the grounds"—

- 1. That the crops are ruined;
- 2. That the cultivators, unable to get advances, cannot pay their rent;
- 3. That the cultivators, owing to previous excessive exportation of grain, kept no stock for this year.

This was all substantiated by the official authority whose duty it was to collect the revenue, and he forwarded the petition to the proper quarter for favourable consideration. The Commissioner of Orissa, however, did not support it, and the Board of Revenue rejected the petition as "inadmissible" on the 9th November. Reports about this time from other districts were equally unsatisfactory; but the Commissioner at the time believed that nowhere would there be less than half a crop, and in many places nearly a full crop; that there was a general disposition to make the present season's crop appear worse than it really was; and that there were

"large stores of grain in the hands of dealers, probably enough to supply the market for a couple of years." It is evident from the tone of the letters containing these remarks that the only blame which can be imputed to the writer was that he was too sanguine at this time. He tries to stimulate every one, and to take a cheerful view of affairs. He writes, "Don't let the people get down-hearted." "Set the people to help themselves-a somewhat difficult matter in Orissa; but there is nothing like trying." The Government of Bengal were of course guided for the time by their representative, and acted accordingly. It was evident, however, that the crops were not up to an average, and the Board of Revenue were asked "to suggest any measures by which it may appear to them that Government can aid with advantage, with a view to mitigate the effects of the present scarcity." The result of this was, that on the 11th December it was determined to inaugurate public works, and that Government, on their own estates, should set the example of affording relief to the helpless poor. Relief committees were recommended; for "it is on the exercise of private liberality, his Honour believes, that in an emergency of this kind the chief dependence must be placed."

In contradiction to all this, a merchant firm of Calcutta, having dealings with Orissa, urged on Government in November the necessity of importing and storing grain to meet the "famine." But the Orissa Famine Commissioners, who, it may be said, were sitting in judgment on the subject, after viewing the whole course of events, and writing with the full knowledge of the dire results, exculpate the Government on this point, and write that, "speaking of the proposal as a whole, we do not think that the information then possessed by Government would have justified its acceptance."

Meanwhile the relief-works noted before as having been authorised were taken in hand; but a serious difficulty arose. An actual want of food was experienced, and thus a "danger" arose "likely to interfere materially with, if not actually to put a stop to, the works." Importation of food-grains, it was definitely proposed, should be undertaken, in order that the actual want—viz., food in exchange for

money-should be provided for. Before these works were undertaken, there had been a famine of both food and money. The latter want had now been supplied, but the former remained. This proposal to import was decisively negatived on the 26th January 1866. By this time the Commissioner was alive to the urgency of the case, and on the 31st he requested authority to advance money to purchase rice. The telegram in reply on 1st February was: "Your message received. The Government decline to import rice into Poorce. If the market favours, imported rice will find its way to Pooree without Government interference, which can only do harm." This was thoroughly disheartening, and for the time being all thought of importation of food was given up. Such was the state of affairs on 1st February, and thus, or nearly so, did it remain till the end of May, except that famine was meanwhile having it very much all its own cruel way, Direct relief and special relief works were instituted, but their utility was in a manner paralysed by want of food.

At last, however, representations from local

officers having in the mean time continued, and the accounts having become most harrowing, on the 29th May the Lieutenant-Governor ordered importations; and from "this time," the Orissa Famine Commissioners report, "it may be said that for a few days the famine was, if it may be so expressed, half realised." By the 19th of June they say: " From this time it may be said that, if the whole severity of the famine was not completely known, at any rate it was recognised to be of a degree sufficient to require all efforts, and all was done that could be done by any ordinary means." But, now that importation was authorised, a further difficulty arose. The isolated character of Orissa has before been described, and the question presented itself, How could the measure for importation be carried into effect? The sea was the only open highway, but now the "elements" were in conjunction with the enemy—they added to the difficulties of the sea-coast. These difficulties were. however, partially overcome, and a modicum of rice was imported. The Famine Commissioners observe, that had the expedition been a military one, some professional assistance to aid in clearing obstacles and improving matters generally would have been forthcoming. Rice, however, was at last provided, and it rescued from famine a portion of the people. Of course, long before the rice was available, death had made sad havoc, and starvation had placed many beyond the healing influences of an after-plenty. Floods and cholera aided the former neglect, and the result of all was "The Orissa Famine."

There now only remains the 1868-69 famine to be noticed. The area which this famine covered was very considerable. It affected a very large portion of the North-Western Province, the whole of Bundelcund and the neighbouring petty states, part of the Central Provinces, Rajputana, and a considerable portion of the Punjab. Except in the native states of Rajputana, it was kept well in hand, and only lasted till the autumn harvest of 1869; but in Rajputana the effects were severely felt till the corresponding period of 1870.

With the exception of the Central Provinces, the Punjab, and the native states, the area affected was under the administration of the North - Western Province. This Province, throughout these sketches, appears as the chief sufferer, and perhaps it arises from the tendency to a frequent recurrence of these disasters that it is easily alarmed: but whether this be the reason or not, it is worthy of notice that both in this and in the previous famine which affected the Province, very early warning was given by the Government to its subordinates to be on the alert; and the contrast in this respect is all the more striking when compared with the action taken in the case of the Orissa famine.

By the 14th July 1868, warnings were issued. "Tuccavee" and relief-works were then suggested, as well as the remission of revenue, notwithstanding the permanent settlement, and the principle thereby involved. The Ganges Canal was now a fait accompli, and for the first time it was to be pitted against its foe. Hitherto its duty had been to encourage and stimulate exertions, to develop cultivation, and to multiply the products of the soil; now it was to save the people. Experience in canal administration gained during the preced-

^{*} See note, page 50.

⁺ In 1861 the works were only partially completed.

ing years was able to suggest minute details. Economy of water was the first principle instilled: preference was to be given, in distributing it, to the food-grains instead of to the more lucrative crops, such as sugar-cane, indigo, &c.; and, curiously enough, rice was among the condemned products. Rice, compared with wheat and other grains common in the North-West, requires a much larger proportion of water for its sustenance; * the produce does not justify the large expenditure of water in a season of severe drought—hence the ban which is put upon it.

In other districts not within the beneficial influence of canals, relief-works on a large scale were undertaken, and everything went on well. But in some of the native states of Rajputana it was far different: it is principally with these that the chief interest lies in describing this famine. Western Rajputana in 1869 corresponded in a somewhat similar degree to Orissa in 1866. It was isolated. Hemmed in by the Indian desert along one half of its perimeter, it had only three decent roads of inlet on the other side whereby to obtain supplies. Happily

^{*} See note in Appendix on this subject.

these means of communication are now being supplemented by the State line of railway from the east, which is fast approaching completion. This will carry abundance to the heart of the province; and it is to be hoped that before a calamity similar to that of 1868-70 befalls the district, that this line of railway will be carried on to join those of the west from Bombay, when there will be at least one long base line along which plenty will exist, and whence assistance will radiate in all directions.

One peculiarity which belongs to this Rajputana famine * is the fact that here we have affairs managed entirely by the natives themselves. We see the results of nature, so to speak, and can compare them with the effects produced by artificial means in our own provinces. The district itself is also a singular one. I have said that it is bounded partly by the desert; but the fact is, that this desert also forms part of Rajputana; and however paradoxical it may appear, it is partially inhabited. A consequence is, that in this instance we see the

^{*} This peculiarity is not applicable to Ajmere, which is British territory—see page 71.

effects of famine on a variety of soils. From barren sandy wastes we gradually pass through sparsely cultivated and inhabited lands to the rich plains of the North-Western Province. A famine in such a country has, of course, marked features. The principal of these is that already announced—viz., the wanderings of the inhabitants in search of food for themselves and of fodder for their cattle.

The administration and special famine reports of the Province for the years 1868-70 enter minutely into this subject. These were written by Colonel Brooke, an officer who has an extensive knowledge of Rajputana, and few are better acquainted with the manners and customs of the people, or with the history of the numerous chiefs. I shall quote freely from his official reports, which are written in a clear and telling style.

The financial and mortality statement in next chapter shows that this Rajputana famine was one of the most costly and dire calamities that has happened in recent times. Money was not spared. We could of course take no direct active measures in the native states themselves. We, however, set the example in our own territory, and offered precept in theirs. In Ajmere, which is, figuratively speaking, an island belonging to the British in the surrounding ocean of native states, we spent an enormous sum compared with the importance of the district; but no doubt we fed and employed thousands of wanderers from the bordering states. Our expenses in this case are thus summarised in an official document: "The sum-total which the Government spent for the relief of the population of its own territory, numbering 426,000 souls, was £152,007. This sum is equivalent to nearly three years' gross revenue."

I now give the promised quotations regarding the wanderings of the people in search of food, from Colonel Brooke's reports.

"In reviewing the history of the past year (1868), the subject which fills the mind is the terrible famine from which the country is suffering. The rainy season of 1868 commenced early in June. The first falls were succeeded by a long break, during which the grass sprouted and withered away again. The husbandman, however, ploughed his fields and sowed his

seed. A second fall of rain in the early part of July caused the crops to attain a height of about twelve inches, and the grass to appear again, but not sufficiently high to be grazed by cattle. No other showers succeeded. A strong. cool, south-westerly wind, most pleasant to the feelings, but most disastrous to the ryot, blew steadily day and night, driving before it, with tantalising speed, light misty clouds, which obscured the sun, but which besprinkled the earth with no fertilising showers. The stunted crops made futile efforts to form heads of seed, and the grass became thinner and thinner, till the fierce October sun burnt up altogether what remained, leaving Marwar an arid and withered expanse. . . The Marwar ryots had been accustomed to periodical failures either of grass or of the grain crops, but the two had never failed in the same year. In the great famine of 1813, which was the most calamitous in Rajputana of which there is record, grain indeed failed, and was not to be purchased, but there was plenty of grass, and the herds were saved. . . . Not only is Marwar afflicted, but neighbouring countries also suffer. In

seasons of scarcity the ryot had been accustomed to find relief in them, especially in Malwa, which was regarded as a land of plenty. where famines were unknown. This year, however, the failure of the rainy season has been more extended; and Malwa, given up to opium, to the exclusion of grain crops, does not offer the same relief as it did in former years. The Marwar ryots, without losing heart, prepared to meet the dreadful calamity, and to absent themselves from their native land till the returning seasons should hold out more propitious prospects. Without waiting till the grass en route was dried up, they started for their voluntary exile as early as the middle of August. Putting the little grain they had left at the bottom of their carts, and spreading their clothes over it as a seat for their little ones and the female members of the households, and driving their numerous herds before them, they journeyed in complete village communities, with grave and thoughtful, but not depressed countenances." The poor people who arrived in Malwa late had to pass on, and were reduced to the last extremity of distress. After exhausting their

little stock of grain, and selling their cattle to purchase food, they tried to make their way back to their homes in great destitution and misery. Numbers have been thus passing through Meywar in a starving condition. Brigadier-General Montgomery, commanding at Neemuch, writes: "The Marwaries are taking back but few of the cattle brought down. Numbers of these poor people died by the way. Some are left to be devoured by dogs, and others are buried a few inches below the surface of the ground, and always in nullah * beds, in view that the remains may be swept down by rain to the sacred rivers. The second great stream of emigrants passed vid Pahlimpore into Guzerat, and some towards Radhunpore. They, too, were doomed to bitter disappointment. The great floods which devastated Guzerat in August, sweeping grass and kurbee stacks, as well as villages and cattle, into the sea, buried the growing grass, and left a desert for the Marwar herds. They were driven further, dying of starvation at each stage, till a

^{*} Nullah is a water-course usually dry except immediately after rain.

few only reached the jungles east of Baroda. Here difference of climate and forage killed off large numbers, and the emigrants have been beggared. Those who went to Radhunpore have suffered in the same way from the unsuitability of climate and forage. In addition to the agriculturists, nearly all the artisans and lower classes have left the country. The Guzerat floods gave employment to these in the rebuilding of the towns and villages which had been swept away. Others who went eastward have found employment on the public works inaugurated by the British Government, which have been the means of saving many. They left to seek for countries in which grain was cheaper than in Marwar, and they have not only found cheaper food, but the wherewithal to purchase it. .

"The report of 1868-69 brought down the account of the great famine from which Marwar was suffering to the month of May 1869. The agricultural population, who had emigrated, were in eager expectation that a bountiful Providence would open the flood-gates of heaven in due season, and bless the land with a teeming har-

vest. This expectation, however, was not ful-Consequently they commenced to return to their homes at that time (May) with their families and cattle, with the view of being in readiness for the early kureef sowings.* They found in Marwar nought but arid and burnt-up plains, without a blade of grass for their cattle, and without water in the wells. The hot winds raged wildly; the dust, whirled aloft in furious storms, was suffocating; no sign of a cloud was to be seen. Down-hearted, a second time they rushed away from the doomed land. Cholera broke out amongst them; and whilst enfeebled in body by want of food, and broken in spirit through misfortune, they fell an easy prey to the attacks of the fell malady. At each place where they halted, many lay down and died. The roadsides and the banks of rivers and tanks formed generally their last resting-places; but their skeletons were everywhere scattered over the country, and for months afterwards were met with in the most out-ofthe-way places." Still were these poor wan-

^{*} Kureef sowings are those for the autumn harvest; they mmence with the rainy season.

derers doomed to disappointment: the rain fell in neighbouring countries, and rumours reaching the emigrants, they made a second rush to their fatherland; but, alas! the hot furnaceblast still scorched the heated plains, and the poor wanderers had to undergo a repetition of their former miseries, much aggravated, however, by their more wretched condition. However willingly they had been formerly accommodated in the countries of their temporary adoption, with cholera in their train no one now would stretch out a willing hand to save them. The greater portion died miserably in the desert; others halted for the season after the first unsuccessful attempt to return home, and were kindly treated there; while others still wandered about till they could return to "Those who "-from the outset-"remained at their homes, however, were in a much worse plight than those who had emigrated. The latter were able to procure food by purchase or by charity; but the former, in country villages, away from large towns, could obtain none whatever, and numbers with means of purchasing perished from starvation. . . .

"Excluding the fertile portion of Marwar enclosed within the branches of the Looney, nearly the whole country to the north-west of this river—comprising the western portion of Marwar, the states of Bickaneer, and Jeysulmere, and Shekawuttee, and covering an area of about 65,000 square miles—is a vast sandy semi-desert." The depth of water from the surface precludes all idea of irrigation. Since in Bickaneer water is only found at depths ranging from 300 to 500 feet below the surface, the supply of grain is entirely dependent on the rainy season, which is very uncertain in this wilderness.

"The great wealth of the desert lands of Marwar, and Bickaneer consists in the vast herds of camels, horned cattle, and sheep, which roam over these sandy wastes, and thrive admirably in the dry bracing climate. The camels and horned cattle are bred in such numbers that they supply the neighbouring provinces. . . . Single households possess hundreds of these cattle, and some large dealers several thousands. The grass in the desert is of an exceedingly nutritious description. The cattle are almost

wild, and in excellent condition; but when taken out of the country, languish and get thin, unless supplied with grain and condiments to make up for the loss of the rich grasses on which they have been accustomed to feed. In Marwar alone, before the famine, there were at the very least 2,250,000 head of horned cattleincluding Mullanee, the number may be stated at 3,000,000. . . . All these, with the exception of about one-tenth, were taken out of Marwar by the departing emigrants. Two millions at least of cattle, and three-quarters of a million of human beings, poured in great floods over the neighbouring countries! Where, however, are now the cattle? The tenth which remained behind may be said to have died off. The masses of bones round the villages, and the few walking skeletons left, attest the frightful mortality. An almost equal mortality seems to have followed the herds. . . . I do not think that I shall be exaggerating when I say that the wealth of the country in its horned cattle will have been reduced to one-quarter what it was at the same time last year-a loss which, I believe, is unprecedented. . .

From the wide extent of the famine tract, however, and the distance the emigrants had to travel, the cattle were soon reduced to skeletons. Moreover, they would not thrive on the poor herbage of other countries, after the rich grasses which had been so congenial to them at home. Their poor owners did not like to see them starving, so offered them for sale for a trifle, keeping, however, their plough-bullocks, which they fostered with great care to the last. Splendid young milch-cows were to be had for one rupee each; but at the worst periods, when the owners were starving with hunger, a pair of bullocks was not to be got under ten rupees. . . .

"On the 19th July 1869, the rains at last set in, but in many places too lightly to moisten the earth sufficiently for agricultural operations. At Jodhpore itself none fell till September 9. Towards the end of July the falls became more general in the country, and the spirit of the people revived. They had lost their cattle, and had no plough-bullocks; therefore, making small ploughs expressly for the purpose, they yoked themselves in place of the oxen, whilst

the women dropped in the grain as the men laboriously turned the furrow. Only one ploughing to the soil was given by these poor half-starved people, and then thorns, in place of harrows, were dragged over the furrows to scratch the earth over the grain. . . Thus energetically did the Marwar population try to retrieve the dire visitation which had fallen on them

"With all these exertions they managed to sow a breadth of land almost equal to half the usual quantity-a result most astonishing, when the slender means at their disposal and their reduced state is considered. The grain sprouted splendidly, and all were in hopes that the famine had passed away." But, alas! another oriental plague was in store for these unfortunate people. During the previous May, swarms of locusts had entered the country and deposited their These eggs are hatched shortly after the rainy-season crops * sprout. In the first stages of their existence, locusts resemble grasshoppers; but they are none the less destructive on that account, except that being then wing-

^{*} See footnote, page 76.

less, their movements are to a slight extent limited. They travel, as it were, in a living mass over broad tracts of country, eating up every green thing in their path, leaving a brown dry track to mark their progress. "As they increased in size, they became more ravenous in their appetites, and when they got their wings and could fly, more ubiquitous." In short, Colonel Brooke calculated that by the time they finally quitted the country, seventy-five per cent of the crops had been destroyed by them.

CHAPTER III.

FINANCIAL AND OTHER RESULTS OF PAST FAMINES.

So far I have given a sketch of some traditional and recent famines. As before mentioned, I consider that our first object of search in this matter should be for reliable statistics of mortality, because they exhibit the results of all efforts made towards mitigating these disasters. But in former times, neither in our own nor in other countries was much attention paid to statistics; therefore it is needless to look for such details in the events recorded in Chapter I. on "Traditional and Historical Famines." Nor are we much more fortunate in this respect when we come to what I have termed, perhaps rather arbitrarily, "Recent Famines." As regards mortality, it has always

been a matter of estimate, and not of record, as it should be; but I can see no reason why this state of affairs should continue. In fact, the measures taken to obtain statistics of the present famine will set an example in this matter.

I will here enter briefly into this question of mortality. The accuracy of the official report of the famine deaths up to the present date (July 1874) has been questioned by some who believe that the actual starvation deaths are much in excess of those registered. Their argument seems to be that the ordinary mortality is being very much exceeded during this year of farine; and that all such deaths (amounting, I suppose, to thousands, but I have seen no definite statement made on the subject), notwithstanding that the immediate cause may be dysentery, fever, &c., are nevertheless famine deaths, because they have been induced by want of food. No doubt this is in one sense true; but it is absurd to suppose that Government is to be held responsible for every such death. If it can be proved that these deaths occurred notwithstanding that the sufferers importunately demanded food or wages, and that Government refused or was unable to grant their requests, then by all means let the charges be advanced. But if, on the other hand, bigotry, fatalistic views, apathy, or any of the many other subtle influences which prevail in the East, was the cause of the sufferers concealing their necessities, or for refusing proffered work, wages, or food, then the charge falls to the ground. It is also absurd to suppose that in a famine year the general health of a community can be kept up to the average.

Next to the statistics of mortality, we may seek a clue to gauge the efforts made to alleviate distress in the financial expenditure on this object.

The following table (p. 89, 90) has been prepared with these two points in view. I will begin with a few prefatory remarks in explanation of this table. First, I may observe that, generally speaking, each author or compiler of an official report has his own method and views. One officer will give details under a particular head, while another will keep the same head in the

background and bring another into prominent notice. It has therefore been a matter of considerable labour to prepare this table, even in its present rather incomplete state. While the greater number of reports, &c., connected with these famines are available at home, yet they do not contain all the necessary details. On the other hand, India does not afford all the information which the India Office possesses; it has therefore been impossible, for the present, to prepare this table in as complete a manner as it is desirable. I do not wish to neutralise the value of the table by saying that it is inaccurate: it is as accurate as I can possibly make it with the materials available. I have referred to the difficulty experienced in abstracting the figures for it from the different authors, who have their own various ways of looking at subjects; it is therefore quite possible that some of the figures are open to revision. In fact, I would prefer to put forward the table in a tentative manner only for the present, and that it may be adopted as a base to work upon. This table will be again found in the Appendix, with numerous notes showing the sources of the information, and how the sums-total have been arrived at. This, of course, will only interest those who have the means of testing the accuracy of the figures; but the plan has been also adopted with the hope that I may receive assistance in completing the table.

I might have enlarged the statement by giving the amount of revenue demands, and comparing them with the amounts suspended or remitted, and shown in another column the absolute losses thereby. Also, the total amount of expenditure on relief might have been separated into (1) Relief-works; (2) Public Charity; and (3) Private Charity: all of which have been thrown together. But to do so I thought would complicate the table and exceed the proposed range of this book.

The first five columns need no explanation. Of the sixth it is to be observed that it represents the population of the affected districts. It is, of course, a difficult matter to draw a hard-and-fast line between plenty on one side and famine on the other. The figures neither represent the population of whole provinces,

nor do they merely give the numbers inhabiting the worst tracts of a famine-stricken country. The area in column 5, of course, corresponds with the figures in column 6. I may also add that the "Census" is by no means a timehonoured custom of the country, and that it is looked upon with a considerable amount of suspicion by the natives, who dread it as containing occult elements of danger. No. 7 column I have already incidentally explained. No. 8 requires no explanation. No. 9 exhibits the loss of Government by remissions and suspensions of land revenue over and above the direct expenditure of money for relief-works and for charity. The remissions are of course a dead loss, and the suspensions, in some cases, become permanent losses also. The objection may be raised that merely these permanent losses should be shown in this column; but I prefer the plan adopted, because it indicates the measures which the Government at the time were prepared to undertake to mitigate the suffering. Moreover, it also affords an item common to all cases, whereas the amount remitted would give only a partial view of the question. These

No.			4	5	6	7	8	9	10	11	12	
	Year.	LOCALITY AFFECTED.				Amount Expended, including Government Re-	Cost of Relief per	Remissions and Suspen- sions of	Tuccavee,*	FAMINE DEATHS.		No.
Famine.		Presidency.	District or Province.	Area.	Population.	lief, Public and Private Charity.	Popula- tion.	Land Revenue.	ruccavee.*	Number.	Percentage of Popu- lation.	Famine.
I.	1770	Bengal	Bengal	Sq. miles. 130,000	30,000,000	£ sterling. £13,770	Shillings.	£ sterling. £80,332	£ sterling. Nil; at all events no trace of it.	10,000,000	33	
II.	1783	,,	North-West & Punjabt	•••	•••		•••	•••	<i>.</i>		!	1:
III.	1803	,,	North-Western Province	20,34	No record	No record	•••	340,923	£100, 000	No record		III.
IV.	1837	,,	>>	25,00	8,500,000	74,844	.17	488,736	Nil	800,000	10	IV.
v.	1860	,,	"	18,63	9,821,000	148,599	.30	132,430	34,021	2, 000,000 ;	16 }	v.
VI.	"	,,	Punjab	8,78	3,179,000	32,510	.20	67,452	§	, , , , , ,	1	VI.
VII.	1866	"	Behar	26,19	7,739,717	32, 536	.09	9,800	220	135,676	2	VII.
VIII.	22	,,	Orissa	7,64	3,015,826	748,262	4.95	156,444	•••	814,469	27	VIII.
IX.	29	Madras	Ganjam, &c.	6,40)	1,100,000	23, 143	.42	12,540	3,200	10,898	I	1Z
X.	18 6 8	Bengal	North-Western Province	29,013	10 ,269,2 (N)	196,422	.38	122,997	93,024	62,772	Î	7
XI.	"	,,	Ajmere	2,673	426, 000§	162,407	7.62	13,998	8,595	106,500	25	1.
XII.	**	,,,	Punjab	'	•••	42,167		56,441	1	f		SE
XIII.	,,	**	Central Pro- vinces	(•••	34,760			8,353	···	• • •	XIII
XIV.	1873	,,	Bengal	50,00)	25,000,000	6,500,000			•••	. •••		XIV.

^{*} See footnote, page 50.

of the mortality.

⁺ No particulars available; these provinces were under native governments at the time.

[#] This is on the authority of Sir A. Cotton; but it spears to me, from what I have gathered from official documents,

[§] This does not include the native states of Rajputana.

The blank spaces I am at present unable to fill up.

remarks also apply to the following column. "Tuccavee," in column 10, is explained in the footnote at page 50.

It is seldom that famines recur in exactly the same districts and under similar circumstances. It may be that one province, or part of it, is common to half-a-dozen famines; but it is affected in a greater or less degree each time, and it has as often a different district associated with it in its distress. It is therefore impossible to contrast the intensities of the various famines with each other with mathematical precision, but the table will furnish the grounds for a general comparison of facts and results.

I have said that the chief point to be looked to in the results of a famine is the mortality caused by it; and in contrasting a series of famines, we can arrive at a very fair idea of their effects by comparing the percentages of deaths recorded. In doing so, we should, of course, also expect to find a constant ratio of diminution, corresponding to our knowledge of the people and to our experience in the management of such disasters—i.e., the later the

famine the smaller the percentage of deaths should be. Column 12 of the table does not fully bear out the desired condition, if we retain the Orissa famine of 1866 and the Rajputana famine of 1868-70. The extreme mortality caused by the latter famine I would be inclined to leave out of the reckoning, as the features connected with the famine are so peculiar. In the states of Rajputana we have not supreme control over the destinies of the people; but no such excuse can be made for Orissa. That there was a complete failure in the early part of the administration of the famine in that country, I do not think any one will deny; and the only consolation we can give ourselves is, that it taught us the lesson so thoroughly known, and which has been carried into practice in the present famine. However, if we omit these two famines, unique in character during recent times, the decreasing ratio of deaths is tolerably uniform. The number of deaths recorded against Nos. V. and VI. I am by no means satisfied with. I can give no other reason for entering the number than that it seems hitherto to have remained unquestioned.

I am aware that this is not a logical ground for accepting the figures, but at present I am unable to settle the question. There was one instance, however—viz., the Bulundshur district, in the central tract of the famine—where the famine statistics were entered into minutely.* The deaths are there given at $3\frac{1}{2}$ per cent of the population, which exceeded the popular estimate—while the emigration amounted to nearly 7 per cent. This, together with some other official information, induces me to think that the mortality has been over-estimated.

In analysing columns 7, 9, and 10, we have two antagonistic principles to deal with. One is, that as years roll on and experience of the wants of the country is gained, an enlightened Government should provide preventive measures in such a manner that a minimum and ever-decreasing amount of relief in a dry season should be required; while the conflicting principle demands that, as years roll on, we should have a maximum and ever-increasing amount of direct relief given by a paternal Government and by a sympathising public.

^{*} See Colonel Baird Smith's Report.

Canals, tanks, wells, communications, and many other similar works, are constructed throughout the country, one of the main reasons being that they will be valuable measures for the prevention of famine. Now, if the principle of undertaking these works be correct, it is evident that as their construction is progressed with, the cost of all future relief in famine should decrease considerably. Yet while the first principle infers that all these roads, railways, canals, &c., have been spread broadcast over the land, the second would imply that they have not. This of course leaves out of sight the contingency of our relief expenditure having been started on an inadequate scale. However, it is evident that if we are to set about this business in a logical and consistent manner, we must at some time or other reach a limit of expenditure under one of the two above-mentioned heads.

We may, however, take another and entirely opposite view of the case. It may be asserted that both constructive and direct relief should be ever on the increase. This is, perhaps, what would be the *prima facie* consideration of the

case. The view has two arguments in its favour: 1st, that India being unhappily a poor country, it cannot afford to have the stupendous public works which it requires, all going on at the same time—hence it is that some districts may be said to be at a stand-still in this respect, and that therefore this constant ratio of increase in direct relief is necessary; 2d, it may be argued with some reason that the first relief-works, remissions, and "tuccavee" advances, were on an insufficient scale to form a basis of relief.

Famines Nos. I. and II. offer us no field for debate. The first, notwithstanding that information concerning it is very tolerably complete, is of so unique a character that no conclusion of any value can be deduced from it; it stands out as a warning simply.

The records of No. III. are too incomplete for a proper comparison, but it is desirable for the present to note this famine in connection with Nos. IV., V., and X., as they all deal with the same district—the North-Western Province—although the total actual areas affected varied somewhat in each. I may here point out that the North-Western Province is one of

the most favoured districts as regards the completeness of its famine-preventive works. The remissions in these several famines. -III., £341,000; IV., £488,000; V., £132,000; and X., £123,000, - bear out the principle mentioned - viz., that as constructive works increase, relief should diminish. The increase between III. and IV. is consistent, because preventive works, such as the Ganges Canal, had not then been undertaken. The marked difference between IV. and V., during the latter of which the first beneficial influences of the canal (as one item of improvement) were felt, is satisfactory. The result, as indicated by the "tuccavee." does not quite bear out the same hypothesis. These advances were.—for III., £100,000; IV., nil; V., £34,000; and X., £93,000. From the latter sum, however, to afford a fair ground of comparison with the others, £40,000 should be deducted, because this sum was advanced in districts, such as Bundelcund, which were beyond the reach of beneficial works like the Ganges Canal, and where large irrigation-works have not yet been inaugurated. After making this deduction, and of course omitting IV. altogether (the action taken in regard to this item has already been commented upon), the result is a little more satisfactory. But what is to be said of column 7? This direct relief has steadily increased. In No. III. we have no record; but No. IV. shows £74,800; No. V., £148,600; and No. X., £196,400. No doubt higher aims were in view; the ambition to save the people increased with our sad experience of famines, and consequently the funds required for this end had to be augmented. Recollecting our first premiss-viz., that as preventive works increase, direct relief should decrease—this result cannot be said to rest on a scientific basis, unless we assume that preventive measures have not yet been sufficiently developed in the North-Western Province. But with the Ganges and Eastern Jumna Canals as witnesses, I do not think that we can admit this view. We must therefore adopt the second premiss, and attribute the result, which is nevertheless highly creditable, to the fact that Government made more strenuous exertions to save the people, and that the public aided their efforts.

It is again necessary to note the difficulty experienced in comparing famines on account of the numerous dissimilar features which they present. We are for this reason brought to a stand-still in pushing this inquiry. Column 8, however, supplies an item common to all famines, notwithstanding their various conditions; but yet it does not afford a mathematically correct standard of comparison. The population in one distressed locality may be richer than in another, and hence they may not require equal amounts of relief; or it may be that one is an agricultural population, while the other is a manufacturing one: but as a rule, the broad areas affected neutralise these disturbing elements to such an extent, that we can accept the figures as providing an index sufficiently accurate for our present purpose.

In studying the figures of this column 8, the first point which strikes the attention is the remarkably small expenditure per head of population which has ever been made. The conclusion which is at once drawn from this fact is, that only a very small proportion of the inhabitants required to avail themselves of this mode of re-

lief. It is evident that had the majority of the population required the relief, and had only received the amounts shown by this column, that the mortality must have been a hundred-fold greater than reported.

Perhaps the next most striking items of the column are the comparatively high figures against Nos. VIII., and XI. famines, and they certainly attract the more attention when we consider the very high percentages of mortality which are attached to them. These facts speak for themselves—they require no analysing; nor do they afford any grounds upon which to base an argument.

Omitting, therefore, the last-mentioned famines from further consideration here, the remaining figures still vary enough to make it difficult to arrive at any conclusion. One question suggests itself, What percentage of mortality can be accepted as sufficiently low to enable us to speak with satisfaction of our efforts to cope with a famine? Hitherto two-thirds is the lowest that we have succeeded in attaining. I will therefore start the discussion with this figure in view. We can now

set ourselves a number of questions. One is -if .38 of a shilling expended gives a comparatively satisfactory result, as exhibited in No. X. famine, what comparative results occurred in the expenditure of any other of the given famines? For instance, let us take No. VII. famine, as it had a minimum cost of relief per head of population. In working out the question of mortality connected herewith-viz., if .38 of a shilling gives 2 per cent mortality, what mortality would .09 of a shilling give? - we find the expenditure of No. X. famine to be four times greater than that of No. VII., while the mortality of the latter was only three times greater than that of the former; the conclusion from which is. that No. VII., in an economical point of view, was better managed than No. X., and we can only lament that more money was not spent in an equally judicious way, in order that a greater number of the people might have survived. With the same data we are enabled to inquire into like results in any other famine. In doing so, we find that not only was much less money spent, but that it was by no means

spent in so economical a way. We may therefore congratulate ourselves so far. Our latest famine—excluding Ajmere, of course, for reasons already given—shows a minimum of mortality, while the cost of relief per head is one of the most economical on record. I have no doubt but that the present famine will outstrip this preceding one in showing a very decided diminution of the percentage of deaths; but whether it will show an equally economical expenditure per head of population cannot at present be anticipated.

It is just possible that this column 8 may supply a rough estimate of the funds required in any future famine. It would appear from the figures in this column, that about .5 of a shilling—i.e., sixpence per head of population affected—will represent the sum that must be expended to combat successfully with famine, on the principle now acted upon. But it is probable that the enormous expenditure now being incurred for the present famine may negative this idea.

The exceedingly high cost of relief per head of population, and the very disproportionate results, in both the Orissa and Ajmere famines, call for some remark. The question, of course, suggests itself—Is "fault or misfortune" to be debited with the disastrous results? and, Have we any lessons to gather therefrom? It is clear that we cannot substantiate the charge of niggardly expenditure in either case; but bad administration must be admitted in the case of Orissa. That Orissa had its own share of misfortunes—in the shape of no communications, and little or no preventive resources, as afforded by canals, and suchlike—is quite certain. With regard to the Ajmere famine, there is nothing to show that any charges of maladministration can be substantiated. Misfortune must be charged with all the dire results.

The lesson taught is, that irrigation schemes and communications should be inaugurated. Both these provinces, as already noticed, were in a manner isolated—they were the ship-wrecked crews labouring within sight of land in a heavy sea, where an insufficient number of life-boats could reach to aid them. New schemes both of communication and irrigation are now being carried out to ward off similar disasters in Orissa. In Rajputana, vast irri-

gation projects are impossible, as may be gathered from the fact of its proximity to, and in some cases its actual encroachment upon, the desert. Our own province of Ajmere is studded with tanks, and these are being multiplied as fast as possible. The railway, as already noted, has now fairly entered Rajputana. Its progress was considerably expedited by reason of this very famine, which proves that the lesson has been taken to heart.

In taking a general view of the foregoing table, we cannot but be struck with the vast amounts which have already been absorbed in dealing with these calamities; and we must, however reluctantly, face the equally certain future expenditure which will have to be made, in the attempt either to avert them or to mitigate their effects. Nor should it be forgotten that the table does not represent the sumstotal expended on these disasters. Many more than are there noticed occurred in the Bengal Presidency since 1770; while it may be said that Bombay is not represented at all, and that the Madras Presidency is almost equally unnoticed.

In comparing the final with the initial results, as shown in the table, I think we may consider that this branch of our administration has progressed favourably. It may be of interest to trace some of the general causes of this, and to discover to what we may attribute these satisfactory results. Experience, as I will hereafter show at some length, is not to be credited with the whole results.

For one of the causes, we must go back to the date of our assuming the administration of affairs in Bengal in 1765. We succeeded a government, or rather a misgovernment, which subjected its people to all the evils of a despotic power, without giving any of the ameliorating influences which render despotism in other countries not altogether an unmixed evil. The government was tyrannical; in Bengal it was vicarious, with the many evils attached thereto; -it might even be questioned if there was any established government at all. Might was right, and want and war were no unfamiliar visitors. Famine was an acknowledged curse of the land, against which it was useless to struggle. Not only did we succeed to this state

of affairs, but our early representatives had lived in the country and witnessed them, and the traditions of generations had been told to them. Everything, therefore, tended to make the Englishman of that period in India thoroughly oriental in his ideas of the management of native affairs, and to inspire him with that contempt for the scourges and wrongs of humanity which familiarity engenders. It is even questionable whether the native of these days was recognised as "a man and a brother" by us; at all events, there is no doubt that ideas were then prevalent which would be scouted now. This is one cause for the very great change of famine aspects between 1770 and 1870.

Again, we must consider the difference between the influence of "public opinion" then and now. To prove that there was neither the wherewithal nor the means of disseminating it, it will be sufficient to recollect that the 'Times' did not exist in these former days. Nor must we forget that public opinion itself has altered considerably during this period.

At page 96 I have noticed, in a general way, how the remissions and suspensions of land revenue have decreased. I may here appropriately particularise some of the works which contributed to this end. My remarks apply to the North-Western Province, as I am familiar with this part of India only; but we may assume that most other provinces have received an equal share of attention.

In 1837, the Grand Trunk Road, "that work of Roman solidity and extent," was metalled continuously only between Calcutta and Alla-"Nothing worthy of the name of a road existed in the direction of the Central Provinces, and the intercourse between one district and another was of a most primitive and limited description." * In 1861, metalled roads formed a network all over the country -not as many, perhaps, as were necessary, but their extent was in proportion to the ability of the country to pay for them. Other signs of British administration were also evident. Massive railways now extended over about the same lengths as the metalled roads did in the previous famine, and steamers had to a great extent superseded the native craft

^{*} Girdlestone.

on the navigable rivers. The great Ganges Canal was also now in existence; and although the elaborate schemes of irrigation dependent on it were not developed to anything like their full extent, yet this grand irrigation work contributed to the general salvation of the country in 1861. In 1868 all these were still farther developed.

It is of course impossible at this time to say what the present famine arrangements will cost the State, but that it has been met in a spirit worthy of the age, no one will deny. That £6,500,000 are available to provide against want, is sufficient to prove that all which it is possible to do will be done. £14,000 represents the ideas of one age, while £6,500,000 represents that of a century later.

But the question, What is to be the fate of Indian finance should a few more such famines occur? is one which I will leave to some able financier. We must hope that in the present instance a considerable portion of the outlay will be returned to the Exchequer from the sale of grain. Of the Durbungah Railway we may justly hope that it will be of permanent use,

and that the cost of its construction may ultimately be debited to other funds than to those of the famine. But with regard to other relief-works, we must, I fear, be guided by experience, which tells us that these operations are seldom of little permanent value.

Should this enormous expenditure after all fail to yield favourable results in the rescue of the people from starvation and misery, we have still one negative consolation to fall back upon -viz., that no other country has yet shown us a better example to profit by, or can give us any useful hints regarding better management. We are not unaccustomed to hear it said regarding many of our institutions that "they manage these things better abroad;" but at all events, so far as any of our neighbours, whether near or far, have tried their "prentice hand" on such disasters, I do not think that they can point the finger of scorn at us in this respect. We have, with this Bengal famine, a synchronous one in Asia Minor; and to judge by all accounts of the latter, we have reason to congratulate ourselves. From the accounts of the last famine in Persia, we may also safely con-

clude that we have no lesson to learn there; and it is certain that Persia might, with considerable advantage to herself, take a leaf out of our Indian famine book. I will conclude by quoting a passage from Dr Bellew's interesting book, entitled 'From the Indus to the Tigris,' describing the journey of an official mission from India to settle some boundary question with Persia. Dr Bellew is an officer of considerable experience in oriental manners and customs, and has long been intimate with the various traditions and vicissitudes of native life in the East. His notes are therefore not those of a novice led away by first impressions, but they are the calm inferences of one who has studied his subject thoroughly. He gives some heartrending accounts of the results of the famine met with in the journey, but the following quotation is the most appropriate to what we have been saying. He writes: "During the pressure of the famine, the citizens of Mashhad used to flock out to the plains on purpose to be captured by the Turkman,* pre-

^{*} The party was at this time alarmed by reports of the proximity of these raiders.

ferring a crust of bread in slavery to the torture of a slow death under the heedless rule of their own governors, who never stirred a finger to alleviate their sufferings or relieve their necessities. This species of voluntary exile soon grew to such alarming proportions, that the Mashhad authorities were obliged to post military guards to prevent the citizens from leaving the city."

CHAPTER IV.

A FEW GENERAL CRITICISMS.

It should never be lost sight of in a critique that we have only the opinion of one mind, and if the subject be one with which the public are imperfectly acquainted, they are for the time being guided by the critic. We know what the normal state of affairs generally is in regard to public opinion on all subjects. Individual feelings, prejudices, idiosyncrasies, and "personal errors," lead the public to widely different opinions on every matter that comes before them, from the Tichborne case upwards or downwards as it may be. We should therefore when unacquainted with any subject, especially one in which we may be asked to pronounce judgment and to measure out pun-

ishment, be extremely cautious in forming our opinions, and we should be averse to accepting as truth everything which any single writer has to say on the subject. No doubt, almost all criticism has some value if it is independent, for it gives the true and honest convictions of a mind; but this is of more use to those criticised than to a public seeking information.

On the other hand, criticism by a body stands a good chance of being fair and just—whereas that of an individual, or set of individuals, may or may not be one-sided; the latter is, moreover, unpalatable, and as such, unless in very skilful hands, is more apt to do harm than good, and for this reason it should be brought into play as little as possible.

In this and in the two following chapters I propose to examine the action of the Government in the present famine, and to discuss what I may call the support given to the State by the Anglo-Indian press on the one side, and the criticisms of one or more newspaper correspondents on the other.

A general in command of an expedition is a

man with undivided control; he is supposed to be able to judge for himself on the expediency of any course of action under an evervarying state of affairs. It is no part of his duty to hold a council of war with every aidede-camp, or with any omniscient outsider who may perchance be willing to advise. Nor would the public be apt to place much reliance on the ideas expressed by an ordinary correspondent on the tactics and strategy of the expedition. Why so?—the answer I leave to the reader. The Governor-General of India is in a still more responsible position. He is a man generally selected for his ability and judgment, and therefore some degree of trust may or should be placed in his actions. He has, moreover, his Council to aid him. A correspondent of a newspaper criticising the actions of the Governor-General may or may not be an equally able man, but if his criticisms are at variance with the means adopted, he is more or less likely to be in the wrong. Again, in the case under consideration, the Anglo-Indian press is a body of considerable ability, wielding the power attached thereto. It represents official and non-official opinion, and thus offers Government the opportunity of "seeing theirsels as ithers see them;" and this press is by no means in the habit of withholding the sharpest criticism when it believes the action of Government to call for it

The press in India-I allude to the leading papers-must not be judged by the press at home: it is a curious medium-a multum in parvo, a panacea for all Indian evils. It has the very best means of obtaining the necessary information on all points where criticism is required; it is more or less inspired, but in an indirect way. It cannot boast the graphic descriptions that diversify the columns of some of our London papers. It is also much more sparing of leading articles, there being in India a sad dearth of subjects for discussion. Those, however, with which it does favour the public are generally to the point, though it is to be regretted that editors should chiefly confine their leading articles to Indian topics. One consequence of the paucity of leading articles is the increased space afforded to correspondence. Full advantage is taken of the opportunities

presented, and the columns of an Indian newspaper thus become a repository for ideas on any subject of interest, the thorough discussion of which is insured. The press becomes consequently the natural outlet for all the pent-up literary talent of both the official and nonofficial classes: it will give publicity to the ideas alike of the oldest judge and of the youngest magistrate; of planters, of merchants, of railway officials, &c. All freely employ its columns for ventilating their opinions on subjects of local and general interest. We have therefore here a medium in which it is quite certain that famines, among other subjects, will be discussed as fully as possible, not to say ad nauscam, by men thoroughly acquainted with not only the general principles, but with the details of the subject.

Then there is also the native press. In it we see, or should see, ourselves depicted from a very different point of view. It is valuable in some respects; but it has not the influence which would be attached to it were the mass of the people educated; at present, the bulk of the population are uneducated, and care little

or nothing for the opinions expressed in their press. It is still, to a very great extent, true regarding famines, that "to the native mind... the question of responsibility probably would not occur in such cases at this hour, except within the narrow circle influenced and instructed by the Anglo-Indian press."*

Again, the official class in India, taken as a body, are, within certain limits, among the picked men of a nation. There is no necessity to discuss the condition of the Indian Civil Service as at present constituted; but, on the whole. I think the Service is allowed to be a good one. Besides its purely civil element, it comprises many military men,-men who therefore necessarily prefer work, and hard work too, to an idle life-men who have spirit as well as ability, and who may be said to be among the best officers of the army. It should also be understood that "Civil Service," in the sense here used, includes many professions and occupations-clergymen, medical men, engineers, geologists, &c., whose opinions are all represented. All these have their own varied ex-

[.] Dr Hunter.

perience of the country and its usages, and have numerous means of obtaining information from natives, and their combined wisdom is brought to a focus in the press.

One often hears such remarks as that "Government seems always to get the square men into the round holes;" that "this is only Government work, and that therefore nothing better can be expected,"-and so on. In short, Government officials are generally set down as fools, who never see things in the true light, or as other people see them. The fact is, that Government is the only institution and does the only work in which the whole body of the public is interested; and besides, it is the only business firm whose transactions and accounts are open to universal inspection. The consequence is, that it receives what at first sight appears to be a preponderating share of adverse criticism. But we must remember that, while at liberty to criticise Government transactions, a man has no right to make public comments on a neighbour's business; nor, were such a practice admitted, would the exposure of personal shortcomings interest the country. We

are too apt to forget that although as a nation we may prosper, yet individually very many foolish errors are constantly being committed which pass unnoticed.

The European non-official class are also a body of well-educated men. There is no emigration scheme connected with India; each man must pay a heavy passage-money, which generally means that he has had a liberal education, and that he has gone to India with some definite object in view. These men also obtain experience, gathered by the rough usage of a day-to-day life in actual contact with the state of things in which they live, and about which they write.

We have therefore in India a public and a press whose opinion on their own especial affairs is well worthy of attention; but it sometimes happens that an outsider invades their territory. Of the resulting effects the English public will be best able to judge by reading extracts from some foreign papers in which English news or politics have been discussed. How often do we find foreign newspapers coming to entirely wrong conclusions

about ourselves, not only from an insufficient knowledge of our language, but, more frequently, from not thoroughly understanding the matter in hand? Similarly, Anglo-Indians are able to pick holes in the remarks and criticisms of the home papers on Indian affairs; and when they have to deal with criticisms not altogether of a friendly nature, it is not unnatural that they should express the resentment they feel at being lectured by people who know little or nothing of the practical detail required to work out the very ideas which they suggest.

The great stumbling-block to a due appreciation of the difficulties of the famine by the public, is the apparent simplicity of the whole affair. A rich nation says—"Given a distressed district with a certain population, requiring so much daily food for so many mouths," and then asks, "What is easier than to buy this food and give it to the poor people?" Or to quote a somewhat similar idea, but much more elaborately expressed, in the 'Saturday Review' of 3d November 1866: "In the bare idea of famine there is something of a peculiarly painful and shocking character. An epidemic may be considered

beyond the prevention of human science—at least of human science in its present stage; it may attack those who have all the resources of the highest civilisation at their command—and its fatal triumph over these resources, although it may excite regret, leaves no room for the still more painful and humiliating sense of self-reproach. But with famine it is altogether different. It gives the lie to some of our most essential conceptions of modern civilisation to find, in the same community, some members enjoying every luxury that wealth can procure, while others are dying for want of bread."

It is no doubt difficult for people at home to picture such a calamity as famine in its true colours; but it is not therefore the less incumbent on them to do so, in order that they may have a just appreciation of the whole crisis if they desire to criticise the management of it. I will therefore first state some of the difficulties which surround the subject in a general way, and will leave till later those difficulties which require discussion in detail. In the latter case, I will confine my remarks

principally to subjects taken up by the press, and more especially to those dealt with by the correspondent of the 'Daily News,' who has, on the whole, approached the majority of the subjects requiring animadversion in a fair and temperate spirit.

At the outset it may be said that we have very little in common with India. In the first place, it is scarcely an exaggeration to say, that no one at home has had any experience whatever in grappling with such a disaster as famine, and that therefore our ideas are necessarily vague and impracticable. I have already noticed that mankind is not apt to be of one universal opinion; we are therefore likely to have the views of one set of men with regard to the general management of a famine opposed to those of another set; while in matters of detail no two men's ideas are likely to coincide. We have had experience of this at home during the present famine. As one instance, I may point to the discussion as to whether exportation of grain in India should be stopped or not; and as another, to the discussions held at several public meetings in the early part of the famine.

Further, we must bear in mind what is here a very important fact—viz., that England in its present normal state imports food-grains, while India exports them; and that in the latter instance, it makes a very vast difference when we have to reverse the operations. A home famine does not seem a very terrible matter to contemplate. We can easily imagine a very bad harvest, or a succession of them, caused either by drought or otherwise. The worst we can picture is a total failure of crops, ruined farmers, and grumbling landlords. It does not seem that we would be at all anxious concerning our actual wants being ultimately supplied; nay, we cannot even imagine that there ever would be any serious want felt; we instinctively come to a conclusion that food would be forthcoming somehow. The question therefore arises, Whence this instinct? On what grounds is it based? Why should we suppose when our crops have failed that want would not be felt, while a native of India would as instinctively contemplate days of dire distress and starvation, if not death itself, as a probable result? The reason is simply that we are a wealthy nation.

and can afford to import whatever there is in the world which is necessary to us. We do not reflect upon this fact, but trust to a sort of instinct which tells us that our wants will ultimately be supplied.

Again, we have a merchant-ship service at our command which no other nation can equal; and the reason of this is, that we are able to give this service constant employment. In ordinary years part of this fleet trades between England and India; but witness the effects which a state of famine develops. Were the cry for food to proceed from England, this service would be all activity, every vessel available would be off in search of grain; but in this very instance of the present Bengal famine, what happens? Trade between England and India stagnates; there is a rumour that grain exports from the latter country are to be stopped, return freights are therefore problematical, and immediately no ship can be chartered for Indian service, except at preposterous rates.

Beyond these, Britain has natural physical advantages for coping with famine. The fleet of vessels at her command has a highway all round our island whereby food importations can be distributed at any point with a minimum of delay, of distance, of transport, and of expense.

Keith Johnston gives the following statement in regard to the coast-line of England: "The length of the shore-line, in its average direction, is about 1300 miles; but reckoning it along the indentations, it is estimated at 3000 miles." Of Scotland the same authority calculates "the length of shore-line, following the inlets of the sea, and including the islands, to be about 3500 miles;" and of India he states that "the entire coast-line is estimated at 3500 miles in length." With the foregoing data, it will not be beyond the mark to reckon the coast-line of England, with its useful indentations, at 2000 miles, and Scotland at about the same figure. But I will confine my remarks to England; because, (1.) although it affords the least striking results, on account of its comparatively large population, yet it will give the fairest contrast; and (2.) it is in England that the greatest amount of discussion has taken place on the subject of Indian famines.

The number of miles of open railway in England and Wales at the end of 1872 is given at 11,366; * we may now take it at 11,682 miles, or, say, in round numbers, double the length of that open in India. Our figures are:—

		Area, sq. m.	Population.
England,		58,311	22,712,266
India,		1,556,836	200,5 00,000
	27	times greater.	10 times the number.

Miles of railway.	Seaboard (miles).	
England, 11,682; 1 in 5 sq. m.	2000; 1 in 29 sq. m.	
India, 6000; 1 in 256,	3500; l in 445 ,,	
I.e., over 50 times the	I.e., 16 times the	
accommodation for traffic.	accommodation.	

That is, the population being ten times less than India, England has therefore 500 times the power, in this respect alone, and 160 times by sea, to accommodate the wants of her people, that India has. Or, in other words, England could distribute about 660 loaves to every individual of her population with the same ease that India could distribute only one. Nor must it be forgotten that these figures by no means represent the full power of distribution

^{*} See Statesman's Handbook for 1874.

at the disposal of England as compared with India. All the other difficulties which have been enumerated elsewhere have to be added; but their value cannot be reduced to such hard-and-fast terms as the foregoing estimate affords. It is useless to fix arbitrarily their importance, by saying that it would amount to double, or ten times, or a hundredfold, of the foregoing. All I ask is, that the facts of the numerous other difficulties be not lost sight of in this calculation.

We have now worked round to a new phase of famine aspects in attempting to compare the effects of dearth in England with those of dearth in India. England is already dependent on foreign countries to a very great extent for her food-supplies; that is, there is an insufficiency of grain in the country for the support of her population—in short, there is a famine yearly in Britain; and instead of its being the normal state of affairs that India should at times be subject to famine and that England should be exempt, we find that England is always in a chronic state of famine, and that famine is the exception in India. What, then, is

it that prevents us feeling this state of chronic famine? It is our experience in dealing with it. If by bad luck we have a downright bad harvest, or a succession of indifferent harvests, it matters comparatively little to us. The same machinery that provides for our wants in ordinary years has simply to provide a fraction more, and the thing is done. There is no scouring the world for food-markets to supply the want. All that is required is already known to the grain-merchants whose routine of business it is to be acquainted with every detail of this matter, and it costs but a few strokes of the pen to provide whatever is necessary. So it would be with India were she in a chronic state of want; and until this happens all such exceptional occurrences will cause disorganisation. If we could but imagine a state of affairs compelling England to import coal, instead of exporting it, we should gain a better idea of the disorganisation caused by India requiring to import food, than any other illustration can bring to our minds. It is true that India also has had experience, sad enough, in warding off famine; but it is also true that

she is the wiser for that experience. I have already given and referred to the details which I think will bear out this statement.

In famines, as in everything else, we require a basis to work upon-thereon we improve, and gradually we drop into the complex mechanism of the all but perfect machine. Stephenson made the first locomotive of practical use; he was a great engineer, his name will be handed down to posterity, and there will always be a kind of instinctive reverence attached to his name in the engineering profession. Yet compare his engine with the locomotive of to-day. It does not follow that because the several men who have improved his ideas were more able, or greater engineers than Stephenson. experience which has suggested all that is new and good: as a fault here is found out, it is corrected-or as a want there is felt, it is supplied. An appropriate commentary on this point in connection with famines is the fact that Sir G. Campbell has made a note in the Appendix to the Report on the Orissa famine, of the "change in the executive machinery of Bengal suggested by the experience of the famine."

The following chapter will discuss, in some detail, the many and various difficulties attached to the management of famines, and will deal with several points which have been brought to the public notice in the press. The whole of these, it will be found, are amenable to the guiding, improving, and corrective influences of experience. At present we have our comparatively new machine, and we have to find out all its faults and correct them, and to develop all its resources. We must be patient in this; "Rome was not built in a day." Experientia docet.

Public opinion nowadays is, as it were, a very sensitive barometer. Formerly, in cases of famine it was sluggish; a scarcity did not even effect a movement, while a famine produced a slow and only a slight elevation. Now, should there be a speck on the horizon, a few days without rain at the proper period, even although the rains have hitherto been favourable, a sudden and decided rise is registered, and famines and rumours of famine are the cry. And this sensitiveness has been carried to the extent that makes it desirable to receive such alarms

with caution, if it is not even found necessary to argue against the chances, in order that moral courage may be sustained and panic allayed.

Before proceeding further, it is essential to arrive at some understanding about the meaning of the word "famine." I despair of being able to give a definition which will be satisfactory to all. It is of no use to refer to Johnson's Dictionary in an instance of this kind. I can. however, at least give some of the meanings which have been applied to it. The Orissa Famine Commissioners say: "The Board of Revenue . . . appear, in fact, to desire to restrict the word to the case where there is not food to be had for money, as distinguished from suffering from dearness and want of means to buy. . . . We will use the word famine in its ordinary and popular acceptation of suffering from hunger on the part of large classes of the population." Mr Girdlestone in his report on past famines says: "It is difficult, of course, to draw the line and say when the direct effects of drought cease, or to decide what extent of distress merits the appellation of famine. . For to all intents and purposes, want, though

only felt over a limited area, is famine, provided the scarcity reaches starvation point." "starvation point" would be as difficult to define as "famine point." Sir J. Strachey (now Lieutenant-Governor of the North-West Province) writes in a note on famines: "Scarcity has not yet passed into absolute famine. . . . It is important that the distinction be rightly understood between a state of famine and a partial deficiency, which shows itself clearly in the increased prices of food. Famine means something more than this. It means that the supply of food existing in the country is, apart from the question of price, insufficient for the support of the people." This definition I propose to adopt hereafter. Heretofore it has been unnecessary to be so exact in the definition. In accepting this, however, it does not at all necessarily follow that a "scarcity" does not also require relief measures. But the laws of supply and demand will, in this latter case, to some extent provide against the want. The labourer is worthy of his hire, which implies the means of providing food and raiment; and as the cost of these rises, so will the price of labour. But no doubt the general employers of labour will not, because of the scarcity, be able to give the same amount of employment as they could, had the normal state of affairs prevailed. Hence, this class, or part of this class, will suffer. Nor will they be the sole sufferers: it is well known that when one trade becomes dull it tells in a hundred indirect ways on the prosperity of the country. It is of no use to follow out the different stages; treatises on political economy will describe the cycle of distress. It is sufficient for us to know that "scarcity," as just defined, necessitates measures of relief as much as "famine" does; but of course the different stages of distress require their appropriate degrees of relief.

Political economy has been incidentally mentioned. As a nation, we have lately devoted considerable attention to this subject. Perhaps the fact that new ideas are engrossing will account for this; but at all events we are apparently enamoured of the science, and press its recognition on every one, irrespective of all considerations and circumstances. Demand and supply, we now say, will regulate

all the commercial affairs of life; and political economy adds the corollary, that the interference of the State, by the importation of food or of any other article, tends to thwart and disturb the ordinary operations of the market, and thereby to introduce elements of disorganisation.

Now the question here suggests itself. Are we to obey these laws in India until they prove themselves true, while we look on numbers of human beings dying of starvation? or are we to prove these laws wrong by stepping in and supplementing them? Should we determine on the latter alternative, when shall we begin? We know well from experience that Indian grain-merchants do not sufficiently recognise their own interests in the cases of famine to import large enough supplies of food. It may be that these merchants have not the capital sufficient to cope with emergencies; or that the apathy incidental to a tropical climate prevents them taking that rapid and decided action which is necessary. When, then, should we commence to increase our supply? Beforehand? Or shall we let things take

their course for a time and see whether they will turn out as black as they look? Evidently common-sense is as much at sea as political economy. We may take any motto whatever, but its antithesis is sure to be as appropriate in this matter. One thing, however, is clearly our duty,—to adopt a policy and stick to it.

CHAPTER V.

ADMINISTRATIVE MANAGEMENT AND PRESS CRITICISM.

In the preceding chapter I have discussed some general criticisms on famine management; the present one I devote more especially to dealing with some of the criticisms of the press.

My readers may or may not be satisfied with the definitions of "scarcity" and of "famine;" but at all events, it being admitted that in both instances relief is necessary, we can at once proceed to discuss the methods which have been adopted as modes of mitigation. The Orissa Famine Commissioners observe that it is impossible to lay down any definite rules for guidance in framing these relief measures, because the cases generally are so widely different. "The main point," they remark, "is to decide in the

earliest stages whether there is or will be a famine-not to assert, when all is over, that sufficient means were not taken." We are really in a dilemma before any actual difficulty has It is this necessity for decided action before any stage of want has developed itself, that adds very considerably to, if it is not the chief of the difficulties experienced in the general administration of famines. An illustration of the perplexity experienced in deciding on the intensity even of a famine after it has developed itself, is afforded by the fact that some people say that the relief operations undertaken by Government for the present Bengal famine are far in excess of the requirements, and that the severity of the whole affair has been grossly exaggerated. They seem to look upon the relief measures as a gigantic farce, got up by Government as a means for the disposal of the vast stores of grain accumulated, which its paternal solicitude had suggested in haste, as being necessary to feed a supposititious perishing multitude

What, then, are the indications of an approaching scarcity? As already remarked, it

frequently happens that there is a deficiency of rainfall one year, which is succeeded by one or more similarly bad years, and these culminate in a season with a still scantier supply of the needful moisture. This, however, is not always the case; one year's decided failure of "the rains" is quite sufficient to cause the most disastrous effects. In the former case, with the warning of preceding bad years, people no doubt are on the alert; but there is always the hope against hope that some future fall will compensate for all deficiencies, and there is further a disturbing element in the prospect that the winter rains may be beneficial, and that therefore the spring harvest may effectively help to tide over impending distress. Our more sudden and therefore apparently more decidedly bad season, has often its elements of doubt as well. It should be remembered that these fertilising rains in India are of short duration, and are not distributed as in Britain, in driblets throughout the year. It follows, therefore, that the rainfall of a few days will make a vast difference in a crop; nay, in critical periods, the few days determine a year of scarcity or of plenty. Again, the rains

may hold off at the beginning of the season and excite great anxiety, notwithstanding that the future rainfall proves abundant: or they may have been favourable in the early part of the season and scanty thereafter; but having developed an abundance of straw, a deceptive appearance is the result, the truth of which is not known till the grain is actually thrashed. Another phase is, that the rains have been very partial; one district has flourishing crops, while its neighbour has nothing whatever to show: and this checkered result may extend over a whole province, and thus give rise to most varied and contradictory reports from the different officials. Against any of these instances of partial failures of rain, it would always be safe to provide for relief; but it is the extent that will be necessary which puzzles.

India, it must also be remembered, is a large country, and its soils and climates are various. The results that may be predicted in one province from a certain fall of rain, would falsify expectations in another. Rice, the product of a naturally damper climate, would pine with a rainfall which proves abundant for jowar,

bajra, and some other rain crops; while wheat, which may be termed the staple food of Northern India, is produced by the scanty rainfall during the winter months, although it is of course directly dependent on the moisture retained by the ground from the preceding rainy season.

A natural, but not an altogether reliable, test of the probability of a famine, is the price-current of food. The table * on the next page will illustrate this. As remarked by Mr Henvey, the " price-currents are not an absolute indication of the necessity of vigorous relief, nor do they afford a consistent ratio for the number requiring relief." It would be out of place to analyse in detail this table. It will be sufficient to remark, that the first date given in it corresponds to the close, or nearly so, of the autumn harvest. It was evident then, from the failure of the preceding rains, that there would be famine in the land, but at that actual date there was a sufficient supply of food for some time to come; yet a panic broke out. No one was aware of what would ultimately happen, and prices in

^{*} Extracted from Mr Henvey's Report.

TABLE OF PRICE-CURRENTS DURING 1868-69 AT

	LULLUTPORE.			Bijkour.		
Date.	Price of wheat; lb. per rupee	Number on relief- works.	Number in poor- houses.	Price of wheat; lb. per rupes	Number on relief- works.	Number in poor- houses,
Sept. 1868.	21	1,670	206			
Oct.	25	2,955	30 0			ļ ļ
Nov.	26	4,693	437			
Dec.	26	5,4 55	484	201	1,741	
Jan. 1869.	261	18,620	1,720	22}	2,464	
Feb.	251	20,273	3,653	24	2,787	1,829
March	261	8,176	4,471	24	18,697	6,229
April	281	18,612	4,842	285	14,089	4,264
May	261	12,123	4,293	301	10,697	1,521
June	217	5,295	5,378	311	3,414	1,468
July	17₹	1,474	4,873	251	3,957	1,750
Aug.	178	3,085	4,719	201	7,376	2,553
Sept.	185	1,021	2,721	201	6,530	2,184
Oct.				197	1,485	668

This table has been taken from Mr Henvey's Official Report on the 1868-69 famine. The two districts cited are several hundred miles apart, and show the state of affairs in two totally distinct localities.

^{*} Rupee = two shillings. The weights in the original table are of course in Indian measure.

consequence rose before other markets were aware of the want, and therefore before they could send relief by the export of their extra supplies. Again, when food was cheapest-i.e., after the spring crop in April—the numbers relieved were at a maximum. This was caused by the normal want of employment for the agricultural classes at this season; the previous harvest has been reaped, and until the rains return to moisten the ground, and render it fit to plough, there is little or no work for the agriculturist, hence the influx of labourers to relief-works. But the most striking feature in the table is the case which exactly reverses the foregoing one -viz., when food was dearest, in August and September, the number on the relief-works was a minimum! But it is accounted for as easily as in the last case. These same agriculturists have again got their normal employment, which is the cultivation of their fields and the reaping of the harvest.

The last two cases cited can barely be brought to bear on the immediate subject in hand viz., the difficulty of deciding at an early date whether a famine is impending or not—but they illustrate cases in which price-currents are not at all seasons indicative of the distress felt.

Dr Hunter's recent work on 'Famine Warnings' deals minutely with the subject of pricecurrents as indications of impending distress.

Having alluded to the difficulties that beset the question of determining whether a famine will exist or not, I now proceed to discuss the measures which will probably be adopted as modes of relief. Although we, or rather the Government, have assumed that a famine is impending, we must remember that the general population have not necessarily also come to the same conclusion. They are in ignorance of the true state of affairs—i.e., they have a very clear idea that the season has been a bad one, and they will no doubt have vague notions of probable or even of dire want-but they are not certain of the state of neighbouring provinces, and hence they have always a ray of hope. It is therefore desirable—as will be explained hereafter-that Government should not display at an early date the relief operations which it intends to undertake. This remark applies only to the Administrative as distinguished from the Executive Government. Although, as already remarked, the climate and soils, and the consequent periods of harvest, vary to a considerable extent in India, yet all are alike affected by the tropical rainfall. We may therefore, in considering a supposititious famine, presume that the alarm is given towards the end of the rainy season—say beginning of September, when it must be decided whether a dearth is probable or not. I do not, of course, pretend to say what the deliberations of the Viceroy and his Council are likely to be, but at this juncture they will decide whether importation should be undertaken or not; and an important part of their duty will be to keep the decision arrived at perfectly secret. as was so successfully done during the early part of the present famine. The exportation of food-grains will also be a subject of debate. This has been discussed freely in the public press, and it is a matter which no local influences tend to envelop in darkness; and therefore, doubtless, every one who will read these pages has already formed his opinion on the subject. My object, as may be gathered

in the Preface, is mainly to provide materials not usually within the reach of the general reader, whereon he can form his own judgment. This subject of exportation is therefore one which I will not discuss. I will merely say that common-sense seems to dictate that no restraint should be put upon it. If home prices are sufficient to keep it in the country, they will do so; the little that must go out by grain-merchants fulfilling their previously undertaken contracts would not affect the state of the country to any material extent. India is already-for a country so subject to fatal relapses of famine-diminishing too rapidly the area of land devoted to the produce of foodgrains to bear any other obstacles being thrown in to further discourage their cultivation.

We will assume that importation of food-supplies has been determined on. The next question for a Government to decide, is the amount of food which must be thus provided for the population of the affected districts. It is in the first place evident, that to take the whole population, multiply it by a given weight for its daily allowance, and provide at this rate for

a period of ten or twelve months, would be grossly absurd. This, no doubt, would afford a thoroughly sound foundation for our undertaking. It would be, as it were, that the whole area to be covered with our building was concreted over, sufficient to rest a solid mass upon. But this we do not contemplate: we want a structure with spaces, with rooms in it-i.e., a house wherein we can dwell; we do not desire a structure of solid masonry, which, besides being utterly useless, would inevitably land us in bankruptcy. Our architect must therefore design and estimate according to the data available. These data are: 1. a certain amount of the population will not require to be fed by Government importations; 2. there will be a certain amount of food in hoard throughout the country; 3. there will be a portion, it may be a small one, of the produce of harvest available; 4. a large proportion of the necessary food required will be imported by private speculation; 5. there is the uncertainty of the period during which the famine will last; 6. there is the uncertainty of the amount of food that should be taken as a basis for the daily

supply of each individual; and 7. contingencies for loss by accident, such as fire, damp, and other misfortunes attendant on the actions of fallible man.

No. 1. is dependent directly on emigration, which will vary according to the character of the people and the nature of the surrounding country. In the famine of 1860-61, 500,000 people are estimated, out of a population of 13,000,000, to have emigrated during the time when famine pressed most severely. A special reference to this feature of temporary emigration will be found at page 204, in the chapter on Preventive and Mitigative Measures.

No. 2. is an item by no means easy to determine accurately. A large proportion of the agricultural classes, both rich and poor, keep stocks of grain for their own private consumption; but this I do not refer to at present—I mean the practice of hoarding grain to apply more especially to the grain-merchants who, in their ordinary course of business, speculate in this way. The evidence given in the Orissa famine points to a strange leaning towards the idea of vast quantities of grain being thus kept in the

country; and it seems probable that this very idea prevented the necessary importation of grain being taken vigorously in hand by the Government. Nor should it be forgotten that the mistake would be almost as great if the opposite opinion was to be assumed without due inquiry. The following quotation, bearing on this subject, from a letter written by the Commissioner of Cuttack, and produced in the evidence before the Orissa Famine Commissioners, is instructive and rather amusing: "No one appears to allow, or to wish it known, that he possesses rice in any quantity. I was present at a meeting of the chief native landholders and merchants of Balasore, when liberal subscriptions were freely offered to the relief fund. The question then turned on where rice could be procured for the money subscribed. The result was, that each individual accused the rest of possessing stores of grain, the imputation being indignantly repudiated. After a long discussion, some began to offer to supply a certain quantity, say 100 maunds,* if a second person

^{*} Maund = 80 lb. See footnote, page 13, where the correct spelling of the word is adopted.

would supply 200 maunds: the latter retorted that he was willing to give 200 maunds if the first speaker would give 400 maunds, an amount he professed himself unable to supply." The "Bunniah"—i.e., the retail grain-dealer is always looked upon in such times with suspicion; in fact, at no time is he a very reliable person. He knows that in times of scarcity the character he bears is not of the best; and acting in the spirit of the proverb, he speedily dissipates all doubt. Certainly it is with the direct end of personal gain in view that he advances the prices on the least provocation; but this is not an altogether unmitigated evil, as will hereafter be more fully noticed. This grainmerchant is therefore not always entirely responsible for the whole of the obloquy laid at his door; but he has had to suffer for it, in defiance of all rules of political economy, as the following extract from an official document shows. The only excuse for this defiance is, that Adam Smith was unknown in those days. The extract is from a circular issued by the Bengal Committee of Revenue, in 1783, "to all chiefs and collectors." "We direct that you

do in the most public manner issue orders by beat of tom-tom* in all the bazaars and gunges+ in the districts under your charge, declaring that if any merchant shall conceal his grain. refuse to bring it to market and sell it at a reasonable price, he will not only be punished himself in the most exemplary manner, but his grain will be seized and distributed among the poor." The Orissa Famine Commissioners remark that the tendency to hoard grain is sometimes the "result of avarice and partly of ignorance and timidity. The action has been to withhold grain from the market until the stock in hand of retail-dealers was exhausted. and then to sell by driblets, so as to enhance not only the price but the trouble of procuring rice." "There is also a vague idea that next year may turn out an insufficient crop; and those who hold more than enough rice for their own use during the current year will hold the balance for next, in place of throwing it into the markets." No amount of care or precaution can overcome these scruples, except vigorous action by Government or by some other powerful body in making large importations, as has been done in the present famine.

No. 3. The amount of food obtainable from a harvest during a very bad season is a matter almost entirely for local and contemporary judges to make on the spot. In India there are few uplands and lowlands where a wet or a dry season would respectively produce an average or an unusually good crop, and more especially is this the case with rice crops, for which the fields must be deluged. However, even in India there are a few districts which are capable, within certain limits, of taking advantage of the variability of the seasons; and although in these exceptions the full amount of moisture required is not supplied, yet it is supplemented to a considerable extent by the natural position of the class of district under notice. If we have no uplands in India, we have lowlands along the courses of the large rivers, and we have marshes which, under a tropical sun, without a due supply of water from the usual source, are soon dried up. From high-water mark to highwater mark on each bank of the large rivers is known as "khadir" land, and the extent of

this is very considerable, varying from a quarter to three-quarters of a mile in width. At all times it is of value: in ordinary years it affords grazing-land; during years of drought, from its comparatively low level, it is near to the spring level of the river, and consequently is within reach of a small amount of moisture. These two natural exceptions are cited by Col. B. Smith, in the famine of 1860-61, as having been of very great benefit. He writes: "The richly irrigated district of Paneput and the northern subdivision of the Delhi district. have virtually escaped injury, by reason, firstly, of their being traversed by the Western Jumna Canal; next, of the continued drought having relieved them from the broad areas of swamp by which they are ordinarily infested, and having turned these useless lands into productive fields; and last, of the low valley lands bordering the Jumna having been so dried up as to become culturable, and to give abundant produce, and guaranteed wealth and abundance." Col. B. Smith also gives the following table, which relates to the subject in hand:-

Per of to	rcentage tal area.
1, .	24. 0
on,	

1. A	rea protect	ed by m	eans of well-irrigation, .	24. 0
2.	,,	,,	Jheels * submersion,	
			natural moisture, &c.	2. 0
3.	,,	**	Eastern Jumna Canal,	4.47
4.	"	13	Gauges Canal on com-	
			pletion,	24.0
			Total, .	. 54.47

Wells, although they cannot be called a natural means of alleviating the effects of drought, yet in some districts are so easily constructed, that they need not be looked upon altogether as an artificial means of irrigation. The very large percentage of area protected by them will be noticed in the last chapter as a preventive measure.

No. 4. Our next element of doubt is the proportion of food importation which will be undertaken by private means. The saying that there is no Act of Parliament through which a coachand-four could not be driven, is almost as applicable to any dictum of political economy. Mr J. S. Mill, whom I need hardly say I quote

^{*} Marshes, &c., as above.

with respect, writes on the subject of food importation by the State: "Direct measures at the cost of the State to procure food from a distance are expedient when, from peculiar reasons, the thing is not likely to be done by private speculation. In any other case they are a great error. Private speculators will not, in such cases, venture to compete with the Government; and though a Government can do more than any one merchant, it cannot do nearly so much as all merchants."

First, the element of doubt is not eliminated; the action is allowed to be expedient under certain circumstances: the query is, who is to judge when and where these circumstances exist? Secondly, even when the time has arrived for Government to interfere, if this dictum be true, great mortality must ensue; because it assumes that Government alone cannot complement the ordinary market arrangements by its supplements, if the phrase may be allowed. But, thirdly, I cannot see why private traders should not, to the extent of their means, vie with Government in importing. In such a case, a Government never enters the market with the

object of underselling the grain-dealer, nor of making a profit by the transaction. Again, the very fact that Government can bring and is bringing, grain into the market, only proves that the object is practicable, and it will act as an example. I am of opinion that the action taken by Government in this respect during the early part of the present famine, will act as a strong stimulus to the trading population in the matter of importation, and that it will be of untold benefit in future dearths. The fact is, that it appears already to have had a good effect, because the private importations now being made are very large, much beyond all expectation. The decided action taken by the Government in this instance, had the dictum of political economy just quoted been true, should have negatived all this. We have another instance of a similar effect being produced by the action taken in a native state by importing grain. The following quotation is from the report of the Political Agent at Tonk, a Mussulman state in Rajputana, and refers to the famine of 1868-69. The case, so far as records go, is unique; but it does not on that account detract from my argument. "It had at

first been determined to purchase more than double the quantity; but it was found that merchants, so far from being discouraged by the State importing, accepted it as a guarantee that the importing grain was not likely to be attended with loss, and had redoubled their own exertions, rendering it practicable and desirable for the State to withdraw from further action."

No. 5. The uncertainty that exists concerning the probable duration of the famine, has been indirectly noticed when discussing the uncertainties that surround a previous question -viz., whether there is a famine impending or not. "The rains" are the grand fertilisers of India; and if these fail entirely, then, as a rule, provision may at once be made for ten or eleven months-i.e., until the first of the succeeding rainy-season crops are ready. But this again brings us face to face with the fact, that it is just possible that this succeeding rainy season may also fail to bring its proper amount of moisture, in which case the calculations for the requirements of the population would be a very easy matter indeed; there would be no uncertainty then. It is therefore necessary to

provide for a month at least beyond the time when plenty may be expected to have returned to the land. But should the rains have only been a partial failure, then the doubtful elements increase. There is the possibility of a favourable spring harvest to compensate for previous losses; and until this time has passed the period of scarcity cannot be calculated. In fact, generally speaking, the question would be determined to a great extent by circumstances.

Nos. 6 and 7 are matters which need not be discussed here; but they are disturbing influences in the calculations which should not be lost sight of.

Before leaving the subject of administrative management to notice press criticisms, there are three topics which it will be more appropriate to express an opinion upon here than elsewhere. On the first of these topics, I feel that a preface is necessary, or it may be that even an apology is required for the tone of the queries, as they were made in perhaps not an altogether judicial frame of mind. The questions were suggested by the reading of some articles in the papers on the

expenditure of this famine, and were then written on the spur of the moment. They would perhaps carry more respect were they softened down, and put in somewhat different language; but they were the honest outburst of the moment, and as such I have allowed them to stand, and ask my readers' indulgence for them. In making the following remarks, I do not wish to ignore the fact that India is dependent on England, and the consequence that the latter country has every right to control the government of her Eastern possession.

It appears to me, that on the subject of the present famine the home press generally has assumed the tone of those who are spending their neighbours' goods—of arrogating the control of property which did not belong to them, apportioning this to that, and dividing the spoils generally. It is desirable to consider the relation in which England stands to India and its Government, as regards revenue affairs. What right has England and her press to interfere with India in this matter? In what way does England contribute to her support more than she contributes to, say, that of

France? India pays for all the soldiers lent to her: in fact, as represented in one quarter, she acts as a screen to the world generally to hide the large armed force that England has at her command. India affords a main outlet to the youth of England, and supports those who accept this task of governing her; she pays all her loans-nay, she even pays for an occasional ball to a Sultan, for the honour and glory of the English nation; she lends troops, and pays them for such affairs as Abyssinian wars; in fact, she pays her way all through, and England does not contribute one direct penny to her support. England, it is said, holds India from a purely philanthropic point of view, and I may therefore, then, be asked, why should England contribute to the funds of India? I will not answer this fully, but will merely put the question, Supposing America and Russia to combine and respectively to attack Canada and India, where would England concentrate her forces? The hypothesis may be somewhat problematical, but it is sufficiently near the mark to justify the query. Or, since Russia is considered a desirable neighbour in Central Asia as a philanthropic agent, why do we make such a fuss about the probability of Russia desiring to obtain India? Why, when both countries have such worthy and identical objects in view, should we not at once offer India to Russia? But to return to the question, why, when England contributes nothing to the Exchequer of her dependency, should she dictate to her? Is she prepared to undertake all the vast schemes of irrigation, regardless of Indian experience, which her press proposes? Will she supply the physical and financial means in the next famine necessary to prevent all deaths whatsoever? It has actually been proposed that the Governor-General should be impeached if a famine death occurred! I do not say that any reasonable man would ever dream of such a thing, and the proposal should therefore be allowed to rest in oblivion; it may seem consequently inconsistent to disturb its repose. But there are unreasonable beings in this world; such a proposal may crop up again: it would therefore be as well to point out, that on the same principle there is no reason why the general who, in our next little war, loses

one man, should not be impeached for—well, I hardly know what; but the one proceeding would be as reasonable as the other. In somewhat the same category must be placed the comment of a special correspondent, who stated the opinion that one famine corpse was sufficient to prove the failure of Government relief schemes. No doubt he would now retract this, and he should be allowed to do so; but one of my objects in writing these pages is to point out mistakes that people who are not well posted up in the subject are apt to fall into.

I have asked some questions, and founded on the assumed replies the doctrine that England has not the title to interfere, in the manner which she has been accustomed to do lately, with the financial aspects of the foregoing subject. It is necessary to put this side of the case as strongly as possible; but, at the same time, I do not wish it to be understood that I consider England is not responsible for India. Britain is answerable for her Eastern possession; and therefore it is her right, as well as duty, to exercise a due control over all the departments of her dependent Government. I consider that

England's duty is to make and uphold a model government in India, but only to such an extent as the resources of the latter country will allow, unless these resources are supplemented by England, which case we are not contemplating. My argument may perhaps be illustrated by considering the subject of railway accidents at home. Railway accidents can be entirely prevented (1) by abolishing railways, or (2) by imposing such working conditions as practically to render all railways bankrupt stock. Now, is the public prepared to adopt either of these alternatives? Similarly with Indian famines. It is only another phase of the old question, Is the majority to suffer to prevent loss to the minority?

I view the existing relation between England and India in the light of a trusteeship. I cannot think that a guardian would be held worthy of his trust who insisted that his youthful charge should adopt on his estate every theoretical means ever advocated by amateur or expert for the prevention of, say, the potato disease, and threatening condign punishment should the result prove that one tuber was lost! In the

first place, I am not at all certain that the trustee could insist on any such proceeding; but assuming that he could, he would, at all events be morally responsible for providing against the necessity of the Bankruptcy Act being put in requisition. It would be quite a different affair, however, were the trustee to say, "Now, my lad, I have a mind to try some experiments in draining, &c., and I know that you are doing your best to practise scientific agriculture; so I wish to assist you the next time you have potatoes in that field, by taking the opportunity to test some of my theories!"

I now proceed with the second topic. It appears to be a general presumption that India is regardless of her "useless gear," and looks upon death in famine as inevitable. It is rather hard that fellow-countrymen in India should be denounced as such cold-blooded individuals. The same blood runs in their brothers and sisters at home. How, then, is it that this change for the worse comes over them? or is it the case? It is a sign of the times—and a sign which I do not think is all portent of good—that the newspapers are so large; bulk is the

main idea of most, and so the cry comes for "padding." It is for this reason, and no other, that such unnecessary detail and irrelevant subjects are published. Omitting advertisements, let any one compare the time required to study the readable matter in most of our daily papers with the amount of type exhibited. May we not, therefore, partly ascribe the assertion that Englishmen in India are cold-blooded, to this demand for padding?—to this necessity of filling up the usual number of square feet of print?-and that therefore this accusation will assist this end, besides having a spice of sensation in it to attract more attention. I have said "partly," for no doubt some honest public opinion holds the views just stated; and no doubt it is to this opinion that the majority of the improvements in the management of famines is due. But it should also be remembered that public opinion is expressed and criticised in a more healthy form in the less frequently published reviews, &c., than in the daily press.

It is not my province to show how public opinion develops itself; to show how and why it is that during particular stages of civilisation, opinions on such subjects as the saving of life from distress, from disease, from famine, from railway accidents, &c., should vary as they do. It may be that it is a particular and necessary phase of advancing civilisation, as, no doubt, most people will at once reply; it may be so-I do not argue the point, I merely state a fact. In the case of famines, public opinion has developed itself in geometrical progression, -i.e,, always making due allowance for the first term being nil; for during the famine of 1770 ten million people died; and not only did this startling mortality prove insufficient to excite attention, but the fact that the number bore the unparalleled proportion of one-third of the entire population, did not evince a word of public opinion or of censure. True, there are many influences at work at the present day that did not exist then; the means of obtaining and circulating rapidly information were not the same formerly as at present. But we must suppose that human nature was much the same then as it is in our own day-the same blood which runs in our veins was circulating in those of our ancestors. Yet compare the fact of 10,000,000

deaths and no censure, with this one death which is to consign to obloquy a whole Government! The statement that the public were or are not aware of any such enormous mortality cannot be admitted. The press, if it was convinced that deaths represent culpability, should have preached about it till every child was familiar with the fact, and could point to it with the finger of scorn. My argument is, that humanity was as sensitive a century ago as it is to-day, but the men of that day did not live in that constant state of excitement which is characteristic of the present age; they did not consider it necessary to travel at the rate of 60 miles an hour, but were content with one-tenth of that speed; they liked to hear what their neighbours were doing, but they were satisfied to know the results when time had somewhat mellowed. softened, and corrected reports. It was not necessary to their existence that the conversations between so-and-so should be supposed to be known and reported in detail within a few hours of the occurrence. Nor was it necessary that every suicide, theft, or murder case, should be discussed throughout the length and breadth of the land within twelve hours of the deed. In the same way, British humanity is as active in India to-day as it is at home; but it does not require to be worked up in a sensational light. There are, I confess, influences at work which seem to imply a slackness of sympathy with the "useless gear," but the true significance of these will soon be seen by any discriminating person on the spot; and I hope that the many difficulties which are encountered in the executive management of a famine, and which will be to some extent detailed in the next chapter, will help to dispel this idea of remissness on the part of Anglo-Indians. I may mention that my argument does not include the doctrine that nothing is to be gained from home criticism. On the contrary, I must confess myself to be a firm believer in Burns's lines-

> "Oh wad some Power the giftie gie us, To see oursels as ithers see us!"

and I may add that I consider them as appropriate to myself and to this subject as elsewhere.

There is still the third general subject, to which I will here refer but briefly, as it was before noticed in Chapter III. It has been frequently asserted that many more starvation deaths occur than are officially reported. One correspondent wrote that a death may be attributed to dysentery, fever, &c., but that when want of food brought on the disease, it was nevertheless a starvation death. True, but it would first be necessary to prove that Government refused the man food, or did not exert itself to find out starving people. There are very many such deaths which would have been prevented had the sufferers only been at the trouble to make their cases known. In attempting to mitigate the effects of famine, as described in the next chapter, many instances of perverse action will be met with, but for which much suffering and anxiety would have been avoided.

Before proceeding to discuss in detail the statements and reports of newspapers, I wish to preface my remarks upon them by saying that I have no intention whatever of being personal. Nevertheless, from the very nature of the case, cannot avoid noticing individual statements,

and they may thus appear as an argumentum ad hominem. One of the main objects of these pages being, however, to point out published errors whereby public opinion is misled, it is impossible to escape this; and as these misguiding remarks are almost always likely to occur, they should therefore be the more pointedly noticed, so that greater caution may be observed in future, and also to show that other people are liable to errors of judgment as well as Governments.

The first press criticism to which I will draw attention is a telegram that the 'Daily News' correspondent sent on the 27th February, and some articles in connection with it. It is evident, from the summing up of the evidence on this matter by the 'Daily News' itself (see 3d April 1874), that it is perfectly satisfied with its correspondent on this point. The following, from the telegram, is the passage to which I particularly take exception: "I visited the Durbungah road relief-works to-day. Fifteen thousand persons are employed on the semi-starvation wages of three-halfpence daily. They are neglected, defrauded, and irregularly

paid." This elicited a telegram from the Secretary of State for India to the Viceroy, asking him to telegraph whether this is true. The reply informed the Secretary of State that rice was selling at from 22 to 24 lb. per rupee, affording for 11 anna 21 lb., and that other food-grains most commonly used by the labourer were selling at from 24 to 26 lb. per rupee; and that usually the whole family was at work. The correspondent, on seeing the Secretary of State's telegram, and reply thereto by the Viceroy, telegraphed: "I have to observe that the men's wages being one and a half anna, the women's one anna, and the children's half an anna, the average wage carefully worked out by myself was three-halfpence per head, affording a daily ration of a pound and a half of rice, with no allowance for salt, dall, and other life-sustaining condiments." The full telegrams, &c., will be found in the Appendix. The concluding sentence of the summing up of the article in the 'Daily News' on this subject is: "The public will also note with satisfaction the carefully prepared basis of personal observation, inquiry,

and calculation on which the short statements in our commissioner's telegrams are founded." With regard to this, and to the portion of the telegram which I criticise, either (1) there were 5000 men, 5000 women, and 5000 children (and this idea is favoured by the 'Daily News' adopting the unit family to consist of father, mother, and one child), in which case I fail to see wherein the pains bestowed by the correspondent on his "average wage carefully worked out by myself" consist; and moreover, if such are the correct figures of the relieved people, what becomes of prolific Bengal with one child only in each family? How does the population increase, and what becomes of that bugbear of famine relief-works, the multitude of children? Or (2) the average wage was not correctly, however "carefully" it may have been, worked out-unless, indeed, we have some still further abnormal distribution of numbers

I cannot pass by this telegram without saying that I consider it sensational. To tell the public in England that people were on wages of three-halfpence a-day, without any further explanation, scarcely required the words "semi-starvation" to be added. the abuses found out were not subjects for a telegram, unless, after representation, they were persisted in. The very fact of the correspondent's having telegraphed them, more than anything else shows the spirit in which he approached the subject at that period. I say at that period; because, on the whole, I consider that this correspondent's criticisms were honest, and when he came to understand something of the difficulties besetting famine operations he made due allowance. As illustrative of this fact, besides corroborating the foregoing remarks, I make the following extracts from a letter of this correspondent, dated 8th April: "It is true that it cannot be said they" (the work-people) " are very highly paid. The tariff of the Seerah circle I found to be one anna a-day for a man with a hoe, five-sixths of an anna for a man or woman with a basket; for a person without a basket two-thirds, and for a child half an anna. At first sight these would seem 'semi-starvation' wages, when it is mentioned that the price of rice in the bazaars has for some time been

dearer than 20 lb.* for the rupee; + but the counter-fact stands, that among the labourers there are no symptoms of suffering, but that, on the contrary, their condition is quite as good as in years of plenty. If further proof were wanting that this pittance suffices, abundance is forthcoming. Mr Oldham, who is in charge of the Moteeharee subdivision, set himself to introduce task-work, introducing an advanced wage of an anna and a half. On this anna and a half rate being started, the people refused to work, saying that they preferred the anna rate without the measurement. On another reliefwork the attempt to introduce task-work resulted in a general resolute strike on the part of the coolies; and on yet another at Katenwa, which was thought to be very badly off, when very light task-work was introduced, the number of labourers fell in one day from over 1300 to 600. . . . The wages seem very low, but it must not be forgotten that every member of a family, down to the brat who can scarcely toddle, is drawing-I will not say earning-

^{* 10} seers in the original, which = 20 lb.

[†] Rupee = 2 shillings.

wages, and the collective amount realised is sufficient to feed every member, not indeed on rice, but on some cheaper food-grains that are offering in the market." These extracts, taken with the criticism already made on the telegram, require no further commentary.

I again join issue with the "carefully prepared basis of personal observation" on which the correspondent rests another of his statements. We have in one letter, of the date of which I have no note, a poetical sketch of the once busy Indian village of quaint picturesqueness, now idle; the tendrils of parched creepers clinging to walls and roofs, which, but for the drought, should have "smothered the humble homes in flowering brightness!" In a succeeding letter we have now the actual village described: "The reader must by no means imagine that a village in India bears any resemblance to English villages, with which we are so familiar. Here there are no pretty porches or latticed windows, with flowering creepers clustering thick about them. An Indian village consists of a casual cluster of hovels, some made of mud, some only of straw, walled with bamboo-splits. There is no furniture in any of the huts, the mud floor is the common bed, and the cooking is done outside. Somewhere about the village is the common tank, which serves at once as a reservoir of water, a bathing-place, and a cesspool." But I suppose special correspondents, like poets, are allowed to indulge their fancy.

I cannot in these pages point out all the inconsistent and hasty assertions made by the press on the subject of the present famine. I have confined my remarks to the letters, &c., of one paper. In doing so, I do not wish it to be understood that I consider the remarks there made the most calling for criticism. If anything, it is rather from the opposite point of view that I have thus limited myself. The few further remarks which I will make, with reference to the same source, are made in the hope that greater care in future will be bestowed in making assertions on abstract subjects. What grounds, for instance, had the correspondent for his lament over the want of harmony between the Government of Bengal and the supreme Government? of the assertion that Lord Northbrooke invested three millions for the relief of Bengal without the knowledge of Sir G. Campbell? or of his conviction that both the Viceregal administration and Sir R. Temple had superseded the local Government in the management of the famine? And would the correspondent now be inclined to modify the following opinion expressed in an early letter? "I can imagine nothing more humiliating to a Government, that has known for so long of the impending famine, than this frank confession that it has been taken unawares thus late in regard to such rudimentary preparations as the construction and improvement of roads. They" (the indigo planters) "make new roads where needed, repair the old ones, construct bridges, and maintain a European establishment." And again, his sarcastic "wonder why Government did not at the outset advertise their willingness to accept tenders for averting the famine," would now no doubt receive qualification. The poor Public Works Department was represented to and by him as having no one to say a word in its favour; in fact, that it was everything and in every way bad. But what does he now say to its having surveyed, constructed, and stocked a line of railway, some 45 miles long, within three months of its first proposal!

It is but fair, both for the object of these pages as well as to the correspondent himself, that retractions made should be recognised. After noting several of the beliefs with which he entered the famine campaign, he says: "I wrote then honestly, according to my lights, and according to my eager hopes; I must write now, with equal honesty, a retraction of what I then wrote. The belief has been crushed into me by facts, that no organisation which any Government could be expected to make could avert considerable mortality in the time of acute famine from a people with such characteristics as those in whose midst I now am. Talk of relief circles and sub-circles! - an officer in every village would hardly avail to prevent deaths by starvation. . . . What can you do with people who will sit still and starve in their hovels, when a grain-store is open at the other end of their village?"

This admission, of an enemy, as it were, is exoneration indeed. Had an Anglo-Indian so written, it would have but merely added proof to the assertion that they are heedless of the "useless gear."

This correspondent has been unfavourably attacked by critics elsewhere; and in his letter of 20th April, he partly replies to them. Notwithstanding the exceptions he there takes to the criticism, I cannot altogether acquit him from the charge of sensational writing. The very illustrations which he in this letter adduces in proof of what he might have done, seems to me but to make things worse. And his last sentence tends to confirm the opinion before alluded to—viz., that a considerable amount of padding is required for our daily press.

I will conclude this subject of press criticism on the administrative management of the present famine by quoting from—and recommending to all—an article in the 'Pall Mall,' 28th March 1874: "But it would have been as unfair and as disastrous for the English newspapers to dictate, under severe threats, to Sir Garnet Wolseley as to the operations required for his campaign, as it is to menace the Indian officials on points of detail connected

with the famine. By all means let England demand the strictest account of the action of those officials, and of the reasons which guided it. No officer can shirk the terrible responsibility which attaches to such a crisis. But the pressure placed by the English press on officers to act, not according to local evidence, but according to the importunate demands of English sentiment, is now reaching almost to an uncontrollable point. It will be a fatal day for British rule in India when the Civil Service first learns to bow its head before the outburst of distant public opinion, and receives its first lesson in acting, not according to actual facts, but to suit the exigencies of panic. The present calamity is sufficiently real, and the responsibility sufficiently solemn, without any such appeals to a personal and ignoble desire to be on the safe side, at whatever cost to the country."

As I have already written, I cannot, in these pages, analyse all the criticism made on the management of the present famine; and there is, therefore, much left unnoticed.

CHAPTER VI.

EXECUTIVE MANAGEMENT.

I PROPOSE in this chapter to deal with the executive management of relief-works, &c. There are necessarily many details connected with this subject which cannot be discussed here: local circumstances will rule very many of these, and features peculiar to the individual case will guide the action in other directions. I will therefore divide the subject into three main heads, and treat only the minutiæ which may incidentally turn up in discussing these.

The three heads are: 1st, saving of life; 2d, economy of control; and 3d, the prevention of demoralisation. These three topics are so intimately connected with each other, that it is difficult to examine each separately. With the exception of merely saying that the first

head will be the primary object of solicitude to a Government, and that the others are subordinate thereto, it will be sufficient to detail the points connected with No. 2, as all questions relating to Nos. 1 and 3 will naturally present themselves for discussion in the examination of the other point.

I have before drawn attention to the difficulty which accompanies the determining when there is actually a famine or scarcity impending and when there is not. This necessarily affects the present subject; but beyond saying that economy will be in direct proportion to the early organisation of relief-works where it has been proved that they will be required, it will be unnecessary to dwell.

The economy of relief-works will be indirectly affected by their utility, and directly by the method adopted in carrying them out. Again, their utility will be in proportion to the area over which it is intended that they should be undertaken, and this further depends on the amount of forethought and premeditation that has been brought to bear on the subject. If the area is large, and especially if it is of a varied

physical character, it is probable that the works undertaken will be of service hereafter. "Large" is rather vague, and depends more on the relative sense in which it is used than on the absolute meaning which can be extracted from it. The area affected by the present famine is "large," no doubt, but the meaning I wish to convey will be gathered as we proceed.

It is of no use to enumerate the different kinds of relief-works which may be inaugurated—they will necessarily much depend on local features; but a canal, a railway, a road, irrigation-tanks, and so forth, will be available as a basis of operations in large areas, while in smaller areas these cannot be undertaken-in fact, it is evident that they cannot be made at every man's door for his especial benefit, in order that he may be saved the trouble of trudging a few miles daily, or of temporarily leaving his home. I cannot help expressing the opinion that if famine attack the land, it is absurd to think that the people should not be put to some inconvenience; but it would even appear in this famine, that some people have found their lines fallen in pleasanter places than a year of plenty ever

vouchsafed to them. This, as it seems to me, perverted sentiment of sacrificing utility to comfort of labour, has been the cause of very considerable waste in all previous famine relief-works; and, as far as one can judge, this will especially prove the case in the present one. As already noticed, the area affected by the present Bengal famine is large, and it therefore fulfils one of the conditions given for utilising labour; but this large area has been forcibly divided into smaller areas. It has been cut up piecemeal, and the work distributed in patches. It is not my object to criticise the Government in the details of this policy; in fact, I have not the necessary local knowledge to enable me to do so: but judging by the ideas previously formed on the subject, I would have thought it better policy to have drafted off all, or at any rate a large proportion, of the able-bodied population and their children to some large works, than to attempt to provide work at every village, as it appears has been the main object in the present famine. I had some personal experience in 1869 of the ease with which this

could be managed in a small way, and it convinced me that it was quite possible to carry out the principle on a larger scale.

Extensive works, such as reproductive railways, roads, and canals, require special and long consideration. It is not enough to say, "there is famine in the land, and there is a canal wanted between two points; therefore let us make this canal!" To be of any permanent benefit, such projects must be undertaken with deliberation. Appropriate works are not always practicable in the afflicted districts, and therefore it is quite possible that it might be found necessary to transport (using the word in a mild sense) a considerable portion of the population to some distant tract. This, however, may provoke the question, What is to become of the old, the infirm, &c., and of the men who must necessarily remain behind to cultivate the land when happier times return? The reply is, employ these on reliefworks at home, much in the same way as is at present being done in the Bengal famine; but let this be considered the abnormal and not the

normal means of protecting a famine-stricken population. There is no doubt that the agricultural classes in many parts of India are in excess of the number required for the cultivated area, so that there need be no anxiety caused re specting the amount of cultivation in the district whence the men were drafted.

So much for the indirect means which affect the economy of relief-works. The direct measures which promote economy are many, but they are matters of detail, the right organisation of which will depend mainly on local circumstances. It will be enough to enumerate some of them, with a few passing remarks thereon.

Of the various methods of employing labour on relief-works, payment may be made according to,—1st, daily labour; 2d, task-work; and 3d, contract. And again, the actual wages may be given in money or in grain; and the latter may either be cooked or raw. The choice thus afforded is a fruitful element of discussion: there may easily be as many different opinions as changes can be rung on the number of terms. In daily labour, demoralisation is the bugbear. It may be said to be only one step, although no

doubt a considerable step, above charity; it can never be an economical means of affording relief. This latter remark, however, is more or less applicable to all the methods, and therefore it cannot be pressed. Task-work has to steer between a Scylla and Charybdis. We have, on the one hand, a multitudinous throng, chiefly composed of the "useless gear" and other inefficients, on navvy work; while, on the other hand, we have a body of stalwart men, skilled in the very labour on which they are employed. The problem is how to get a fair day's work out of this heterogeneous mass. The useless gear, in such instances, is primarily composed of that which is the normal state of affairs-viz., the excess of women and children over adult males: the inefficients are adult males, such as weavers, tailors, masons, &c. &c., unaccustomed to the work. What would be a severe task in one instance would be a light one in another: if piece-work is introduced, a fabulous wage may be earned by the skilled labourer; while the excess of women and children, who act as carriers to the diggers, will in all cases still further increase the cost.

In the contract system, there is room for some discussion; but, as a rule, the arguments in its favour are antagonistic to the main object of the Government—viz., to save life. As a matter of course, a contractor will only employ those who are able to give an adequate return for his money, and therefore the weak and infirm will suffer, or go to the poorhouse. A system of subsidised contracts was tried, but this will always prove a failure in India among natives.

Between daily labour and contract work there is one intermediate step, which, if it could be introduced throughout the whole body of work-people, would go far to promote economy—viz., a system of petty contracts. Families and neighbours will combine, and the spirit of thrift will exercise in some instances not only a profitable but an emulating influence. The system, however, is not applicable throughout; but it should be encouraged in all cases.

On this subject of employment on reliefworks, the Orissa Famine Commissioners write: "If special relief-works are commenced too early, the ordinary labour-market is disturbed without necessity; if too late, this most legitimate of all modes of relief becomes, as we have said, nearly useless. If daily pay be too freely given, the people of all countries, when employed for charity, will struggle to do next to nothing. If task-work is rigidly enforced, without the means of making it practicable to all, the object of relief may be defeated. If taskrates are too hard, they are injurious; if easy in the extreme, it is probably impossible to vary such rates according to the capacity of individuals, and the stronger labourers are enabled to earn far too easy gains, from which it is difficult to wean them. We cannot say that any one system should be followed under all circumstances. Everything must depend on individual skill and discretion."

As to a money or grain wage. What may be suitable in one locality may not be the most advantageous method in another. In the same place, what is expedient at one time may prove inexpedient at another. Very much, in this respect, will always be left to local discretion. There are some circumstances which will indicate one mode of procedure, while other features

will dictate a different one. In one place firewood may be the principal difficulty, and the necessity may arise of providing either fuel or cooked food, to prevent the devouring of raw grain and its fatal consequences. There is a general dislike to receiving cooked food, but this only arises from caste prejudices. As a rule, daily labourers are of the lowest class, and not over-punctilious: but the option of cooked or uncooked food is a good test of the severity of a strain; and according to its ready acceptance or otherwise, action may be determined. The fact that the food thus offered is always cooked by high-caste Brahmins for the Hindoos should of course overcome all religious scruples, but in reality it has not this effect.*

The question of the amount of wage may here be appropriately noticed. This of course only applies to special relief-works; in other instances, where the work has not been organised for this purpose, it may be presumed that the labourer is worthy of his hire, and that

[•] See page 200 for further particulars concerning this subject.

demand and supply will regulate this. As before, we have in view the main object of saving life. Either a proper daily allowance of food must be granted, or its equivalent in money: and hence, unless active outside measures are adopted to provide the district with grain, this money-wage will rise much higher than in ordinary times, notwithstanding that labour is a drug in the market. Colonel B. Smith advocates the payment of liberal wages, as it frequently becomes the "cheaper policy, shortening the time during which it is necessary to continue relief." His argument is that a low wage tends "to keep the recipient of charity in a weak and emaciated state, and to preclude the possibility of his making any attempt to save, only prolonging the period over which relief has to extend: whereas a more liberal rate enables the recipient to gain in strength, to purchase clothing, and, it may be, to lay by a few 'pice* with which to start again in life. When they have achieved this much experience, they

^{*} Anglo-Indian expression, equivalent to our "a few pence," although pence and pice have very different intrinsic values.

will, as shown in the greater number of cases, return to their former homes, if there is a possibility of their obtaining some more congenial employment."

The 'Daily News' correspondent introduced the case of the necessity of supplying nitrogenous as well as carbonaceous foods. As far as I am aware, this has always hitherto been attended to. It righted itself in the present famine, and requires no further notice.

I will bring this chapter to a close by adding a few remarks on State relief and charity. The distribution of cooked or of raw food has already been noticed under the head of wages; but it forms one of the principal modes of the disbursement of charity. One of the many difficulties attendant on Indian famines is the necessity of finding out who are actually in distress. It seems strange, but it is a fact, that only the direst stress will bring out some of the poorest sufferers; and even this extremity is sometimes not sufficient to reveal the hidden misery. It is these different degrees of suffering that have to be treated in all the varying stages. The first pinch of hunger will

find out the lower classes; and these will accept relief in any shape which is not patently and peculiarly obnoxious. Food, cooked or uncooked, is acceptable to these people; but it is only when the pinch is very severe that it will bring out the majority of the better classes; till then they will refrain from resorting to the poorhouses for relief, or to the works for employment. And it is only after a house-to-house visitation-undertaken with many scruples and misgivings-that the suffering higher classes are found out. To effect this, it is generally found expedient to form a committee of the influential men of a town, or to employ the head-men of the villages, whose duty it will be to work in co-operation with Government officials. In this way only can the condition of the "purdah-nusheen" women be found out and relief administered. It is, of course, difficult to comprehend such a state of society in England, where we sometimes understand our neighbours' affairs better than our own: but in the East it is the custom of the Muhammadan population to refrain from making the slightest allusion, in any respect, to one's wife; even her

health itself is a subject upon which there is a prohibition of inquiry.

It seems now to be an understood arrangement that the funds for all pure charity should come from the public, as many wants are thus more "tenderly" relieved than they would be through the necessary hard-and-fast lines of Government agency. This generally means, that besides relief from actual starvation, other help is given — clothes are distributed, and many other necessaries that could not otherwise be recognised.

CHAPTER VII.

PREVENTIVE AND MITIGATIVE MEASURES.

I MAY state my opinion at the outset, that famines will recur in India for ever unless some vast climatological change occurs, a prospect which we have no business to speculate upon. There are various possible methods of mitigating and alleviating such disasters, but to prevent them in toto is, I think, altogether beyond our control. We have adopted many means to ameliorate the dire effects of these calamities, and we have undertaken many measures to partially prevent a recurrence of them. As ideas expand and appliances are invented, so will we continue to utilise them. On this subject of the past and the present state of society in respect to famines, Dr Hunter

writes: "What were deemed direct visitations of God are now brought under the control of man. Famines, floods, droughts, and pestilences are no longer permitted to perform their ancient function of checking the pressure or the population on the soil, and Government has taken upon itself to step in between its subject: and the ordinary dealings of Providence. The isolation of each district, which formerly intensified every local scarcity into a famine, ha been broken through. Railways, roads, canals. have welded the several provinces of India into a homogeneous whole, mobilised the resource of each, and increased the efficiency of the national harvest in a greater degree than if we had suddenly doubled the productiveness of the soil."

Before discussing the means of the prevention of famines, I think it will be preferable first to notice some of the disturbing influences which exist tending to obviate the full development of any means which may be attempted to mitigate these disasters.

"God helps those who help themselves" is saying which is not thoroughly understood

the natives of India, and until it is recognised there will always be one stumbling-block in our way. I quote from Dr Hunter in his account of the 1770 famine, the words being more or less applicable to the present day: "The loss of life was accepted as a natural and logical consequence of the loss of the crop. The earth yielded no food, and so the people in the ordinary and legitimate course of things This notion is not confined to India alone; it may be termed a purely oriental doctrine-it pervades the length and breadth of Asia. Dr Bellew, before quoted, in speaking of the famine of 1870 in Persia, gives us the following dialogue between himself and one of the Persian escort attached to their party "'Nobody cares for us, and the villagers have nothing we can take from them.' 'It is hard,' I said, 'but it is the custom of the country.' 'Yes, it is the custom of the country,' was the ready reply, 'and that is why the country is ruined.' 'With the aid of famine,' I add. 'The famine! no; that is a decree of God, and we must submit. No one can fight against what God ordains." With such sentiments as

these prevailing, no one can look forward to any preconcerted action being taken to provide against such calamities. Another phase of the oriental character is depicted in the following. The quotation is the reply to No. 74 question (the last) put by the Orissa Famine Commissioners in the examination of Mr H. A. Harris, commander of a steamer, and who during the Orissa famine was employed piloting vessels to Balasore, and generally assisting in relief operations. The question was, "Do you remember anything else remarkable that you saw?" Reply: "I saw some very curious traits among the people of Orissa that made it difficult to deal with them. Able-bodied men who were offered work would refuse it, and would sit down under tree till they got thin enough to get gratuitous relief. I found dead bodies with actually 6 or 7 seers * of rice on their persons. People would come into the Dhurmsallah + with 10 or 12 seers of rice on their persons; they would keep the cooked rice until it was absolutely rotten—people that were so bad that they had

^{* 12} to 14 lb.

[†] Where the food was distributed gratuitously.

to be sent to hospital. We tried every way we could think of, and found that they would steal, but would not eat. I think the Ooryahs are quite a different sort of people from those in all other parts of India where I have been." Here is another picture, drawn by the 'Daily News' correspondent during the early part of the present famine. He first describes the better-to-do people holding aloof from the groups of wretched poverty-stricken poor collected for an inspection. They betoken no sign of sympathy or interest for the sufferers. "They blush neither that they lied to us, nor that while their ribs are well fleshed and their mud grain-stores far from empty, their poorer fellow-villagers should have come to this pass. Nor do the latter seem to feel, far less to resent, this indifference. Kismet / it is their fate: it has been the fate of their forefathers, of their caste, from times immemorial, to toil when toil and wage offered; to hunger and to starve when wage and food failed them."

A very great deal has been said about caste prejudices, and there is not the slightest doubt but that these add an aggravating element to our numerous difficulties. Caste can hardly be credited with too many sins. To this is due the horros felt by the high caste of mixing with the crowd, when honest convictions that work was necessary should prevail: to this is due the many instances of the non-acceptance of wellmeant offers of succour to suffering wretches and to starving babes. Caste must be debited with the aversion to receiving cooked food, as well as with the difficulty of providing it even when it is known that it will be acceptable. To caste w must attribute the want of brotherly affection between fellow-countrymen, and the consequent want of unity of action. Women's rights are agitated freely in England; but the compulsor, seclusion of women in the East should be known to our sisters at home before they can realisto the full their past disabilities or sufficiently value their present privileges; and they shoul. then rejoice that caste is not an institution this country. Caste is also accountable for tl. limited variety of food, none of the more nourisle ing and sustaining articles of diet of the Wester world being permitted by caste usage. Manother disturbing elements are attributable

the same cause. Brahmins who may work on their own account in whatever manner they please, dare not - so they say - work for wages. This caste barrier, which rests on no solid basis of Hindoo scriptural authority, is being very slowly undermined; and the sooner it falls the better it will be for every one. As bearing on this point, I will refer to a circumstance connected with the Orissa famine. On that occasion vast numbers of people had subsisted on cooked food obtained at the poorhouses, and it became a matter of great anxiety to know what would become of these; to know what the result of receiving cooked food would be; whether the recipients would again be admitted into their castes, or whether society would be disorganised. Happily the matter was settled in a clear and decisive manner by the high priests of the community. I think it desirable that the opinions elicited should be published widely in India, much more so than they have been. Any one wishing to study the subject in detail should refer to Mr Kirkwood's Report, Cuttack, 1867, or to Mr Geddes's official report, entitled "Experience in

former Famines." It will be sufficient here to give the substance of the decisions. The pundita of Pooree (the abode of Juggernauth), Cuttack. and Calcutta were consulted. In their replies, opinion was unanimous that no act committed in order to save life occasions losof caste; but the Cuttack pundits enjoined the payment of a few annas, and the performance of certain ceremonials, not because the Shastras so directed, but because they deemed it expedient. The others stated that no penance whatever was necessary (Kirkwood) The Calcutta pundits' reply to six questions or the subject was: "At the critical conjuncture of a wide-spread famine, it is not considered any sin to eat with a throng of others cooked rice provided by Government or the community at large. This is the declaration of the learned pundits in general." Then follows their proof, extracts from Manu, instancing several holy men who, when in dire straits, had eaten dogs and even cows' flesh; but that they did not

^{*} The cow is the sacred animal of the Hindoo; and "cow's flesh" is therefore intended to convey a more emphatic expression than our English word "beef" would do.

involve themselves thereby in sin. One celebrated Rishi is even instanced as having murdered his son to obtain the wherewithal to appease his hunger.

Such are some of the abstract causes inherent to India which tend to aggravate a season of want. The concrete causes are quite as formidable; but they are perhaps not quite so easily realised with our home experience of the thousand and one appliances which are all around and so familiar to us. These, it should be remembered, are absent in India. At home we have railways, steamers, &c. &c. "So," you may reply, "has India, although they are limited." But in addition, it must not be forgotten that they are the birth of our Western civilisation; that they only spring into existence in times and places suited to them; that they have no struggle for existence to encounter. A train, a steamer, an engine is in a land of plenty at home: there is coal to feed it, there are men to work it, in abundance. In India both fuel and men have to be imported. A train would be a helpless or an ungovernable mass if it were not for the two Europeans—the engine-man and guard—who accompany it. A sufficient commentary on this very matter is the fact, that during the present famine a body of these functionaries had to be sent out in hot haste to one of the Indian trunk lines, to form a reserve, as it were, to meet the vast strain put upon its European staff by the increase of work required. Were we behind the scenes there would be endless instances corresponding to this last one, all of which have to be added to our stock of difficulties.

If, unhappily, influences exist which do not minister to the wants of the people, there are, on the other hand a few circumstances which tend to alleviate the baneful results of famine. A shipwrecked crew put themselves on short commons—prudence dictates this course; and similarly, if prudence is not the absolute dictator in pending famines, avarice for once has its advantages, and comes to its aid, and both co-operate to tide over the distress for a time, if not till succour arrives. In former days, when natives presided over the destinies of the inhabitants, these influences were much more active than in the present day. The idea of a liberal

relief by Government is fostered in every one's breast, which is not an encouraging sign: it engenders a feeling of dependence. Government has and should exact its unqualified right to demand that each one will act prudently; that he will exercise thrift in the expenditure of food, and so tend to economise, or in other words to increase, the food-supplies. And this is all the more important in India. There it is the custom of the agricultural population to subsist for the greater part of the year on their own private stores: they depend to a very small extent on the markets for the provision of food. It is on account of this principle of economising food-supplies that Government acts judiciously in withholding information from the general public as to the amount of relief that it is prepared to give.

It has before been noticed, that owing to the variety of soil, products, &c., and, within certain limits, also owing to the variety of climate, the whole of India, or even a large proportion of it, is seldom subject to famine at one and the same time. Migration, therefore, from stricken tracts to favoured districts, is a legitimate prospect to

look to for a slight alleviation of distress. I am of opinion that this temporary migration is a source of relief in times of famine which has not been sufficiently developed; and I have the less hesitation now in bringing these ideas forward, as I find that Sir John Strachev (now Lieutenant-Governor North-West Province) advocated its adoption many years ago. Permanent emigration to Burmah, &c., as has been attempted in the last famine, will never, in my opinion, be favourably viewed. Love of their fatherland is strong in the natives of India. Temporary emigration, on the other hand, has long been an acknowledged means of escaping from dire want; but to my knowledge it has never been recognised in a sufficient way by Government as a mode of relief. Beyond advertising that relief - works were available in certain districts, I am unaware of any such attempt having been made to alleviate distress. In the famine of 1864, Colonel Smith estimated that out of the distressed population of 13,000,000, as many as 500,000 had emigrated. This amounts to only four percent on the entire districts; but in one of the central

famine tracts, the proportion was known to have risen to over seven per cent. This movement was entirely spontaneous; and to such an extent was it carried, that in some of the districts bordering on the famine tract, special measures of relief became necessary there also, notwithstanding that they had reaped a "magnificent harvest generally." In connection with this subject of migration, Colonel B. Smith notices a curious and praiseworthy trait. He mentions that "a sort of rotation of relief was established" in many villages. "Families whose meagre home-sources were not altogether exhausted, adopted the plan of living in two sections, one going to work for a certain time, while the other remained at home." The working section, after a spell on the reliefworks, returned home, when No. 2 section took their place on the works. Thus a much larger community may be said to have been supported than the actual numbers on the works represented; while the little agricultural work possible at such times in and around the villages received its just amount of attention.

The account of the wanderings of the in-

habitants of Rajputana in 1868-70, given at page 71, is also illustrative of this system of voluntary exile.

At page 183 I have spoken of "transporting" a considerable proportion of the population in times of scarcity and famine. No doubt in such a wholesale emigration there would be all sorts of rumours abroad as to our intentions, and prejudice would defeat our efforts to a great extent; but gradually these would be overcome. It should, of course, be made as public as possible, that we were merely organising on a vast scale a system of emigration—something to supplement their own voluntary efforts in this direction. And it should also be advertised that our means for assisting them to return, when happier times were again vouchsafed, would be as complete as our aid to their exodus.

I shall have occasion hereafter to notice the influence which extended irrigation schemes may exert; but it is right that I should point out the fact that canals, or such other projects as may be termed "vast," are not the only means of providing against drought. We are at present discussing the means which may be said to be

already in existence, or at hand, for alleviating theeffects of famines; and any process, the cost of which is within the reach of most individuals. may fairly be considered as an existing preventive measure. Especially does this apply to well - irrigation. From time immemorial wells have been the basis of agriculture in India; and although wells are no doubt numerous throughout the land, still their number could be increased very considerably with great advantage. Colonel B. Smith estimated in 1861 that well-irrigation throughout India amounted to between 3,000,000 and 4,000,000 acres, while canals irrigated only about onequarter of that area. For the country called the Doab,* that officer prepared the following table,+ showing the percentages of the different modes of irrigation practised in that province in 1861:-

> Percentage of total area.

					w	en area.	
ı.	Area	protected	l by	means	of well-irrigation,	24.0	
2.	22	17	33	"	Jheels, submer-		
	sion, natural moisture, &c.,						

^{*} See footnote, page 11.

[†] This table is also given at page 152.

3.	Area	protected by	mean	s of East	er Jun	ına	
		Canal,					4.47
4.	72	,, ,,	"	Ganges	Canal	on	
		completio	n,		•		24 .0
				Total,			54.47

Any one who has a personal knowledge of the extent of country irrigated by the Ganges Canal, will be surprised to learn that the wells in the corresponding tract of country irrigate an equally large area. This fact will at once clearly indicate the importance of this system of well-irrigation, and point to the necessity of encouraging its extension. The probability of a second canal as large as that from the Ganges being constructed in the Doab, to protect only one-half of the area of the threatened districts, will be reverted to.

To be forewarned is to be forearmed; but at present our only warning is that famines will recur,—when and where we cannot predict. Meteorological science as yet can afford us little or no help; but we may hope that the day will come when it will be of some assistance. India presents a field well worthy the attention of meteorologists, and which is slowly being worked.

We have one source to look to for prophetic light—viz., the recurrence of famines at stated periods, but the results are not encouraging. The following, however, is the opinion of the Orissa Famine Commissioners on this subject: "Colonel B. Smith has remarked on the rough periodicity of famines; and it may be said that these local famines recur in one part of the country or other every 5, 10, or 15 years. The following we know to have happened in the range of inquiries our subject has led us, within the memory of the present generation:"—

Interval.

"1832-33. Lower parts of the Madras territory; food supposed to have reached three or four times the ordinary price.

1837-38. Lower Doab and some adjoining districts of the North-Western Provinces; food reached three times the ordinary price,

5 years.

1853-54. Higher parts of the Madras territory; food reached three or four times the ordinary price,

16 ,,

1860-61. Upper Doab and adjoining districts of the North-Western Provinces; food reached four times the ordinary price.

7 ..

1865-66. Orissa and part of Western Bengal; food reached eight and ten times, and in particular places thirty and thirty-five times, the ordinary price, and was not procurable for money in many places.

5 years."

The Orissa Famine Commissioners continue: "It will be seen that, with comparatively small exception, the same area has never been twice very severely affected in the last 40 or 50 years; while many provinces, which are equally liable to the calamity, have not suffered during this time.

"But if we look to the greater famines of a more far-spreading character, both the cycle of periodicity and the areas of their range are very much larger: the difference is almost like that between comets of the smallest and those of a very large orbit. The great famines occur in successive centuries; instead of 5, 10, or 15, we may say at intervals of 50, 100, and 150 years."

Such conclusions are of course of no practical value. We cannot prepare any special preventive measures on the chance of a famine recurring on this basis of calculation. We are

therefore driven to general measures—measures which will provide a certainty in ordinary years, and mitigate disasters when they do occur. If we can derive any benefit at all from the knowledge of famines returning in some such cycles as just indicated, it would be that we should prepare a reserve fund to meet the very extraordinary calamities which may be looked for about these times.

It is rather an Utopian idea, in my opinion, to suppose that irrigation will ever be able to complement a failure of the rainfall. Apart, in the first instance, from the impracticability of covering the whole of the country with a network of canals sufficient for this purpose, the natural composition of rain and of irrigation water is in some respects, and especially in some districts, essentially different, and the results produced are very dissimilar. I by no means wish it to be understood that this is any argument against the extension of irrigation schemes. I wish it to be clearly understood that I merely say that irrigation can supplement, but cannot make up for, a total failure of the rainfall. "The rains" in

India may be here shortly described from an

agricultural point of view. Unlike the rainfall in England, where it comes more or less regularly throughout the whole year, India depends on seasonal rains of short duration, where the difference of two or three days of total want, or it may be two or three days of a deluge-whereby a considerable amount of the total annual fall is thereby diverted from its proper duty - may affect the produce of the crops to such a degree that the result will be a scarcity or famine. The climates of India and England are utterly different. Our general complaint at home is not a want of rain, but of sunshine; even in any year where there is a peculiar want of the latter, there is always a degree of warmth present-obtained among other sources from the Gulf Stream-which, added to a few days of sunshine, materially assist to ripen the crops, and make a considerable portion of the produce available; whereas, a few days' rain in India, which correspond to our few days' sunshine at home, would be totally useless.

It is not necessary here to enter into detail of schemes for extending irrigation canals. It

is quite sufficient to say that they are being extended as far as the resources of India will permit; but it must be remembered that these resources have limits. I have looked over the files of the 'Saturday Review' for its critiques on passing events during late famines, and I find that the cry for extension of irrigation schemes was strong; it was the sine qua non, not only as a safeguard against famines, but as a mainstay of the resources of the country. "Civilised India," the 'Review' wrote, on 13th April 1861, "has not even kept on a level with the human intelligence of the earlier despots of India; and while money could be found for any war, just or unjust, none-or at least nothing adequate to the necessity-was ever forthcoming to apply the fertilising streams of the country to their natural purpose of increasing the productions of the soil. By investments which would have brought in untold profit to ourselves, we might have blessed India with perpetual plenty, and saved her people the suffering, and ourselves the shame, of such a calamity as that which is so strongly moving the compassion of all classes. . . . When

humanity and interest have equally failed to hasten the sluggish course of the Indian Government, it is difficult to know what feeling to appeal to. There is little to be said beyond the fact that every one knows, that by well-devised works of irrigation, India might be made at least as safe from recurrent famine as England now is." Another article in the same strain follows; and again, on April 13th, 1867, with the experience of six years, the following appears: "A famine in India is as much the direct act of man as a famine in England would be if we neglected to sow the necessary seed. For the most part, the one only essential to insure productive harvests, is water, and the water is there in abundance if we choose to us it. We have not so chosen, because it would cost money to make the needful reservoirs and canals; and because we could not see the wisdom of borrowing at 4 per cent to repay t the Government from 10 to 100 or 200 per cent, and to the people all that is comprehended in the difference between periodical starvation and unbroken plenty." Audi alteranpartem: the Ganges Canal is allowed to be the

canal, par excellence, of Upper India; yet with all the immense expenditure upon it, it only covers one quarter of the area of the Doab. Its financial results, and the experience gained by its introduction, and that of other canals, may be realised by perusing the following extracts from an official document of late date: "Before concluding, however, we wish to record one remark as regards the profits of irrigation works. That is, that in no case, even the most favourable, can it be expected that the income realised will pay immediately interest on the capital spent. In every case there must be a period of growth, during which charges for interest and capital will accumulate against the work. When water is scarce, and irrigation well understood by the people, the period may be short; where, on the other hand, irrigation is new to the people, and water comparatively plentiful. the period will be long. The Ganges Canal, which, on the average of the last five years. has paid over five per cent on its capital, was twelve years before it began to realise so much as four per cent. The Orissa works, which, had they been constructed sooner, might have saved

half a million of people from death in the famine of 1866, will doubtless take much longer before they will realise even this rate of interest. . . . But the anxiety of Lord Mayo's Government for legal power to enforce a compulsory rate was an emphatic expression of the belief that, without such a rate, a long period of slow growth of revenue from irrigation works could not be avoided. We wish that this should be freely understood. For if the result of our expenditure should be judged of by the immediate returns, the effect might be to deprive the country of extensions of irrigation essential to the prevention of famines and to the progress of prosperity." That compulsory irrigation-or its equivalent, a compulsory water-rate - has been found necessary as a sound proposal by the Indian Government, is as pointed a commentary as can well be imagined on the fabulous benefits to be derived by the people themselves, and on the returns to the Government which their outlay was to produce. There are, of course, vast indirect returns which are the result of such irrigation schemes, and which do not appear on the suiface; but the direct returns, &c., on which the arguments for the immense extension of irrigation schemes are based by public writers, do not exist. Or, as the 'Times' lately put it, a private individual or a company does not lay out money for a problematical indirect return, but for a tangible direct profit.

No one knowing India, and comparing the extent of country traversed by the Ganges Canal on one side of the Doab, and by the Eastern Jumna Canal on the other side, would ever dream, from non-statistical knowledge, of proposing that a new canal of equal proportions to those already existing should be constructed in the same neighbourhood. But what would be the effect of such? Some thirty per cent more of the cultivated area of the Doab would be brought under the influence of irrigation; and this would still leave about twenty per cent unprotected! If, then, the richly irrigated North-Western Province still requires such an enormous further development of irrigation schemes, what can be said of other parts of India? and where are the funds to come from to supply this apparent sine qua non? I question if the whole world could supply them!

Of other preventive measures, the opening out of the country by roads, canals, and railways, and by all other means of communication, is of equal importance with the extension of vast irrigation schemes. Of these, except navigable canals, nothing more need be said beyond stating the fact that they are being constructed as fast as the resources of the country will admit; but the want of funds which impedes the extension of irrigation schemes is also the great stumbling-block of our communication projects. Of navigable canals, it is necessary to remark that they never can be advantageously combined with irrigation canals, as has lately been proposed. Of a necessity the former are all directed toward the large cities, while the latter carefully avoid them, -firstly, because the country is their raison d'être; and secondly, because from a sanitary point of view it is advisable to avoid large centres of population, where the level of the water is liable to fluctuation. Moreover, in times of drought, when these canals ought to be of the greatest service, the requirements of the

one case would nullify the utility of the other. Irrigation would demand that a maximum of water should be withdrawn, while communication would require that the proper level be maintained. But these duties do not preclude irrigation canals being altogether unprovided for transport arrangements—in fact, the Ganges Canal is, to a certain extent, adapted to them.

Importation of grain can scarcely be called a mitigative measure in the sense referred to in this chapter. I may, however, mention, that in almost all cases there are two arguments in favour of its adoption, or in favour of preparations to adopt it, by Government: (1.) such a measure is sure to be carried out on an economical scale, and hence the market-prices can be gauged; and (2.) the knowledge that Government is prepared to import, or is importing largely, has the effect of bringing out stocks of grain which otherwise would have remained in hoard.

Of minor preventive and alleviative measures, the following may be cited: (1.) When there is a staple article of commerce produced in an afflicted district, all means of encouraging its product should be made while scarcity exists.

It should be cheapened by every means possible—if a duty is taken upon it, it should be temporarily rescinded; in short, everything should be done to tempt its exportation, and thereby attract traffic to the country, whereby imports of food would be possible. (2.) Of late years, crops, such as indigo, opium, cotton, sugar, &c., more lucrative than the food-crops, have been introduced a good deal, and they in a manner supplant the food-grains. The oftrecurring years of drought should be remembered, and encouragement be given to the production of the latter. In years of plenty the natural outlet would be exportation to foreign countries. Though this, at first sight, may not appear so profitable as the others, it is a question whether it would not be so in the longrun. At any rate, a disbursement of an occasional £6,500,000 is an event so important as to call for the consideration, whether a portion of the sum could not be employed more profitably than in direct mitigative measures.

APPENDIX.

NOTES.

PRESIDENCIES. India is divided primarily into the three Presidencies of Bengal, Bombay, and Madras.

These again are divided into Provinces and Districts, the principal of which are—

Bengal Presidency comprisesBengal proper, Assam, Orissa, Behar, Chota Nagpore, and British Burma, North-Western Province, the Punjab, Oudh, Central Provinces, and Berar.

PROVINCES
AND
DISTRICTS.

Bombay.

Bombay, Scinde, and the Northern Provinces of Bombay.

Madras.

Madras and the Carnatic.

The Protected and the Independent States, and the French and Portuguese Possessions.

The East India Company received the fiscal administration of the district of Bengal in 1765, and the "Ceded Provinces," which correspond somewhat to our North-Western Province, were yielded up in 1801.

LIST OF AUTHORITIES QUOTED AND CONSULTED ON THE SUBJECT OF INDIAN FAMINES.

1. HISTORICAL-

Elliot's Biographical Index.

" History of India as told by its own Historians, in course of publication.

Elphinstone's History of India.

Mill's History of India.

Marshman's History of Bengal.

James Grant Duff's History of the Mahrattas.

(2.) OFFICIAL DOCUMENTS-

Orissa Famine Commissioners' Report and Appendices.

Col. Baird Smith's Report on the 1860 Famine.

Girdlestone's Past Famines in the North-Western Province.

Henvey's Report on the 1868 Famine in the North-Western Province.

Col. Etheridge's Report on Famines in the Bombay Presidency.

Blue-book on the Madras Famine of 1866, Punjab 1868 Famine Report. Allahabad Central Committee's Report on the 1868 Famine.

Census of the North-Western Province.

Geddes's Administrative Experience of Past Famines.

3. NARRATIVE-

Dr Hunter's Annals of Rural Bengal.

- , Orissa.
- Famine Warnings.

Bengal Asiatic Society's Journals.

Sir Bartle Frere's Lecture on the Present Bengal Famine.

Ain-Akhari.

Akhar Nāmah.

Khāti Khān.

Dr Bellew's From the Indus to the Tigris.

The Famine in Persia.

LIST OF FAMINES AND SCARCITIES.

YEAR,	LOCALITY.	AUTHORITY.
942	Upper India.	Native author, see Elliot's Bio- phical Index. Generally speak- ing, for the earlier and less known famines, the native writers given
1200		in this work are the authorities. Orissa Famine Report (the mention made therein is vague).

LIST OF FAMINES AND SCARCITIES-continued.

YEAR.	LOCALITY.	Аптновіту.
1345	In and around Delhi District.	Orissa Famine Report, and Elliot's History of India.
1396	Deccan.	J. G. Duff's Hist, of the Mahrattas.
1471	4	Orissa Famine Commissioners.
1521	Bombay Presidency.	Colonel Etheridge's Report.
1540	Ditto.	Ditto.
1556	Delhi Districts, &c.	Akbar Nāmah,
1596	Central India, but also reported to have extended over the whole of Asia.	Native author, Biographical Index.
1631	Deccan.	Khāfi Khān.
1661	N.W. Province and Punjab.	A well-authenticated famine.
1703	Bombay Presidency.	Colonel Etheridge's Report.
1733	Ditto.	Col. B. Smith and Col. Etheridge.
1739	••••	Girdlestone.
1744		Colonel B. Smith.
1752		Ditto.
1759	Bombay, Scinde.	Colonel Etheridge's Report.
1765	Ditto.	Ditto.
1770	Bengal.	Official documents, &c. &c.
1773	Bombay Presidency.	Colonel Etheridge's Report.
1783	N.W. Province and Punjab.	Official documents, &c. &c.
1786	Bombay Presidency.	Colonel Etheridge's Report.
1789-92	Madras Presidency.	Blue-Book, Madras Famine of 186
1790	Bombay, &c.	Col. B. Smith and Col. Etheridge Report.
1792	Orissa.	Orissa Famine Commrs.' Report.
1794	Bombay Presidency.	Colonel Etheridge's Report.
1799 }	Bombay Presidency.	Ditto.
to1801 }	Madras Presidency.	Blue-Book, Madras Famine of 1860

LIST OF FAMINES AND SCARCITIES-continued.

YEAR.	LOCALITY.	AUTHORITY.					
1803	N.W. Province and Bombay.	Col. B. Smith and Col. Etheridge's Report.					
1807	Bombay Presidency.	Colonel Etheridge's Report.					
1810	Ditto.	Ditto.					
1812	Ditto.	Ditto.					
1813	N.W. Province and	Colonel B. Smith and Colonel					
	Rajputana.	Brooke.					
1819	N.W. Province.	Colonel B. Smith.					
1820-22	Bombay Presidency.	Colonel Etheridge's Report.					
1825-27	N.W. Province.	Colonel B. Smith.					
1832	Ditto and Madras,	Girdlestone, and Oriesa Famine					
1834	Bombay Presidency.	Colonel Etheridge's Report.					
1836	Ditto and Madras.	Ditto, and Blue-Book Madras					
		Famine.					
1837	N.W. Province.	A well-authenticated famine.					
1853	Madras.	Orissa Famine Commissioners.					
1860	N. W. Province, Pun-						
	jab, and Bombay.						
1865	Orissa and Bengal.						
1868-70	0						
	Rajputana.						
1873	Bengal.						

It is worthy of notice that from 1837-38 to 1853—i.e., during a period of fifteen years—no famine or scarcity is recorded in India; while the nearest approach during the present century to such a lengthened immunity from these disasters is from 1813-14 to 1819, and from 1853-54 to 1860, being respectively five and six years. But the sins of omission in such a list are always greater

than the sins of commission, and it is just possible that the records of some famines may have escaped my notice. I regret that I was unable to obtain a detailed historical sketch of these disasters in the Madras Presidency and in Rajputana. The latter country, I suspect, has been subjected to many more such calamities than are here recorded against it.

Notes, giving the authorities, &c., for the information wherefrom the table given in Chap. III., and here repeated (p. 233, 234), has been constructed:—

Col. 5, Note 1.—Area of Bengal, 94,539 square miles.

" Behar, 42,417

136,956

See Geddes, p. 439, approximate area taken at 100,000 square miles. Area here taken at 130,000 square miles.

Col. 5, Note 2.—Girdlestone names the districts affected; the following are included in the list:—

				B. M.	1				8. N.
Moradabad,				2,461	Brought for	w	ard,	,	11,917
Badaon,				1,973	Furrackabad,				1,744
Bareilly.				2,373	Cawnpore, .				2,336
Shajehanpore				1,723	Allahabad,.				2,765
					Futtepoor, .				
Mynpoorie,									
Carry forwa	ard	١.		11,917	•				-

- Col. 5, Note 3.—Note of authority amissing, but it is supposed that the information was obtained at p. 69 of Girdlestone, which has been quoted from Col. B. Smith.
- Col. 5, Notes 4 and 5.—The districts reported by Col.B. Smith were noted, and the areas measured by myself on the maps.
- Col. 5, Note 6.—This refers to Behar only; not to all of the districts of Bengal which were affected in 1866. The figures for this, No. VII., famine, were obtained from a table given in Geddes, p. 301, extracted from Mr Cockerill's report on Behar.
- Col. 5, Note 7.—This, No. VIII., famine, only includes the districts of Cuttack, Pooree, and Balasore. For the information here given, see pages 302, 303, and 320, of Geddes.
- Col. 5, Note 8.—See p. 255 of Blue-Book on Madras and Orissa, 1866, famine.
- Col. 5, Notes 9 and 10.—See 323 and following pages of Geddes. The districts affected were—

				8. M.	I	S. M.
					Brought forward,	
Jhansie, .				1,608	Muttra,	1,613
Bijnour, .				1,882	Allahabad,	2,765
					Humeerpore,	
Bareilly, .				2,373	Banda,	3,030
Badaon, .				1,973	Mirzapore,	5,200
Agra,				1,873		
					Total,	29,013
Carry fo	w	ard	,	14,117	·	

For Ajmere, see Col. Brooke's Administration Report.

- Col. 5. Note 11.—I have seen no official statement saying definitely that such and such districts are in the famine tract: a good deal is left to individual fancy to determine what should be considered as such. Sir B. Frere, in his published lecture on the present famine, attaches a table, "drawn up by Mr Trelawny Saunders," which states the area of the threatened districts of the lower provinces at 72,830 square miles - and of the threatened division, Benares, of the North-West Province, at 15,556 square miles; or the total threatened area at 88,386 square miles. Again, the 'Daily News' seems to consider that the area affected is 42,417 square miles (being the area of the various districts composing the Behar division, while the area of Behar is given in official documents-see Geddes, p. 320-at 73,040 square miles). I have therefore adopted for the present 50,000 square miles, as being approximate.
- Col. 6, Note 1.—See the notes on the official reports and other documents concerning the famine, in the Appendix to the Orissa Famine Commissioners' Report. Also, in Dr Hunter's 1st vol. of 'Annals of Rural Bengal,' and the Appendix thereto.
- Col. 6, Note 2.—See note 3, col. 5.
- Col. 6, Notes 3 and 4.—13,000,000 was the total population affected in the Punjab and North-Western Province, as given by Baird Smith. He writes that the "western section" (p. 6), amounting to 4,879,000,

included the Punjab generally; but in reality it was the section west of the Jumna, and therefore it included the Agra and Muttra districts of the North-Western Province, for which 1,000,000 and 700,000 are allowed (see population statement, Geddes, p. 322); therefore, 1,700,000 have to be deducted from the "western section," thus leaving for the Punjab 3,179,000, and 9,821,000 for the North-Western Province.

- Col. 6, Note 5,-See note 6, col. 5.
- Col. 6, Note 6.—See p. 320, Geddes.
- Col. 6, Note 7.—See Blue-Book, Madras famine of 1866.
- Col. 6. Note 8.—See p. 323, &c., of Geddes.
- Col. 6, Note 9.—See 323 and following pages of Geddes.
- Col. 6, Note 10.—See note 11, col. 5. Note appended to Sir B. Frere's Lecture on the Bengal Famine, p. 121, gives population of all the threatened divisions, 42,793,830. 'Daily News' gives 19,736,101 for the Behar division alone, while 25,000,000 has generally been adopted by Government. See Mr Auckland Colvin's article in the 'Fortnightly Review.' The latter figure has been adopted.
- Col. 7, Note 1.—See Dr Hunter's Annals of Rural Bengal.
- Col. 7, Note 2.—See Girdlestone, p. 68.
- Col. 7, Note 3.—See Girdlestone, p. 89 and 90, where the "recapitulation of all losses" is given.
- Col. 7, Note 4.—Do. do.
- Col. 7, Note 5.—See p. 301, Geddes.

Col.	7, Note 6.—1866 (Geddes, p.	305), R	elief and im-
	portation,		Rs. 15,20,107
•	1867 (Geddes, p. 306), Imp	ortation	
	only,		52,14,722
	1867 (Geddes, p. 311), Relief,	•	6,42, 104
			73,76,933

Special Relief Works, see p. 639 Orissa Famine Commissioners' Report,

1,05,692

Total, . Rs. 74,82,625 Or, £748,262.

- Col. 7, Note 7.—See p. 255, &c., Blue-Book, Madras famine.
- Col. 7, Note 8.—See p. 324 and 331, Geddes. Total amount there given is, Rs. 22,11,401—from which Rs. 1,50,295 + Rs. 96,886=Rs. 2,47,181 have to be deducted, which were expended on Ajmere, leaving Rs. 19,64,220 for the North-Western Province.
- Col. 7, Note 9.—See 323 and following pages of Geddes.
- Col. 7, Note 10.—See prefatory letter to the Punjab Famine (1868) Report.
- Col. 7, Note 11.—See Geddes, page not noted.
- Col. 7, Note 12.—£5,000,000 was to be provided; but it appears by the Budget statement that £6,500,000 have been expended.
- Col. 9, Note 1.—The authority for this is not forthcoming among my notes, but I am almost certain I obtained the information in Dr Hunter's Annals of Rural Bengal. Against this item I have—"10 per

cent was added to the land-tax during the famine year, and 5 per cent remitted."

Col. 9, Note 2.—See p. 22 of Girdlestone.

Col. 9, Note 3.—See p. 67 of Girdlestone. The sum noted does not include remissions in subsequent years, which have been estimated as high as Rs. 90,55,937.

Col. 9, Note 4.—See p. 89 of Girdlestone.

Col. 9, Note 5.-Note of authority amissing.

Col. 9, Note 6.—See p. 126 of Mr Cockerill's Report.

Col. 9, Note 7.—See p. 320, &c., of Geddes.

Col. 9, Note 8.—Blue-Book of Madras famine of 1866, and p. 315 of Geddes.

Col. 9, Note 9.—See p. 327, Geddes.

Col. 9, Note 10.— Do. do.

Col. 9, Note 11.—See prefatory letter to Punjab Famine (1868) Report. The remissions given are only for two districts—viz., Delhi and Hissar.

Col. 10, Note 1.—See p. 23 of Girdlestone; no definite data are available, the amount given is an estimate.

Col. 10, Note 2.—See Girdlestone, p. 70.

Col. 10, Note 3.— Do. p. 90.

Col. 10, Note 4.—Note of authority lost.

Col. 10, Note 5.—Blue-Book, Madras famine of 1866.

Col. 10, Notes 6 and 7.—See p. 331, Geddes.

Rs. 930,248

Col. 10, Note 8.—See Geddes, note of page amissing. Col. 11, Note 1.—A well-authenticated fact—Dr Hun-

- ter's Annals of Rural Bengal, and the official documents
- Col. 11, Note 2.—See Girdlestone—note of page amissing. Baird Smith, p. 63 and 66, paras. 58 and 63.
- Col. 11, Note 3.—Sir A. Cotton's lecture before the Social Science Congress, 1866. For the grounds of questioning the number, see text.
- Col. 11, Note 4.—See Geddes—extracted from Mr Cockerill's Report.
- Col. 11, Note 5.—See p. 320 (?), Geddes. It must be recollected that the figures given in the table represent only Cuttack, Pooree, and Balasore, the three principal districts of Orissa. Dr Hunter estimates the mortality throughout all the affected districts at one quarter of a million.
- Col. 11, Note 6.—See Blue-Book, Madras famine, 1866; cholera and fever deaths are not included in this.
- Col. 11, Note 7.—The excess of deaths, in the affected districts of 1869, over 1868, has been adopted here; this is really too high. It was intended to quote Mr Henvey's remark concerning the estimation of famine mortality (see p. 321, Geddes), but unfortunately no copy of the passage was taken when the book was available.
- Col. 11, Note 8.—See Colonel Brooke's Administration and Famine Reports.
- N.B.—Unfortunately, while making out this Appendix, I have only had my notes to depend upon, the original references being beyond my reach at present; hence the uncertainty of one or two of the notes.

1	2	3	4	5	6		8	9	10	11	12	1:
No. of Famine. I. II. IV. V. VI.	Year.		LOCALITY A	FFECTED.	·	Ex- in-	Cost of Belief per	Remissions and Suspen- sions of	Tuccavee.*	FAMINE DEATHS.		٠,
		Presidency.	District or Province.	Area.	Population.	Fife Fig.	tion.	Land Revenue.		Number.	Percentage of Population.	e i ami
I.	1770	Bengal	Bengal	Sq. miles. 130,000 ¹	30,000,0001	£13,7701	Shillings.	£ sterling. £ $80,332^1$	£ sterling. Nil; at all events no trace of it.	10,000,0001	33	1
II.	1783	"	North-West & Punjab†		•••			•••	•••	•••		I
III.	1803	**	North-Western Province	20,3472	No record	id	•••	340,9232	£100,000¹	No record		11
IV.	1837	,,	39	25,0003	$8,500,000^2$	74,544 >	.17	488,7363	Nil ²	800,0003	10	I
v.	1860	"	>>	18,6394	9,821,0003	148,5993	.30	132,4304	34,0213)	2,000,000³±	10 (1
VI.	"	"	Punjab	8,7885	3,179,0004	32,\$104	.20	67,4525	}	2,000,000-1	16	\mathbf{v}
VII.	1866	,,	Behar	26,191 ⁶	7,739,7175	32,5365	.09	9,800	2204	135,6764	2 `	VI
VIII.	"	,,	Orissa	7,6497	3,015,826 ⁶	748, 2 626	4.95	156,4447		814,4695	27	VII
IX.	'n	Madras	Ganjam, &c.	6,4008	1,100,0007	23,1437	.42	12,5408	3,2005	10,898 ⁶	1	IX
X.	1868	Bengal	North-Western Province	29,0139	10,269,2008	196.422	.38	122,9979	93,0246	62,7727	3	X
XI.	n	"	A jmere	2,67210	426,000°§	162179	7.62	13,99810	8,5957	106,5008	2 5	XI
XII.	"	"	Punjab	•.	***	42,16710		56,44111			•••	XII
XIII.	"	,,	Central Pro- vinces		•••	34,76011			8, 353 6	•••		XIII
XIV.	1873	"	Bengal	50,00011	25,000,000 ¹⁰	6,500,10012				•••		XIV

^{*} See footnote, page 50.

The blank spaces I am at present unable to fill up,

⁺ No particulars available; these provinces were under native governments the time.

[‡] This is on the authority of Sir A. Cotton; but it appears to me, from what have gathered from official documents, much in excess of the mortality.

[§] This does not include the native states of Rajputana.

TELEGRAMS AND ARTICLE REFERRED TO AT PAGE 168.

"DURBUNGAH, Friday.

"I visited the Durbungah road relief-works to-day. Fifteen thousand persons are employed on the semi-starvation wages of three-halfpence daily. They are neglected, defrauded, and irregularly paid.

"There is no supervision, except one native official for one hour in the morning.

"The Government is to blame for the delay in sending European supervisors, as requested by the local officials. Most of the public works are in the same state from the same cause.

"I found many persons in an extremely emaciated state; and I saw one famine corpse lying unburied in a ruined temple.

"There is much mortality among the children.

"The famine wave is threatening to swamp preventive efforts.

"Shortness of money in the local treasury threatens to cause a collapse in the transport service and the public works,"

From the Secretary of State for India to the Viceroy, Calcutta. Sent 28th February 1874.

"'Daily News' telegram received about Durbungah road relief-works states that relief-works are not supervised by Europeans; that labourers are paid semi-starvation wages of three-halfpence daily, payment being irregular.

"Inform me immediately amount of labourer's daily pay, and price of rice at Durbungah.

"Message adds that shortness of money in local treasury threatens collapse of transport and public works.

"Telegraph whether this is true."

From the Viceroy, Calcutta, to the Secretary of State for India. Sent March 2d, received March 2d, 1874.

"Your telegram 28th. Sir R. Temple, who is here, informs me that rice at Durbungah sold at 11 to 12 seers, of 2 pounds, the rupee. Murwa, kind of pulse much consumed by relief labourers, 12 to 13 seers the rupee. Wages of relief labourers, one and a half annas per diem (equal to two and a quarter pounds of rice). Something less for women or children. Usually whole family works. One bad case of irregular payment occurred from mistake of officers concerned; remedied immediately on discovery. Labourers paid daily. European supervision for all relief-works impossible. Cash in Durbungah treasury, from large disbursements, run low; will be fully supplied. No danger whatever to transport from this."

[&]quot;SEETAMURREE, Thursday.

[&]quot;I have just seen the Viceroy's reply to Lord Salisbury's telegram of the 28th February as to my Durbungah statements.

"I have to observe that the men's wages, being one and a half anna, the women's one anna, and the children's half an anna, the average wage, carefully worked out by myself, was three-halfpence per head, affording a daily ration of a pound and a half of rice, with no allowance for salt, dall, or other life-sustaining condiments.

"At the date of my Durbungah telegram there was no resident European supervision on any relief-work in that subdivision, and peculation and delay in the payment of wages were everywhere rife. I personally discovered, not one, but numerous cases of irregular payment, entailing incalculable intensification of the distress.

"The transport arrangements actually suffered delay from the inability of the Durbungah treasury to meet the contractors' requirements. The contractors were driven in consequence to borrow silver from the native bankers.

"Similar inconveniences still exist in Sectamurree. From the low state of the treasury the erection of storehouses is delayed. The contractors, to whom public money is owing, are compelled to borrow right and left, to enable them to go on."

Article by 'Daily News' on receipt of foregoing Telegram, Friday, April 3d.

"The telegram from our Special Commissioner in India which we publish to-day, confirms the criticisms we have already made on the Viceroy's reply to Lord Salisbury's questions as to one of our Commissioner's earlier despatches. In the distant corner of our Indian Empire from which his telegram of yesterday is dated, our Commissioner had only just heard of Lord Salisbury's despatch and the answer of the Indian Government which excited attention at home five weeks ago. It will be remembered that on the 28th February we published a despatch from Durbungah, dated the evening before, in which our Commissioner said that he had visited the relief-works on that day and found 15.000 persons employed on starvation wages of three-halfpence a-day. He added that these persons were irreguarly paid; and that there was no supervision, except one native official for one hour in the morning. He also blamed the Government for not sending European supervision, and said that shortness of money in the local treasury threatened collapse of the transport service and the public works. Lord Salisbury immediately telegraphed the substance of this despatch to the Indian Government, and asked for explanation. explanation was that wages were one anna (equal to two and a quarter pounds of rice) per diem, but 'something less for women and children:' that 'one bad case of irregular payment had occurred from mistake of the officers concerned;' that European supervision of the reliefworks was impossible; and that though cash had run low in the Durbungah treasury, it would be fully supplied, and no danger would occur to the transport service. We at once pointed out that this official despatch confirmed our Commissioner's statements, or was, at least, entirely compatible with them-an inference which his letters, with fuller details, afterwards justified. In his telegram of vesterday our Commissioner gives the reckoning on which his statements was founded. It is quite true that adults receive one anna and a half; but the 'something less for women or children,' in the words of the Viceroy's telegram, is actually that women have one anna and children half an anna. As one anna is equivalent to three-halfpence, it will be easy to see that in a family consisting of father, mother, and one child there would be received three annas a-day, equal to three-halfpence for each person; affording, as to-day's telegram says-'a daily ration of one pound and a half of rice, with no allowance for salt, dall, or other life - sustaining condiment.' Our Commissioner further says that he 'personally discovered, not one, but numerous cases of irregular payment, entailing incalculable intensification of the distress.' It will be further noted that the transport service actually did suffer from the lowness of the Durbungah treasury; and that at this moment, at Seetamurree, similar inconvenience still exists from the lowness of the treasury, which also delays the erection of storehouses. We note these points, from no desire to depreciate the efforts of the Indian Government, but to stimulate activity as far as any stimulus is applicable. The public will also note with satisfaction the carefully prepared basis of personal observation, inquiry, and calculation on which the short statements in our Commissioner's telegrams are founded."

NOTE REGARDING THE RAINFALL REQUISITE FOR THE CULTIVATION OF RICE.

The amount of rainfall necessary for the cultivation of rice without external aid, such as inundation or artificial irrigation, is not such a well-ascertained fact as I was inclined to believe it to be previous to my making special inquiries on the subject.

An authority on the matter informs me that the Madras estimate of the requisite quantity of water required is 1 cubic yard per hour per acre during the period that the crop is on the ground—viz., about five months. This is equivalent to nearly $5\frac{1}{2}$ inches continuous rainfall per month; but, as a matter of fact, "the rain of course does not fall at all regularly—and probably nearly double that quantity, or 50 inches for the five months the crop is on the ground, would be necessary to do what is requisite; and even this would not suffice unless regularly distributed."

My authority continues: "On the whole, I should say that a fall of 60 inches will not secure rice without artificial irrigation, or without inundation, which comes to much the same thing. The Orissa rainfall is about 60 inches, and the rice is always more or less dependent on artificial irrigation, though with such a rainfall it may probably be often got without expensive works."

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