M.R.O. 14—18,000—27-8-34

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1602	Press ~~Mis.~~
44-45	
Dated 3—9—	1864.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 3rd September 1864.

No. 44. Read the following letter from H. E. JACOMB, Esq., Officiating Under Secretary to the Government of Bombay, (Revenue Depatrment), to J. D. SIM, Esq., Secretary to Government, Revenue Department, dated Bombay Castle, 12th August 1864, No. 3,062:—

SIR,

1. I am directed to forward herewith, copies of two Memoranda of the replies of the Collectors in this Presidency to the references made to them by the Revenue Commissioners, Northern and Southern Divisions, for the information required by the Government of Madras regarding the Cattle disease referred to in your letter No. 1,933, dated the 27th October last.

2. In forwarding these Memoranda, I am directed to request that this Government may be favored with any further information the Government of Madras may have obtained, both as regards the character and treatment of the disease.

3. Captain Neal has, as suggested by the Collector of Khandesh, been requested to make experiments to test the effect of vaccination and any other medical remedies that may suggest themselves to him.

5. A copy of the correspondence has also been furnished to the Principal Inspector General, Medical Department, and he has been requested to state his own opinion and that of any other Medical Officers he may consider it desirable to consult, on the character of the disease, and the nature of the treatment that should be tried.

5. Mr. Hallen, the Staff Veterinary Surgeon at Kirkee, has also been furnished with a copy of the Proceedings, and requested to favor this Government with his opinion on the subject.

No. 45. ORDER THEREON, 3rd September 1864, No. 1,602.

Miscellaneous.

1. Forwarded, together with copies of the enclosures, to the Board of Revenue for information, and for communication to Veterinary Surgeon J. Thacker.

2. The requisition in paragraph 2 of this letter will be attended to.

(True Extract.)

(Signed) J. D. SIM,
Secretary to Government.

To the Board of Revenue.

Exd. S. T. Augustin.

Memorandum submitted with the Revenue Commissioner's letter No. 1388, *dated* 16*th April* 1864.

The several Collectors of the Southern Division having been requested to report if such a cattle disease as is described at the close of paragraph 1 of Captain Nelson's letter to the Collector and Chief Magistrate of Kurnool dated the 8th July 1863, copy of which formed one of the accompaniments to the Government reference to the Revenue Commissioner S. D. No. 4288, dated 1st December 1863, is known in their Districts, and if so what are its supposed causes, and what its mode of cure, if any, the following information has been received from them.

2. The Collector of Ahmednuggur (Mr. D'Oyly) reports that such a disease is not known in his District.

3. Mr. Reid, Acting Collector of Dharwar, states that the cattle disease described exists in his Collectorate, and is known by the name of "Hirey Bialee," or the great disease. Like cholera, its true source is unknown, but it is attributed to atmospheric causes. There is no specific cure for it, and it is treated in a variety of ways, but almost invariably without success. Mr. Reid has sent a vernacular memorandum of some of the remedies applied, but, as these are very similar to those which are given by the Collector of Belgaum in his report quoted below as the remedies known in his District, it is unnecessary here to describe them.

4. Mr. Gray, the Collector of Sholapoor, states that a cattle disease of somewhat similar diagnosis to that specified is reported to have appeared in the Moodebehal and Mungolee Talookas of his District about two years ago, and in the Beejapoor Talooka about four years ago. No particular causes are supposed or known to bring on the disease, which is said sometimes to have been produced by excessive heat, and also by unusual dampness. Various modes of treatment are adopted when the disease is prevalent, but none of them are said to have as yet been found to be efficacious with any degree of certainty. In the Moodebehal Talooka sugar, ghee, boiled rice, and toor dall, were mixed together and administered to the diseased animals. Decoctions of toor and rice, and of several other substances, are also resorted to for the cure of the disease.

5. Mr. Chapman, the Collector of Sattara, reports that the disease alluded to has occurred in some of the Talookas of his District. Its causes have not been ascertained, though it is believed by some to be attributable to heat, by others to the bite of venomous snakes, viz., the Munair, Nunatee, Dootondee. The following are given as some of the remedies employed for its cure, but whether they have been found to be successful or not is not stated.

1*st*—Two seers of buffalo's milk (not heated), quarter seer of ghee and quarter seer of sugar, which are mixed together, and given to the diseased animal every morning and evening. No water is allowed until the animal is a little better, when only hot water, in small quantity, is given.

2*nd*—Juice of a kind of plant called "Gernolee," extracted after taking off the bark, is given in one and half seers of buttermilk.

3*rd*—Juice of any "mistletoe" growing on Babool trees is given in buttermilk.

4*th*—Juice of the Datura plant.

5*th*—Liquor (Brandy).

6*th*—Branding.

7*th*—Branding, and juice of the leaves of the plant called "Cherghol."

6. Mr. Morgan, Collector of Poona, reports that a disease somewhat similar

to that described is known in different parts of his District, that it is stated by all the Talooka Officers where known to be very fatal, and that it is known by different names, and attributed to different causes, the remedies used also being very different. In the Kheir Talooka the disease is not known by any particular name, but is called by some "Chandia." It is said to be generally preceded by the disease called "Khoorkhoot" (a disease in the feet of cattle). The remedy used is firing. In the Haveillee Talooka it is known by the names "Bhool," "Bhuvanee," "Keermeeya." It is said to appear after unseasonable weather. The remedy used is the leaves of the "Hurpur Rewdee," or bitter Leemb tree, pounded up with buttermilk. In the Mawul Talooka it is known by the name "Khaprya," and is said generally to break out with cholera, and in the hot season. The remedy here used is ghee and buttermilk mixed and given to the diseased animal. Mr. Morgan quotes the following report on the subject from his Second Assistant, Mr. McFarlan :—

"A disease the general symptoms of which correspond to those described prevails among cattle in the Districts under my charge, but not to a great extent. It appears both in the cold and hot weather, and has not been traced to any cause. It is sometimes called "Wara," and generally "Rogh," or the disease. It is likened to cholera, inasmuch as when it once is generated it spreads, and animals attacked die in three or four days.

"The treatment varies. Doses of buttermilk (Tak), plain or mixed with the juice of the leaves of the Neem tree, Jowaree gruel (Ambil), juice made from the 'maka' vegetable, "chinch" or tamarind juice, opium juice, red pepper juice, and sugar, are severally given. Firing on the head between the horns, on the loins, breast, hip, and thigh, is often resorted to, and in some cases the animal is made to inhale the smoke of dried elephant dung."

7. The following is the report of the Acting Collector of Belgaum, Mr. Duff:—

"The disease is known in this District, and is called the Heerey Byanee, *i. e.*, the worst of diseases.

"Mr. Hunter, First Assistant Collector, reports as follows:—

"'In the Bagulkote Talooka the disease is known by the name of 'Motha Rog,' Canarese 'Heerey Byanee.' Its causes are not known: sometimes it is supposed to proceed from the animal having been deprived of water. The following medicine seems to be usually adopted here, though with very little success:—

"'Take of elephant's dung of the size of a cocoanut, mix in warm water, and give to drink; after two or three doses give flour of cooltee boiled in water. In some places when the animal is much distressed the following cooling draught has been supposed in some cases to lead to recovery: grind dall to a fine flour, mix with water, make it into a thick gruel, boil it well; when cold, give to drink.

"'In the Hoongoond Talooka this disease has not appeared for the last three years: it previously carried off many cattle there. It appears suddenly in April and May. The cause is not known, nor is any specific for it known: the following is resorted to as a possible remedy, though in most instances it fails:—

"'Mix elephant's dung and the leaves of a large species of Nim (Canarese 'Helbeyad'), pound them together, mix with water, and give to drink.'

"My Second Assistant, Mr. Pritchard, writes as follows:—

"'The Padshapoor Mamlutdar reports that the ordinary remedy used in his Talooka is the juice of the date palm, or unfermented toddy.

"'The Beedee Mamlutdar mentions the four following remedies:—

"'1.—Branding the animal on the forehead, temples, hind quarters, and hocks.

"'2.—Five or six chillies and half a tola of chilly seed crushed and mixed in half a seer of strong spirits. After this has been administered no water to be given for two or three days, likewise neither green grass nor oil-cake, nor similar food. After three days a small quantity only of warm water to be given, and the quantity increased gradually till recovery. The diseased animals to be kept apart from the sound ones.

"'3.—One quarter seer of toor dall ground and mixed with the leaves or root of a species of thistle called "Bhurm Dundee," and the urine of a cow in good health.

"'4.—The juice of the berry of a creeper that grows in the "Mullad" called "Gunesh Kanday," to be administered for three days.'

"The Mamlutdar of Sumpgaum recommends the following treatment as that usually adopted:—

"'Branding on each joint. Water passed through a compound of elephant's and hog's excrement, and gruel made of ground toor dall, to be given freely; warm water only to be given.'

"The Pursghur Mamlutdar mentions the following as remedies:—

"'Pounded ginger, orris root (buch), and chillies, mixed into a ball with ghee.

"'A mixture of colocynth and salt.'

"The Mamlutdar of Badamee mentions two remedies, viz.—

"'The dung of an elephant mixed in buttermilk. The juice expressed from the leaves and root of a creeper called the 'Shee Towndee' mixed in conjee made from toor flour. This acts as an aperient; after it has acted well, nachnee gruel to be given.

"'It does not appear that any of the above remedies are considered infallible by Natives, who look on this disease among cattle as answering to cholera among the human race.'"

8. Mr. Duff has also separately forwarded a report from his Third Assistant, Mr. Little, from which the following is an extract:—

"After stating that the disease is known in the Talookas of Chikodee, Uthnee, and Gokak, under the Canarese name of "Herri," he gives the following as the recipes that have been sent to him for its treatment:—

"'(1.) Pound the small leaves of a tree called in Canarese "Hounee" in stale buttermilk, put the mixture into a chatty, and bury it in dung; take it out and apply the mixture to the animal's mouth through a tube. To stop the humour from the eyes, pound chilly seeds in ginger water, and apply the solution as a lotion to the eyes. The tree called above "Hounee" does not grow in this part of the country, but is found, I believe, in Beedee. I do not know by what name it is popularly known to Europeans. Its botanical name, according to Reeves' Canarese Dictionary, is *Rottleria tintoria*.

"'(2.) Firing. Heat the iron ring used to fasten the tooth of a harrow into its socket, and with it brand the animal on the forehead and between the eyes.

"'(3.) Pound the marking-nut (Canarese "Keyroo"), and apply the oil expressed from it to the animal's tongue. At the same time steep the leaves of the aloe (Canarese 'Kalnaroo') in water, and make the animal drink a seer of the juice a day for three successive days.

"'(4.) Pound the small leaves of the sour orange tree and dry chillies in water, and give a lota full, or one seer of the juice, to the animal to drink.

"'(5.) Mix the small leaves of the "Bungalee" tree, the "Umbalee" tree, and aloe leaves together, pound them, and mix the juice expressed therefrom with buttermilk, and in this form give it to the animal to drink.'

"The 'Bungalee' is, according to Reeves, botanically known as the *Hibiscus populneus*. I cannot ascertain what the 'Umbalee' tree is, nor do the Natives about here seem to know.

"'(6.) Mix tamarind juice and buttermilk with the pounded leaves of the "Shirusoo" tree, and put the mixture into the animal's mouth.'

"The Gokak Mamlutdar states that toddy is used as a medicine, but he does not say in what way."

9. The Collector of Canara, Mr. Shaw Stewart, states that a cattle disease, of which the symptoms are similar to those described, is known in this Collectorate, and is called the "Dhod Rog," or the plague. The disease is supposed to be contagious, healthy cattle being attacked with it when they come in contact or mix with cattle belonging to traders, &c., from other parts of the country previously attacked with the disease. Beyond this its causes are not discoverable. The method of cure generally tried consists of branding the forehead, hips, and eyebrows, and a preparation of the bark of some jungle trees is sometimes administered, but, he adds, the proportion of cures is rarely more than about five or so in a hundred, and even in these instances the cure is not attributable to the treatment, as cattle not so treated are known to recover.

10. Mr. Shaw, Acting Collector of Rutnagherry, reports that the disease is known in his District under the name "Moosulwada," and that it is an epidemic not unlike cholera. No satisfactory reason can, he states, be given for its prevalence, though there is an idea that it is occasioned partly by cattle drinking of shallow streams passing over rocky beds when heated by the sun,

and partly by drinking water impregnated with "Mina" and "Atok," glutinous preparations used for poisoning fish to ensure a plentiful catch. The remedies used are, he adds, as various as they are fanciful. No sort of reliance is placed upon them, and though cattle occasionally recover they, as a rule, succumb to the attack of this disease.

11. The following are the various modes of treatment adopted for this disease as described by Mr. Shaw:—

"'Kokumsaley' (dried rind of mangosteen fruit) and coarse salt are to be put in water in a copper pot for four days, so as to get its verdigris therein, and then half a seer of that water is to be given in the morning, and the same quantity in the evening. At noon a quarter seer of juice of Toolsee and Panglea leaves, mixed with equal quantity of ghee, is to be given.

"2. One eighth seer of 'Methee' flour and 'Budisof' seed mixed together and boiled in one seer of buttermilk to be given.

"3. A half or a quarter seer of brandy is given according to circumstances.

"4. One fourth seer of 'Wurree' flour mixed with the juice of top part of tender cocoanut, and also a little quantity of opium, to be given.

"5. One fourth seer of cashew fruit juice, and the same quantity of onion juice, to be given.

"6. Tender mangoes burnt in fire, and two tolas of the contents of 'Bel' fruit, and an equal quantity of dried ginger, are given. As also 'Asoof' and 'Bhang,' to be ground together, and one third of which is to be given in half a seer of warm buttermilk.

"7. Three fourths of a seer of boiled-milk of cow or she-buffalo to be put in a bottle, and mixed with one tola of lime-juice. The bottle to be shaken for half an hour, and then the mixture is to be given.

"8. The seed of 'Terida' plant, being bruised, to be given.

"9. The juice of the creeper of 'Goolvel' plant, mixed with sugar, is to be given.

"10. The juice of the bark of 'Koonbhia' tree is given.

"11. The juice of the bark of 'Jambool.'

"12. Betel leaves with ghee are given.

"13. The fruits of 'Bokhada' tree to be pounded and given.

"14. The juice of 'Kurbel' fruit mixed with cummin seed, or the powder of black pepper, with ghee, is given.

"15. Tobacco to be bruised in water, and the water is to be given.

"16. Conjee of 'Nachnee' is given.

"17. The juice of the leaves of the creeper 'Bandroda,' that grows on the mango tree, is given.

"18. The juice of the root called 'Wujrmoot' is given.

"19. 'Methee' seed to be ground and given with butter-milk.

"20. The juice of the root of the 'Nisnee' is given.

"21. The juice of lemon-grass is given.

"22. Ghee is given.

"23. The juice of mangosteen and cummin seed is given.

"24. Elephant's dung, mixed with water, is given.

"25. The juice of the bark of 'Woola' tree is given.

"26. The juice of the bark of mango tree is given.

"27. The juice of the leaves of the 'Bhoker' tree, mixed with the ashes of straw of 'Chemunsal' rice.

"28. Cattle attacked with disease are immediately branded three times on the throat, and once from the chin to the neck; afterwards one third of a bottle of brandy is continued to be given for three days successively.

"29. Liquor Ammoniæ is given.

"30. A pinch of the powder of snake slough and cummin seed, mixed with the contents of an egg, is given.

"31. Tongue of a tiger is levigated in water, and the water is given.

"32. The fruits called 'Tisley' are bruised in water, and the water is given.

"When the medicine is found to take effect the cattle are given only dried grass, and no water till they get perfectly well."

Memorandum of the Replies of the Collectors in the Northern Division, except the Collector of Kaira, from whom no communication has been received.

Collector of Ahmedabad.

Small-pox, or a disease of the nature alluded to in the proceedings of the Madras Government, prevails to a limited extent in this part of the country every year in the months of June and October, or immediately before and after the rainy season. Last year it appeared with greater virulence than it had done for eight or ten years previously, and destroyed a number of cattle.

2. Horned cattle are the most liable to this disease. Two or three days elapse before the nature of the attack is clearly shown. The affected animal then rejects fodder, loses flesh, and grows daily weaker, until reduced almost to a skeleton. The period of the disease varies from twelve to twenty days, and the animal appears to suffer considerable pain and uneasiness during its course. The external marks are uncertain in their appearance, pustules sometimes breaking out and sometimes not.

3. But little is done in the way of remedies for the cure of this disease. The mouth is moistened with ghee, or washed twice a day with warm water, and the animal is fed on "ghensh," a sort of gruel made from jowaree flour; but, as a rule, the cattle so affected are left very much to themselves to recover or die as nature may determine.

4. As to the cause or causes predisposing to this epidemic, the classes of the people most familiar with the subject can give no information, probably because they do not trouble themselves to reflect in the matter, ascribing the disease (as they do) when very prevalent to the baneful influence of the goddess of pustular diseases (the Seetla Mata of Hindoo mythology), whether the patients be men and women, or cattle.

Collector of Surat.

I have the honor to state that all my Mamlutdars, with one exception (Oolpar), report the occasional appearance of a disease among cattle similar in its symptoms to that described in the Madras correspondence, and give as its remedy a mixture of ghee and the water in which "toower" has been boiled. When this fails, a drink formed of water and the juice of bruised green leaves from the Bawul tree is prescribed. No one, however, speaks of these remedies as by any means specific, and it seems to be pretty much a matter of chance whether an animal attacked by the disease recovers or not.

Collector of Tanna.

I have the honor to report as follows:—

Mr. Bell, Acting First Assistant Collector, states—

"That the disease * * * * is known in the Districts of Salsette, Bassein, Mahim, and Sunjan, under the same name as the Natives give to small-pox. For some years, I am happy to say, the disease has not attacked cattle extensively.

"2. When the disease appears the people keep the sick cattle as much as they can from the healthy.

"3. The percentage of recoveries varies, according to reports, from 5 to 25.

"4. The people have no medicine in which they put any faith; they generally content themselves by dieting the sick animal. The ordinary diet is naglee or toor conjee, with a little ghee.

"5. I have got another receipt partaking more of the character of a medicine: take equal quantities of the following grains—Kuskus, Mussoora, and Methya, grind, and give half a seer in two seers of curds or buttermilk.

"6. One man recommends the following receipt, and sets down the probable recoveries at ninety per cent.: take a piece of the tail of a crocodile (soorwur), dry and pound it, mix a tola of it in a quarter of a seer of water, or of buttermilk, and give a dose morning and evening for three days. I am unable to discover that this man has had any practice. His recipe strongly resembles that Natives give to men suffering from incurable diseases—'If you will only drink the milk of a tigress, you will get well.'"

Mr. Izon, Acting Second Assistant Collector, states—

"That the murrain or disease amongst cattle, which, from its resemblance to the small-pox, is called by the people Devi, is well known in these Districts.

"2. The symptoms are universally described as an eruption of pustules, diarrhœa, and emaciation, followed very usually by death.

"3. I cannot learn that it has increased in frequency of late.

"4. When it appears in a village it continues there for a long time, often many months, and no remedy is known as being of any efficacy in putting a stop to its ravages; it is, besides, highly infectious.

"5. From these circumstances it would seem that inoculation, if practised as soon as the disease breaks out in a village or district, would be the only remedy for this fatal malady."

Mr. Ravenscroft, Sub-Collector, states—

"That he has never met with any cases of cattle disease, and does not therefore feel competent to offer an opinion on the subject.

"2. I am inclined to think that the disease herein described is a kind of small-pox amongst cattle, and inoculation, if practised as soon as the disease makes its appearance, would, in all probability, prove an efficacious remedy."

COLLECTOR OF KHANDEISH.

I have the honor to report that a disease in cattle corresponding only in some respects with that described by Captain Nelson is known in Khandeish. It is known by the same name as small-pox in human beings. It resembles small-pox in some respects, and is probably identical with it. I have been unable to procure any practical information of any value as to the treatment of the animal. Some persons recommend an infusion of Neem leaves, but they rely chiefly on muntras and sacrificial offerings to idols. It is admitted that both are equally inefficacious.

2. A murrain has lately destroyed nearly all the cattle in Egypt and Turkey: perhaps some information may be procured from those countries.

3. I would suggest that Captain Neale and the Superintendent of the Cattle-breeding Farm in Mysore should be directed to conduct a series of experiments to test the effect of vaccination, or any other medical treatment that may suggest itself.

Revenue 1864 Sept.
Pros: of Govt for Sept.
No. 2225.

From the Off.g
Under Secty to the
Govt. of Bombay

Dated 12th Augt.
Received 23d " 1864.

No. 3062.

From Do. 20 Dec/64
C.M. 5357

Forwarding the
replies of Collectors regard-
ing Cattle disease.

No. 1602. 8 Sept.

With an order

No. 1602

Forwarded, together
with copies of the enclosures, to the
Board of Revenue for information,
and for communication to Veterinary
Surgeon J. Thacker.

The requisition in para
2 of this letter will be attended to.

From Lt. Govr. &
3d Sept. 1864.

To
The Board of Revenue. with 5 Copies dt. 5 Sept.