M.R.O. 1—77,000—8-3-37.

(1) Number of pages 16

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

G.O. No. 454	Press / Mis.
Dated 3-10- 18	

10/10

69-20

Not to be folded or roughly handled

No. 19. Read the following letter from the Secretary to the Government of India, to the Chief Secretary to Government, Fort Saint George; dated Simla, 17th September 1867, No. 2586.

With reference to the correspondence regarding the method of assaying in the Madras Mint, which is recorded as numbers 44 and 45 in the Proceedings of the Local Government, in the Financial Department, for the month of June 1867, I am directed to observe that the humid or chloride process of assay was approved by the Government of India some years ago as the process for adoption in the Indian Mints; that it now prevails in the Mints at Calcutta and Bombay; and that, so long as the cupellation process is observed in Madras, there can be no certainty, beyond that supplied by the general test of the pyx coins, that the assays of the Madras Mint are as accurate as those of the Mints at Calcutta and Bombay.

2. The accompanying copy of a letter, No. 56, dated the 22nd ultimo, from the Officiating Assay Master of the Calcutta Mint, is accordingly forwarded, with the request that His Excellency the Governor in Council of Madras may be moved to carry out that Officer's recommendations.

Ordered that a copy of this letter and of that from the Assay Master, Calcutta, be sent to the Accountant General, Madras.

From H. W. GRAHAM, Esq., Officiating Assay Master, Calcutta Mint, to the Secretary to the Government of India, Financial Department, Simla; dated Calcutta, 22nd August 1867, No. 56.

I have the honor to acknowledge the receipt of your letter, No. 2033, dated Simla, the 14th August 1867, requesting a report on the correspondence forming letters Nos. 44 and 45 in the Madras Government's Financial Proceedings for June 1867, a copy of which you transmit to me. In accordance with your request, I beg to submit the following remarks.

2. The questions I have to report upon appear to me to be, first, whether it is advisable to introduce the chloride process of assay in the Madras Mint, and, if so, whether it necessitates an increased expenditure.

3. In the first place, is it expedient to introduce the chloride process of assay at Madras? I, at the outset, beg to state that I consider it most advisable to do so, and in this opinion I think I am borne out by all the Assay Masters in the employ of the Indian Government. In addition to the reasons which have been already assigned from various sources, and which I need not repeat, I have a most important one to advance.

4. It has been ordered by the Right Honorable the Secretary of State for India (vide margin) that "Officers who now enter the (Assay) Department will be posted to the lowest appointment on the list." This appointment is that of Deputy Assay Master at Madras. Seeing, then, that all have to begin at this point, I think it may be looked upon as a training school for the other Mints. If, therefore, the methods of assay are not assimilated in the three Mints of Calcutta, Bombay, and Madras, the Madras Deputy Assay Master, acquainted, as he would be, only with the old, dry cupellation process, on being ordered to do duty at either of the other Mints, would be perfectly useless on first arrival, and quite incompetent to lend aid to the Assay Master, his new superior, for the process of assay at the Madras Mint is totally different, and the newly arrived Madras Deputy would only be a hinderance, inasmuch as he would have to undergo tuition *denovo*, and would be quite incapable of taking up the current duties of his new office, and this, perhaps, at a time, when there was a pressure of work at the Calcutta or Bombay Mints. I, therefore, consider that there can be no doubt of the urgent necessity of introducing a uniform method of assay in the three Government Mints of Calcutta, Bombay, and Madras.

See G. O. G. G., Financial Department, No. 2823, dated Simla, 16th October 1866, paragraph 2.

5. It is evidently (and naturally in my opinion) the great desire of the present and past Assay Officers of the Madras Mints to assimilate their work with that of the Bombay and Calcutta Mints, and as the moist process is universally allowed to be the most accurate and satisfactory

one for the assay of silver bullion, the determination of the Madras Government to prevent its application appears to me to have been arrived at without a sufficient knowledge of all the facts of the case, and I should regret if their decision should stand in the way of their Assay Officers adopting the process which is allowed to be the best. Having myself been employed at the Madras Mint, I can speak from personal experience of the respective merits of the two modes of working.

6. The Madras Mint Master, in his letter, 23rd March 1867, assumes a weak position when he observes that the "Queen's Assayer" in the Royal Mint uses the cupellation process of assay. Gold is the legal current coin of the realm, and the principal metal he has to assay, and it is because his work is almost entirely confined to gold that the cupellation process is in vogue, and employed likewise for silver. It would not be worth the while of the London Assay Office to set up a separate apparatus for a moist analysis of the small quantity of silver they have to deal with; and, further, I beg to state that the Madras Mint Master's silver pyx coins are all assayed, not by the cupellation process by Professors Miller and Hoffman, but by the wet method, because of its superior accuracy, as reference to the Home pyx reports will enable him to see.

7. The question, then, of the advisability of the humid process of assay being disposed of, I will now turn to the subject of increased expenditure.

8. A different scale or disposition of establishment is absolutely necessary.

9. The scale proposed by the present Acting Assay Master at Madras appears certainly a high one. I have no doubt, however, that when the chloride process shall have become completely introduced, and the establishment *au fait* at the work, that the Assay Master would be able to reduce the number of men employed in his office, and still have it in efficient working order, and able to take up any amount of work that the Mint could give it to do.

10. I, therefore, having, as before mentioned, had some experience of the work at Madras and knowing the different requirements of the two modes of assay, would beg to suggest the following amended rate, which will be found to reduce the expenditure nearly to the present scale, and yet to retain an efficient staff.

		Rs.	A.	P.	
	1. Head Assistant and Accountant (say	200	0	0	With possibly increasing annual increment of Rupees 10 a month to Rupees 250, or some special personal allowance after some years of service.
	1 2nd Assistant and Accountant	80	0	0	Increasing to Rupees 100 as above.
	1 Head Writer	35	0	0	
	1 2nd do.	20	0	0	
Weighmen.	1 Superintendent of Musters	35	0	0	
	1 Assistant do.	15	0	0	
	1 Laboratory Apprentice	25	0	0	
	1 Moochee	12	0	0	
	1 Hammerman	10	0	0	
	1 Laboratory man and fireman	15	0	0	
	2nd Do.	8	0	0	
	3rd Do.	7	0	0	
	3 Peons, at 7	21	0	0	
	Sweeper	3	8	0	
	Scavenger	1	0	0	

The Laboratory Department, I think, could not be reduced with safety.

11. A complete apparatus for the moist process was some years ago furnished from this Office, and exists in the Madras Assay Office, ready for use, so there would be no additional outlay on that score.

Proceedings of the Madras Government, Financial Department,
8th October 1867.

12. The men objected to by the Madras Mint Master in the clerical department of that Assay Office, and designated "Accountants," are required for other duties besides those which their names imply, viz, in directing and manipulating in the Laboratory, where one responsible man, at least, should ever be present, as a safeguard to preclude any possibility of the silver being tampered with while in process of assay.

In the Calcutta Office, the calculations of the outturn of bullion are made by one of the Assistants in the Laboratory, and also by a writer, by two different methods; the Deputy Assay Master checks the results, and enters them in the Office Register.

13. A peculiarity of the department is that many portions of the work must be carried on at the same time; hence, more men are required than would at first sight appear necessary to one not intimately acquainted with all the minute details. Having to deal with a special department, it is necessary to have on hand a specially trained lot of subordinates and workmen to fill up gaps in cases of absence from sickness or other causes, in order that the Laboratory may never lack its complement of skilled hands.

14. Should Government agree in seeing the expediency of introducing the chloride process at Madras, I would urge, in accordance with Dr. Busteed's suggestion, that a suitable person be deputed to the Calcutta Mint for three months, on full pay, with free passage, to learn the mode of assay which obtains here.

15. To give additional weight to the foregoing remarks, I may observe that I have read them to Dr. Shekleton, and I am authorized to state that he fully agrees with me in their general purport.

16. According to your request I beg to return you the copy of the Madras Government's Financial Proceedings for the month of June.

Gazette of India, 20*th October* 1866.

FINANCIAL DEPARTMENT.

No. 2823.

SIMLA, *the* 16*th October* 1866.

Read Financial Despatch from the Right Honorable the Secretary of State for India, No. 185, dated the 16th August 1866, regarding the salaries of Officers in the Assay Department in the three Presidencies.

RESOLUTION.—The appointments in the Assay Department of the Indian Mints have hitherto been ordinarily confined to Officers of the Medical profession, but a modification of this practice having, on the recommendation of this Government, been sanctioned by the Secretary of State, the Governor General in Council is prepared to declare that any candidate who can produce the necessary certificate from the Secretary of State of his qualifications as an Assayer, and who may be otherwise duly qualified, will be eligible for employment in the Assay Department.

2. The appointments and salaries in the Assay Department, are as follow:—

	Salaries. Rs.	A.	P.
Assay Masters, Calcutta and Bombay, each Rupees 1500, rising by increases of Rupees 100 per mensem every other year to	1800	0	0
Assay Master, Madras	1500	0	0
Deputy Assay Masters, Calcutta and Bombay, each	750	0	0
Deputy Assay Master, Madras	606	10	0

Officers who may now enter the Department will be posted to the lowest appointment in the list, and will be held eligible for transfer or promotion to the Assay Offices of the three Presidency towns.

Proceedings of the Madras Government, Financial Department, 8th October 1867.

ORDER.—Ordered that the foregoing Resolution be published in the *Gazette of India* for general information.

No. 20. ORDER THEREON, 8th October 1867, No. 454.

The Governor in Council directs that the Officiating Assay Master will submit, through the Mint Master, such suggestions as he may have to offer in regard to the measures to be taken for introducing the chloride process of assay into the Madras Mint.

(True Extract).

Chief Secretary.

To the Officiating Assay Master.
,, Mint Master.

Exd. J. H. Burns.

A. M's Assay Office
Calcutta Mint
August 22d 1867

No 56

From,
The Offg: Assay Master
Calcutta Mint

To,
E. A. Lushington Esqre
Secretary to the Govt of India
Financial Depart.
Simla.

Sir

I have the honor to acknowledge the receipt of your letter No 2033 dated Simla the 14th August 1867 requesting a report on the correspondence forming letters No 44 & 45 in the Madras Govt Financial proceedings for June 1867 - a copy of which you transmit to me - In accordance with your request I beg to submit the following remarks.

2. The questions I have to report upon appear to me to be first, whether it is advisable to introduce the Chloride process of Assay in the Madras Mint, and if so, whether it necessitates an increased expenditure.

3. In the first place is it expedient to introduce the Chloride process of Assay at Madras? I at the outset beg to state, that I consider it most advisable to

to do so - and in this opinion I think, I am borne out by all the Assay Masters in the employ of the Indian Government. In addition to the reasons which have been already assigned from various sources, and which I need not repeat, I have a most important one to advance.

4 It has been ordered by the Right Honble the Secretary of State for India (vide margin) that Officers who now enter the (Assay) Department will be posted to the lowest appointment on the list. This appointment is that of Deputy Assay Master at Madras. Seeing then that all have to begin at this point I think it may be looked upon as a training school for the other Mints. If therefore the methods of Assay are not assimilated in the three Mints of Calcutta, Bombay & Madras, the Madras Deputy Assay Master, acquainted as he would be, only with the old, dry Cupellation process being ordered to do duty at either of the other Mints would be perfectly useless on first arrival, and quite incompetent to lend aid to the Assay Master, his new superior, for the process of Assay at the Madras Mint is totally different, and the newly arrived Madras Deputy would only be a hinderance,

in

see GO Gl. Fin. Dept. No 2028 dated Simla 16 Oct 1866 para: 2.

in as much as, he would have to undergo instruction de novo, and would be quite incapable of taking up the Current duties of his new Office - and this perhaps at a time when there was a pressure of work at the Calcutta or Bombay Mints. I, therefore, Consider that there can be no doubt of the urgent necessity of introducing a uniform method of Assay in the three Government Mints of Calcutta, Bombay and Madras.

5. It is currently (and naturally in my opinion) the great desire of the present & past Assay Officers of the Madras Mint to assimilate their work with that of the Bombay and Calcutta Mints, and as the moist process is universally allowed to be the most accurate and satisfactory one for the Assay of Silver Bullion, the determination of the Madras Govt to prevent its application appears to me to have been arrived at without a sufficient knowledge of all the facts of the case, and I should regret if their decision should stand in the way of their Assay Officers adopting the process which is allowed to be the best. Having myself been employed at the Madras Mint, I can speak from personal experience of the respective merits of the

two

two modes of working.

6. The Madras Mint Master in his letter 23d March 1867 assumes a weak position when he observes that the 'Queens Assayer' in the Royal Mint uses the cupellation process of Assay. Gold is the legal current coin of the realm and the principal metal he has to assay and it is because his work is almost entirely confined to gold, that the cupellation process is in vogue and employed likewise for silver. It would not be worth the while of the London Assay Office to set up a separate apparatus for a moist analysis of the small quantity of silver they have to deal with and further I beg to state that the Madras Mint Master's Silver Pyx Coins are all assayed, not by the cupellation process by Professors Miller & Hoffman, but by the wet method because of its superior accuracy as reference to the Home pyx reports will enable him to see.

7. The question then of the advisability of the humid process of assay being disposed of, I will now turn to the subject of increased expenditure.

8. A different scale or disposition of Establishment is absolutely necessary.

9. The scale proposed by the present acting Assay Master at Madras appears

appears certainly a high one. I have no doubt, however, that when the Chloride process shall have become completely introduced, and the establishment an fait at the work, that the Assay Master would be able to reduce the number of men employed in his office and still have it in efficient working order and able to take up any amount of work that the Mint could give it to do.

10. I therefore having as before mentioned had some experience of the work at Madras and knowing the different requirements of the two modes of assay would beg to suggest the following amended scale which will be found to reduce the expenditure nearly to the present scale and yet to retain an efficient staff.

	1 Head Assistant & Accountant (say)	Rs. 200	With possibly increasing annual increment of Rs. 10 a month to Rs. 250 or some special personal allowance after three years of service
	1 Do Asst & accountant	80 in exchange at 2/ a Rupee	
	1 Head Writer	35	
	1 Do Do	20	
Foreigner	1 Supt of Masters	35	
Foreigner	1 Assist do.	15	
	1 Laboratory Apprentice	25	
	1 Moodeen	12	
	1 Hammerman	10	
	1 Laboratory man & fireman	15	
	2 Do Ditto	8	
	3 Do Ditto	7	
	3 Coins @ 7/	21	
	Sweeper	3-8-	
	1 Scavenger	1	

The laboratory department I think could

could not be reduced with safety.

11. A complete apparatus for the moist process was some years ago furnished from this Office and exists in the Madras Office ready for use so there would be no additional outlay on this score.

12. The man objected to by the Madras Assay Master in the Clerical department of that Assay Office and designated "Accountants" are required for other duties besides those which their names imply viz in directing and manipulating in the Laboratory where one responsible man at least should ever be present as a safeguard to preclude any possibility of the silver being tampered with while in process of assay.

In the Calcutta Office the calculations of the outturn of Bullion are made by one of the Assistants in the Laboratory, and also by a writer, by two different methods, the Deputy Assay Master checks the results and enters them in the Office Register.

13. A peculiarity of this department is that many portions of the work must be carried on at the same time hence more men are required, than would at first sight appear necessary to one not intimately acquainted with all the minute details. Having to deal with a special department, it is necessary to have on hand a specially trained lot of subordinates and workmen to fill up gaps in cases of absence from sickness or other causes in order that the Laboratory may never lack its complement of skilled hands.

14. Should Government agree in seeing the expediency of introducing the Chloride process at Madras I would urge in accordance with Dr. Bastecks suggestion, that a suitable person be deputed to the Calcutta Mint for 3 months on full pay with free passage to learn the mode of Assay which obtains here.

15. To give additional weight to the foregoing remarks, I may observe that I have read them to Dr. Shekleton and I am authorized to state that he fully agrees with me in their general purport.

16. According to your request I beg to return you the Copy of the Madras Govt Financial proceedings for the month of June

I have &c
(Sd.) Henry N. Graham
Offg Assay Master

(A true Copy)

H Cohen

Asst Secy to the Govt of India

No. 2586.

From

E. H. LUSHINGTON, Esq.,

Secretary to the Government of India,

To

The Chief Secretary to the
Govt. of Fort Saint George

Financial Dept.

Simla, the 17th Sept. 1867.

Sir,

With reference to the correspondence regarding the method of assaying in the Madras Mint which is recorded as numbers 44 and 45 in the proceedings of the local Government in the Financial Department for the month of June 1867, I am directed to observe that the humid or Chloride process of assay was approved by the Government of India some years ago as the process for adoption in the Indian Mints, that it now prevails in the Mints at Calcutta and Bombay and that so long as the Capellation process is observed in Madras there can be no certainty beyond that supplied by the general test of the Pyx coins that the assays of the Madras Mint are as accurate as those of the Mints at Calcutta and Bombay.

2 The accompanying copy of a letter No. 56 dated the 22d. Ultimo from the Offg: Assay Master of the Calcutta Mint is

accordingly

accordingly forwarded with the request that His Excellency the Governor in Council of Madras may be moved to carry out that Officer's recommendations.—

I have the honor to be
Sir
Your most Obedient Servant

Ed. H. Lushington
Secy: to the Govt. of India.

Ordered that a copy of this letter and of that from the Assay Master Calcutta, be sent to the Accountant General Madras.—

16-9

Financial Department.

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter from the Secretary to the Govt of India, Finl. Depart.

No. 2586 dated 17th Septr. 1867.

Order thereon 8 October 1867 No. 4554.

The Governor in Council directs that the Officiating Assay Master will submit, through the Mint Master, such suggestions as he may have to offer in regard to the measures to be taken for introducing the Chloride process of Assay into the Madras Mint.

To the Officiating Assay Master.
Mint Master.

18 Oct 10

Fin. Lr. to Govt.
21st March 1868
No. 7.

Financial 1867. Department.

No. 457.

PROCEEDINGS OF GOVERNMENT.

Fort 489

Dated. 8 October 1867.

Replied to 7 Proc
No 51 of 1868

19.20.

C4 Cum
87-4

M.R.O. 1—77,006—3-6-37.

(1) Number of pages 4

(2) Date of repair 25.8.38

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Financial DEPARTMENT.

G.O. No. 455 Press / Mis.

21-22

Dated 8-10- 1867.

3/4

21-22

Not to be folded or roughly handled

Proceedings of the Madras Government, Financial Department,

8th October 1867.

No. 21. Read the following letter from the Mint Master, to the Chief Secretary to Government, Fort Saint George ; dated Madras, 3rd October 1867, No. 315.

I have the honor to request the sanction of Government to my writing off from the Mint accounts 171½ lbs. of copper, short received per ship *Roxburgh Castle*, valued at Rupees 68-6-6, particulars of which were reported to you in my letter, No. 293, of the 18th ultimo, and also noticed in the Packing Account.

No. 22. ORDER THEREON, 8th October 1867, No. 455.

Sanctioned accordingly.

(True Extract).

Chief Secretary.

To the Mint Master.

,, Accountant General.

Exd. J. H. Burns.

No 315 3d October 1867.

From

Colonel J Carpendale B.C.
Mint master

To

The Chief Secretary
to Government

Sir,

I have the honor to request the sanction of Government to my writing off from the Mint Account 171½ lbs of Copper short received per ship "Roxburgh Castle" valued at Rupees 68-6-6 particulars of which were reported to you in my letter N° 293 of the 18th Ultimo, and also noticed in the Packing Account.

I have the honor to be
Sir
Your most obedient Servant

J Carpendale
Mint master

8 Octr 1867 Fin.ce 1867 Department.

8 October 1867 N.o 455.

Sanctioned according

by

To The Mint Master

From The Chief Secretary to Government

Dated 3rd October 1867
Recd 4th

No 464 of 315

Request the sanction of Govt. to writing off Rs 60-6-6 value of 171½ lbs of Copper short received per ship Roxburgh Castle

To The Mint Master

Accountant General

Written order

21. 22