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Proposed Abolition of the Mad[illegible] Mint

1854

SELECTIONS

FROM

THE RECORDS

OF THE

MADRAS GOVERNMENT.

R56

PUBLISHED BY AUTHORITY.

No. III.

REPORT

ON THE

PROPOSED ABOLITION

OF THE

MADRAS MINT.

Madras:

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1854.

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No. 204.

FORT SAINT GEORGE, MINT,
28th January 1854.

FROM MAJOR J. T. SMITH, ENGINEERS,
Mint Master.

To SIR T. V. STONHOUSE, BART.
S. D. BIRCH, Esq.
W. H. BAYLEY, Esq.
} *Mint Committee.*

GENTLEMEN,

Para. 1st. In compliance with the instructions contained in your Secretary's letter of the 24th October last, I have the honor to forward herewith a report, in quadruplicate, upon the various subjects referred for enquiry by the Government of India, and beg to apologise for the delay which has occurred in preparing it, which has been in a great measure unavoidable.

2d. Almost the whole of the facts which are stated in this report have been taken from the printed trade returns prepared by the Reporter of external commerce; and as these are accessible to your Committee, and will be in the hands of the Supreme Government, and the Honorable Court of Directors, I have thought it best not to encumber the papers by any authenticated extracts from them, as they would possess no higher authority.

3d. I beg respectfully to state that I have taken every pains in my power to ensure accuracy in the Statements which I have now the honor to submit to your judgment, and have also endeavoured to draw such inferences from them as may commend themselves to you as just and moderate; I trust, therefore, that you will do me the honor of supporting the conclusions at which I have arrived; but should such unfortunately not be the case, as the object of all parties can only be to ascertain the truth, I hope you will do me the favor to permit me to lay before you such further explanations as may seem to you to be called for, to account for any errors which I may appear to have fallen into; that by this means there may cease to be the wide discrepancy of opinion which the Honorable Court made the subject of remark upon the former occasion.

I have the honor to be,
Gentlemen,
Your most obedient Servant,
(Signed) J. T. SMITH,
Mint Master.

(True copy.)
C. A. ROBERTS,
Secretary Mint Committee.

A

ABSTRACT OF THE REPORT.

Para 1. Particularises the subjects enquired into.

2 to 8. Misapprehension of former reports explained, and the peculiar and exceptional position of the Mint during the period formerly enquired into shewn. Proof given, that under ordinary circumstances the Madras Mint realises a considerable profit, not a loss, as supposed.

9. The second question, declined for want of information.

10 & 11. Detailed report as to the capabilities of the Mint.

12 to 15. Third question as to probable future demand. Summary of views formerly held as to the progress of Commerce.

16. Former anticipations stated to be more than realised.

17 to 22. Reasons for the rapid increase enquired into, and comparison of the present grounds for anticipation with the former ones. They are shewn to be very much stronger, and in consequence, a future increase of Commerce to 9 or 10 crores in 10 years is suggested as probable.

23 & 24. Bullion trade. The former views on this subject recapitulated.

25. The anticipations held out in former reports stated to be more than realised.

26 to 34. Causes of the increase in the bullion trade enquired into. The reason is shewn to be, the greater rapidity of the increase of the export, than of the import trade—and the necessity, in consequence, of returns in treasure.

35. Conclusions regarding the past history and future prospects of the trade.

36. The increase of the bullion trade which would ensue in case of any diminution of the Honorable Court's bills, considered, and the probabilities of diminution.

37. Summary of various important circumstances affecting the bullion trade; ending with an estimate of the future trade at 84½ lacs per annum.

38 & 39. The above estimate justified, and objections against it anticipated and replied to.

40. Possible effect of scarcities in England and Madras adverted to.

41 & 42. The estimate of silver work for the Mint completed, by reckoning the Uncurrent coins. Former estimate of 15 lacs per annum shewn to be too large, and 5½ lacs per annum reckoned for the future. The total demand for silver coins estimated at 90 lacs in value, and 110 lacs in number of pieces.

43. The former estimate regarding copper coins repeated—they were calculated at 1,20,000 Rupees value, and 80 lacs of pieces.

44. The Hyderabad currency referred to, details of the probable coinage required.

45 to 48. General remarks as to the probability of alterations in the financial system of the Honorable Court, and the results thereof to the bullion trade.

49 & 50. Remarks on the drain of specie from this Presidency, and the fatal consequences of a contraction of the currency.

51. Reasons why a preference should be given to bills drawn by the Honorable Court, over exportation of specie; if any part of the surplus revenues of the Presidency are to be withdrawn.

52 to 55. The insufficiency of the powers of the Calcutta Mint to meet the requirements of the currency of all the countries, dependent upon it, since the addition to our territories of Hyderabad, Nagpore, and Burmah; considering the large increase which must take place in the Calcutta bullion trade, pointed out, as well as the total inadequacy of two Mints to meet the currency demands of a vast empire 4 or 5 time the size of France, when once the trade receives animation.

56 to 60. Former opinion as to the probable expediency hereafter, of abolishing the Madras Mint, modified, for the reasons above stated.

61 to 63. A hope expressed that the Committee will support early measures for the introduction of steam power, at an expense of 4 or 5,000 Rupees; and an expectation held out that, as a want of the services of a Mint becomes more widely and generally diffused, it will be found to be an advantage to have preserved a demonstration of the ease and economy with which those demands may be met.

REPORT.

Para 1st. The subjects to which my attention has been particularly directed on the present occasion are the following:

1*st.* The annual expense of the Mint, on a correct calculation of its profits.

2*d.* The probable expense of the Assay Establishment, on the footing proposed by the Madras Government.

Also the expenses of a bullion depôt.

3*d.* The quantity of silver and copper coins, in tale, which this Mint can produce, if in constant steady work.

4*th.* The estimated annual demand for silver coins, under ordinary circumstances, in this Presidency; and the same for copper coins.

5*th.* The probable demand for the new ½ pice pieces; and

6*th.* The probable demand for silver and copper coins for the Nizam's Territories.

2d. Before proceeding to enter upon these questions, I must beg permission to correct an error which the Honorable Court appear to have fallen into, respecting my meaning in part of my first report of 11th* April 1851.

Misapprehension corrected.

3d. It was not by any means my intention to propose, as the Honorable Court seem to have inferred, that the charges of the Assay and Mint Committee Offices should be omitted in a comparison of the Mint charges and profits; but I was anxious to bring into prominent notice the fact, that the circumstances under which this Mint had worked during the period then under review, were peculiar, and exceptional; so that if, after correcting the errors in the statements, it still appeared to have worked at a loss during 10 years; it was to be attributed to the fact, that it had been occupied in work (as regards the precious metals) for which no profit was credited, viz. the reformation of the old currency; and that, in lieu of having the expenses of its more costly operations met and balanced by a seignorage upon the bullion worked; what little of the latter was brought in by the merchants, was inadequate to meet the charges of assaying, so that the Mint had to defray the expenses of a coinage of the

The true meaning of the Reports stated.

* This report is printed in the Appendix.

merchant's bullion, an extensive coinage of old currency, a large copper coinage, and meet a *debt* upon the bullion, out of the profits of the copper coinage alone.

Cause of the deficit in the Mint accounts enquired into.

4th. It was my wish to shew, that the fact of an actual deficit during the 10 years did not prove that the Mint under ordinary circumstances worked at a loss, it merely shewed that it was not paid for its work; for if a seignorage were reckoned upon the Uncurrent coins, the result would shew a large gain by the state; nay more, I stated that if the department were credited, not with the usual seignorage, but only with the additional cost which, upon the lowest scale of computation, the transmission of the Uncurrent coins to Calcutta, and coinage there would have involved, it would be seen that a very large profit to the state had been realized by its operations.

5th. The state of the case under such a supposition, for the last 10 years, is shewn in the margin; and will I trust convince your Committee that, were the Mint working under ordinary circumstances viz. upon merchant's bullion paying 2 per cent. seignorage, it would not only defray its own expenses, besides the Assay, and Mint Committee Offices, but also assuredly realise a very considerable profit; as is the case at present.

				C. Rs.	As.	P.
Actual expenses during the last 10 years including Assay and Mint Committee offices				12,02,105	12	10
Actual net gains during last 10 years	10,60,026	1	11			
2 per cent on Uncurrent coins*	4,50,706	15	4	15,10,733	1	3
Profit				3,08,627	4	5

* If instead of seignorage, the charges which must have been incurred in coining 225¼ lacs value of bullion into 350 lacs of pieces in Calcutta be calculated, they would amount at a minimum to 3,05,010 Rupees, and excluding insurance risk, to 1,92,985 Rupees.

Inference as to the economy of the Mint in ordinary circumstances.

6th. Noting these important facts, I pointed out* that, as the demand for the recoinage of Uncurrent coins must, in the nature of things, decrease, and the bullion trade improve, we might reasonably expect, when such was the case, and during the ordinary course of the Mint's history, that a net gain could not fail to be the result. It is a great satisfaction to me to be able on this occasion to state, that this anticipation has already been fulfilled; as your Committee will perceive by the statements accompanying this report;† which shew that already the charges have been exceeded by the gains actually

* Report 11th April 1851, paras 47 and 63.

† Vide Statements A and B.

realised, the net surplus profit, after defraying all the charges of the Mint, Assay, and Mint Committee Offices, during last year having amounted to Rupees 35,945 11 10.*

Summary of the above explanation.

7th. The above statements taken in connection with the facts laid before you in my former reports, will I trust convince your Committee and the Honorable Court, that the reasons which appeared to exist, suggestive of a doubt as to the economy of this establishment are altogether founded on a mistake. That the expenses have not increased of late years, but diminished; and that although during the last 10 years it is the fact that the expenses have exceeded the income by Rupees 1,42,079-10-11 as shewn by the Statements now submitted, yet this is entirely in consequence of the department having had to perform work to the value of Rupees 4,50,706-15-4 on account of Government, for which no seignorage is credited in its accounts.

First question replied to.

8th. I now proceed to answer the several questions upon which I have been instructed to report; and in regard to the first, beg to refer you to the accompanying Statements A and B, which have been carefully drawn up in accordance with the instructions of the Honorable Court of Directors. They shew, as above stated, a difference between the profits and charges of the Mint in the 10 years of Rupees 1,42,079-10-11 the cause of which I have already explained. Had it not been for the extraordinary and large amount of unpaid work, occasioned by the reformation of the currency, swelling the Mint expenses, these Statements would have exhibited a profit, in spite of the temporary decline of the bullion trade; and I have much satisfaction in stating, that unless some unforeseen change should take place, the whole of the remaining deficit will be speedily obliterated.

Second question.

9th. I am unable to answer the question as to the probable expense of the Assay Establishment and bullion depôt on the footing proposed by the Madras Government, not being acquainted with their proposal. In regard to the quantity of silver and copper coin, in tale, which can be produced at this Mint, if it is in constant and steady work, I beg to report as follows.

Third question, as to the powers of the Madras Mint.

* Mint expenses	82,486	5	3
Assay Office do	25,363	15	11
Mint Committee do	3,673	9	9
Total	1,11,523	14	11
Profits	1,81,937	15	3
	70,414	0	4
Loss in the sale of 4 years collection of copper scissel.	34,468	4	6
Difference	35,945	11	10

Statement of the daily outturn.

10th. The Mint is at present furnished with all the apparatus and means for executing an average daily coinage of not less than 1,00,000 pieces, under ordinary circumstances, and capable of extension to 120 or 1,40,000 for a short period, in time of emergency, with the single exception of the laminating department, which being worked by bullocks, for which there is scope for employment in only two mills, cannot execute more than the work required by 30,000 pieces daily. There is spare machinery on hand, which would be available in part to increase the power in this department, and the expense of doubling it, and thereby doubling the outturn of the whole Mint, would be comparatively trifling, not more probably than 4 or 5 thousand Rupees; but this has never been thought advisable hitherto, because, till lately, the average daily demand for silver coinage has not exceeded 30,000 pieces, and in regard to copper coins, the difficulty has been obviated by procuring the copper from England in a laminated state, so that very little mechanical power is expended in passing the straps through the mills to equalise them.

Limitation of outturn owing to the want of mechanical power in laminating.

Summary of the present powers of the Mint.

11th. It will be understood from the above, that this Mint is at present capable of turning out 30,000 pieces daily of silver coins, and by a trifling expense may be made to double that outturn. That in addition to this, copper coins can be executed to such an extent as to make up the total outturn to 100 or 1,20,000 pieces per diem.

Fourth question noticed.

12th. I have now to enter upon the question of the estimated annual demand for silver coins for this Presidency, in ordinary circumstances, and the same for copper coins.

Reference to former reports on this subject.

13th. As the reply to this question necessarily involves a decision upon the views which I had the honor to submit in detail in my reports of the 15th April and 16th December 1851,* it seems to be only requisite now to compare the opinions then expressed with the experience subsequently obtained.

Outline of views respecting the commerce of this Presidency.

14th. In the reports above referred to, I stated that the commerce of this Presidency was in a state of transition, that while the trade in rude manufactures which formerly existed, and which carried with it a bullion trade of 32½ lacs of Rupees per annum, had been sapped and destroyed by the introduction of British manufactures, consequent on the Acts of Parliament of 1813 and 1834, a new commerce in raw produce had arisen, which was daily increasing in developement. The facts of the transition and change in the com-

* Vide Appendix.

merce were established, as I trust to your Committee's satisfaction, by a reference to the actual exports and imports to and from various countries shewn by the trade returns,* and the general increase of the present commerce of this Presidency, chiefly in raw produce, was shewn to have amounted to one million sterling† during the 10 years expiring in 1849-50, the aggregate exports and imports being at that time very nearly 4 crores.

Aggregate exports and imports 4 crores.

Former anticipation 5½ or 6 crores in 10 years.

15th. Adverting to the intimate connection of the increase of trade with the progress of the country in public works, I had the honor to express my belief that a perseverance in the enlightened efforts then being made for the improvement of the country, would probably cause a much larger increase in our commerce in future years; and I stated that it appeared to me to be a moderate anticipation to reckon it at 5½ or 6 crores at the end of 10 years, and 8 or 10 in 20‡ years.

The anticipation has been more than realised.

16th. Your Committee will, I doubt not, be gratified to learn that the above anticipation has been more than realised by the subsequent progress of our commerce, which has already exceeded the amount of 5½ crores, if we take the value of the exports and imports of last year; and upon the average of the three following 1849-50|| amounts to an increase of very nearly a million sterling beyond that which forms the basis of the comparison above referred to.

Causes of the rapid increase enquired into.

17th. It may perhaps be advisable to glance at the causes which have led to this rapid developement, as it has so much out-stripped the expectations which I ventured to express in my former reports, before endeavouring to estimate the further probable increase. That it has been in part due to the increased exertions which have been made for the improvement of the country, during the last few years, there can be no doubt; but it is possible that there may be other unforeseen causes which have influenced it, more or less, to which I will briefly allude. These are the increased communication with England, there being now three monthly Steamers instead of one, and the greatly increased production of gold, which has, perhaps, given an

* Report 16th December 1851, paras 12 to 24.
† Do. do. para 25.
‡ Do. do. para 27.

|| Average exports and imports of Company's and private merchandise and private treasure.

For 10 years ending 1849-50 390,46,830
For 3 subsequent years 497,47,721
Ditto for the year 1852-53 569,16,213

impulse to the commerce of India, as well as that of all other countries. Both these causes, however, appear to be too recent to have had any very marked effect upon our trade, up to the date of the last returns.

Former anticipation moderate.

18th. I trust that your Committee will be prepared to agree with me in my opinion that the estimate formerly made was a moderate one; and in the hopes that such is the case, I will proceed to lay before you a comparison of the grounds upon which that estimate was based, with the similar data on the present occasion.

Comparison of former with present grounds for anticipation.

1st. We then had a statement of the gradual increase of commerce at the rate of 10 lacs per annum. We now have a statement of its increase during subsequent years with more than threefold rapidity.*

2d. We then knew merely the general desire and endeavour of the Government to improve the country, coupled with evidence of the interest taken in the subject of public works by the appointment of a commission to enquire into the best means of promoting them. We now have, not only the report of that commission urging in the strongest terms the immediate construction of roads and communications of all kinds, for the improvement of commerce, and shewing the large benefits to be derived from them, but also the facts of the Honorable Court having earnestly engaged in the prosecution of this most important enterprise, and the actual completion of a contract for the expenditure of 4 crores in 5 years within this Presidency, in the construction of a line of railway; and arrangements made for the speedy negotiation of further contracts of the same kind.

Greatly improved prospects of trade.

Reality of these causes of anticipation.

19th. We have besides the facts, that the expenditure just referred to has actually begun; that the attention of all the highest authorities has been forcibly drawn to the subject, and the most vigorous measures advocated and received with approval in every quarter.

20th. In my former report I adverted to the incalculable effects upon our commerce which would ensure from opening the navigation of the rivers Godavery, Kistnah, Cavery, Colleroon, and the construction of canals, regarding which no step had then been taken. We now have preliminary measures actually finished in regard to the chief one, the Godavery; and it appears certain that the accomplishment of this object, in which there is no insurmountable difficulty, will lead to a trade in cotton of millions sterling per annum.

Results to be expected from opening the navigation of the Godavery.

* Vide para 16.

21st. I am aware that there are some who look upon such a notion as visionary, under the idea that the navigation of the river is impracticable; but in a measure of such vast importance these objections cannot but yield to the facts that the trial has been successfully made, a cargo boat having been actually taken to the heart of the cotton country, and the few obstacles which have been met with ascertained by careful examination to be of insignificant importance.

Objection to these views met.

22d. Under these circumstances, remembering that our present commerce, on the average of the three past years amounts to 5 crores, and assuming that the energetic measures for the improvement of the country, in regard to its communications and public works, will be preserved in, I trust that your Committee will agree with me that it is a moderate anticipation if I estimate our united exports and imports 10 years hence at 9 or 10 crores, and 20 years hence at 18 or 20.

Summary of the grounds for anticipating increase of trade.

Expected increase stated at 9 or 10 crores in 10 years.

23d. I will now solicit your Committee's more particular attention to the past history and future prospects of the bullion trade.

Bullion trade.

24th. In my former reports, after pointing out the transition which our commerce was undergoing, and to which I attributed the decline in the bullion trade, I stated my opinion that the crisis of that decline had been reached in 1847; that it must necessarily improve, as our new commerce became established, and that it would probably equal, if not surpass, the former average of 32½ lacs per annum.* I added that, having in view the permanent rather than the immediate prospects of the country, that estimate must be viewed as beneath, rather than beyond, the fair probability.†

Former views recapitulated.

25th. By the Statement annexed in the margin, your Committee will perceive that these anticipations have been already more than verified. For while in the short space of 3 years the commerce has increased to an average of 5 crores, the bullion trade has risen to an average of nearly 38 lacs,‡ having during the present and last year far surpassed the amount calculated on. Though the expansion

1847-48	1,12,676
1848-49	1,77,896
1849-50	2,44,319
1850-51	12,00,113
1851-52	18,74,966
1852-53	46,65,176
1853-54	*49,23,033

* As since realised.

* Report 11th April, para 20.
† Supplementary Report, para 53.
‡ 37,89,317 average of 3 years.

has been rapid, yet I would respectfully call your attention to the fact that it has hitherto been steadily progressive, from the date of the lowest depression above referred to.

Importance of ascertaining the cause of this increase.

26th. It seems to be of much importance that the causes of this increase should, if possible, be ascertained, otherwise we may be tempted to believe that it is merely accidental, or temporary, as was indeed thought in 1851. I would therefore respectfully request your particular attention to the Statement C annexed, which has been carefully compiled from the trade returns, beginning from the earliest, and ending with the latest dates of which I have official information; and containing all the data which bear upon the question.

Cause of the import of bullion.

27th. From this table it appears, that our export trade of merchandise has gradually increased from an average of 155 lacs during the 10 years ending in 1833-34, to an average of 243 lacs during the last 10 years; a difference of 88 lacs in 19 years, or an increase at the rate of $4\frac{1}{2}$ lacs per annum. It is also manifest that our import trade has been unable to keep pace with this accelerated export; that during the same period it increased from an average of 94 lacs to 124 lacs, a difference of 30 lacs, or at the rate $1\frac{1}{2}$ lac per annum.*

Owing to rapid developement of export trade.

28th. This difference of growth, your Committee will observe, has been partially met (as I intimated in my Supplementary Report)† by the remittance of the Honorable Court of Director's bills, supplying the place of imports of treasure. During the first 10 years subsequent to their first issue in 1834-35 they amounted to an average of $10\frac{2}{3}$ lacs per annum. During the last 10 years they have averaged 36 lacs.

29th. Reckoning these as imports, it may be useful to mark how the gradual enlargement of our commerce in exports has been met and adjusted by the smaller enlargement of the imports of merchandise, made up by the Honorable Court's bills and treasure. Thus the average increase of imports during the 10 years ending with 1852-53, compared with the 10 years ending 1833-34 is as follows:

* We must be careful not to confound the growth of the trade with the excess of exports over imports; the former is $4\frac{1}{2}$ lacs per annum, the latter 29 lacs during the last 10 years.

† Para 35.

	Lacs
Increase in the annual average import of merchandise*	30
Increase in Company's bills†	36
	66

Examination of the increase of exports and imports during last 10 years.

30th. Turning our attention again to the exports, we find that, in addition to the increase of the exports of merchandise, above shewn to be 88 lacs,‡ there was an increased export of treasure during the last 10 years, to an average extent of 5 lacs per annum, total 93 lacs.

31st. The total exports of merchandise and treasure having thus increased by the average annual sum of 93 lacs of Rupees, and the total imports having increased by only 30, made up by the Honorable Court's bills to 66, the difference of 27 lacs has been adjusted by an increased import of bullion and treasure, to the amount of $26\frac{7}{8}$|| lacs of Rupees, as your Committee will perceive by Statement C.

Examination of increase of exports and imports for the last 3 years.

32d. In the same manner, if we examine the last three years, during which so great an increase in the bullion trade has taken place, and compare them with the same period, viz. the first 10 years contained in the Statement, we find the case stands as follows:

	Lacs
* Average imports merchandise up to 1833-34	94.17
do do 1852-53	124.84
Increase	30.67

† Average Honorable Court's bills up to 1833-34	0.17
do do 1852-53	36.23
Increase	36.06

‡ Para 27.

	Lacs
|| Average imports of treasure 10 years ending 1833-34	29.85
do 10 years ending 1852-53	56.72
Increase	26.87

	Lacs
Increase of the average annual export of merchandise*	....123.43
Increase of treasure do	...... 0.41
Total increase of exports	....123.84

Against which we have to set the following :

	Lacs
Increase of merchandise imported†	.... 34.94
Honorable Court's bills‡	.... 40.29
Total average increase of imports	.... 75.23
Leaving a difference of	.... 48.61

still to be made good ; and your Committee will perceive that the average increased imports of bullion and treasure during these 3 years amounted to 47.15 annually.‖

Examination of the increase of exports and imports last year.

33d. Finally, if we take the last single year contained in the Statement, and make a similar comparison, we find that there is an increase in merchandise exported amounting to 173.76 but a falling off in the export of treasure to the extent of 8.62 leaving the difference, increase of exports equal to 165.14.§

	Lacs
* Average exports up to 1833-34	154.74
do do 3 years 1852-53	278.17
Increase..	123.43

	Lacs
† Average imports up to 1833-34	94.17
do do 3 years 1852-53	129.11
Increase..	34.94

	Lacs
‡ Average Honorable Court's bills up to 1833-34	0.17
do do 3 years 1852-53	40.46
Increase...	40.29

	Lacs
‖ Average imports of treasure up to 1833-34	29.85
do do 3 years 1852-53	77.00
Increase..	47.15

	Lacs
§ Average exports of merchandise and treasure up to 1833-34....	167.51
do do last year 1852-53....	332.65
Increase..	165.14

34th. During the same year the increase of imported merchandise was 33.55. The Honorable Court's bills 52.14. Total increase of imports, exclusive of treasure 85.69.* Deducting the increase of imports from the increase of exports, the balance remaining to be made good by treasure is 79.45 and your Committee will perceive that the increased importation of treasure and bullion amounted to 78.93 lacs value.

Cause of the very large import of bullion and treasure last year.

35th. These particulars will be more clearly seen by the Table which I have annexed in the margin, and the comparison satisfactorily shews the dependence of the bullion trade upon the relative growth of our imports and exports of merchandise ; I hope also that I may consider the following propositions to be satisfactorily established by the evidence now before us.

Correspondence of the increase of exports and imports, made good by treasure.

Table shewing the increase in exports and imports, compared with the 10 years ending 1833-34.

	Increased Imports.				Increased Exports.
	Increase in Merchandise.	Increase in Honorable Court's bills.	Increase in Treasure.	Total Increase.	Increase in Merchandise and Treasure.
Ten years ending 1852-53	30	36	27	93	94
Last 3 years ending 1852-53 ..	35	40	47	122	124
Last year 1852-53	33	52	79	164	165

The increase, only, in the exports and imports is here noticed, because there is never an exact agreement between the total imports and the total exports ; the latter being uniformly in excess by about 40 to 50 lacs, owing to the remittance of bills on account of parties withdrawing funds from India, Officers retiring from the Honorable the Company's service, families &c.

Conclusions.

1st. That the import of merchandise has not been able to keep pace with the export of the same during past years, as stated in my Supplementary Report ;† whence we may infer, that if the exports should be much farther, and rapidly increased, the imports must fall short in a still greater ratio than heretofore.

	Lacs
* Imports of merchandise and Honorable Court's bills up to 1833-34.......	94.34
do do last year 1852-53.......	180.03
Increase..	85.69

† Paras 36 and 42.

2dly. That had it not been for the Honorable Court's bills, an import of bullion and treasure to the extent of 461* lacs altogether, (362 lacs within the last 10 years) over and above what has been imported, must have taken place; and, coming from England, must have been brought to the Mint.

Conclusions.

3dly. That should any circumstance cause a stoppage of the Honorable Court's bills, an increase in the import of bullion must immediately take place, to the extent of 36 to 40 lacs per annum, even if no increased excess of exports over imports of merchandise should happen simultaneously; but if the latter circumstance should be also called into operation, a still larger extension of the bullion trade must ensue.

Effect of a reduction of the amount of Honorable Court's bills.

36th. Your Committee are aware that there is some probability of the event just referred to taking place, as the Honorable Court have entered into contracts with various Railway Companies, which seem likely to diminish their demands upon the Indian Treasuries. In respect to the Madras Presidency, the engagement entered into guarantees the completion of work estimated at 4 crores of Rupees within a period of 5 years; and as I understand the proportion of that amount disbursed within the country will probably be about one half, it would appear that the drafts from the Treasury will be at the rate of 40 lacs per annum. Other contracts are also in contemplation, and as the payments thus made are replaced by cash paid in London, and thus have precisely the financial (not commercial) effect of bills, it is most probable that the Honorable Court will greatly diminish, if not altogether put a stop to further issues of the latter.

That reduction is probable.

37th. Considering then the following facts viz.

Summary of present prospects of bullion trade.

1st. That at the present rate of increase (i. e. of the last 10 years over the preceding 9†) there will be a further excess of exports of merchandise and treasure over imports of merchandise, to be met by treasure or Honorable Court's bills, on the average of the next 10 years, to the extent of 29 lacs per annum.‡

* Vide Statement C.

† Vide Statement C.

	Lacs
‡ Increase of exported merchandise and treasure	52.29
Increase of imported merchandise	23.25
Average increased excess during 10 years ending 1852-53	29.04

2dly. That for the reasons given in paras 19th, 20th, and 21st there is strong probability that the rate of increase will be greatly accelerated, in which case the excess will be proportionably increased.

3dly. That there is every probability that the Honorable Court's bills, now averaging 36 lacs per annum, must cease, or be greatly diminished, and their place taken by bullion.

Summary of present prospects of bullion trade.

4thly. That on the average of the last 5 years, the existing bullion trade amounts to 25½* lacs per annum.

5thly. That for all new enterprises commenced in this Presidency by means of European capital, funds can only be remitted in bullion, and

6thly. That the country is in a state of exhaustion for want of it, and that by the increased, and daily increasing communication with England it has been brought into close approximation with a country, in which the precious metals, estimated in food and labour, have little more than one fourth the value they have here, which value is daily and rapidly diminishing, by the large importations from the mines. I trust that your Committee will consider me quite moderate when I estimate the bullion imported during the next 10 years at an average of 84½† lacs per annum.

Future trade estimated at 84½ lacs.

38th. I would respectfully beg to draw your attention to the facts, that in this estimate I have assumed the present trade on a 5 years average at 25½ lacs, though the average of the last 3 years is 38‡ lacs; also the average increase of trade at only what it would amount to at the rate of acceleration of the last 10 years, making no allowance for the great acceleration which has taken place in the last three, nor for any greater increase which may be expected hereafter. I have also supposed 6 lacs of the Honorable Court's bills to continue to be drawn annually.

Estimate justified.

39th. I cannot refrain from adding, that but for my desire to take an unexceptionably safe view of the prospects of this trade, I should have no hesitation in expressing my belief that, unless a total change in our commerce is brought about by

More may be anticipated.

* 25,62,495 vide para 25.

† Present trade	25½
Increase	29
Bills replaced by bullion	30
	84½

‡ 37,89,347.

unforeseen causes, the day is not far distant when it will surpass a crore of Rupees per annum. As this anticipation may perhaps seem inconsistent with the comparisons which I formerly drew of the trade of Calcutta and Bombay, and their imports of bullion, the most favorable of which would give, in proportion to a commerce of 10 crores, a bullion trade of only 68⅓ lacs, it seems necessary that I should explain that, as is obvious from the nature of the case, these comparisons can only have a very general application. It depends upon the peculiar circumstances of the commerce of a country; circumstances infinitely various and diversified, what part of its returns shall be made in treasure, and I believe we should not be safe in assuming more than this, that, apart from all special reasons, either for or against returns of bullion, we might expect a commerce of a given magnitude to be connected with a bullion trade in proportion to it. In the present case however there are special reasons of the strongest kind, tending to an expectation of the returns of bullion, namely, as I need hardly mention, the exhaustion of the currency, and the next to moral certainties of a rapid expansion of our export trade.

A temporary check not impossible.

40th. At the present moment, indeed, the unsettled state of the political world, and the already existing scarcities both in Europe and in this Presidency might be expected to cause a temporary check to our commerce, and a still more perceptible diminution of the bullion trade, (which is dependent chiefly on the increasing excess of exports over imports.) But this has not yet been in the least degree perceptible,* and even if it were, no accidental contingency of the kind can make any change in conclusions based, as we have seen, upon the steady and uniform results of the last 30 years. It would be idle in me to speculate upon the consequences of a general European war.

Probable amount of Uncurrent coins for recoinage.

41st. By way of completing this part of the subject, by ascertaining what the demand for the coinage of Uncurrent coins is likely to be, I beg to refer your Committee to the Statement forwarded with my letter of the 10th November last, shewing the value of Uncurrent coins received since the date of my former reports. From this it appears that my estimate of 15 lacs has not been realised, only 21 lacs having been received in 2 years; whence, as we may infer that the stock in the country must be reduced very low, I would propose to calculate for the next few years upon the receipt of not more than 5½ lacs per annum.

42d. The total average annual demand for silver coinage likely to be made upon this Mint during the next 10 years, thus amounts to 90 lacs of

* From the 1st to the 15th of this month, the tenders of merchants bullion amount to 6 lacs of Rupees in value.

Summary of the total demand on the Mint 90 lacs.

Rupees; * and if, in estimating the number of *pieces*, an addition of only 20 lacs be made on account of small coins (for with the general revival of trade the demand for small currency may be expected to be greatly increased) the total number of silver coins requisite will come to 110 lacs per annum.

Copper coins.

43d. Regarding the copper coins, I am unable to offer any thing in addition to what was stated in my former reports† when the value was estimated, for reasons therein given, at 1,20,000 Rupees, and the number of pieces at 80 lacs. The total demand then for Mint work, in silver and copper, exclusive of Hyderabad, would thus appear to be as follows:

Aggregate demand in silver and copper by tale, 190 lacs.

	Value.	No. of Pieces.
Silver	90 lacs	110 lacs.
Copper	1,20,000 Rupees	80 lacs.
	91,20,000	190 lacs.

Fifth question.

44th. I am sorry to be unable to offer any reliable opinion on the subject of the probable demand in this Presidency for the proposed issue of copper half pice pieces, but must leave it to your Committee to deal with that subject. I am also unable to give any opinion, on official data, as to the probable demand for the currency of the Hyderabad state, to which I presume will now have to be added that of Nagpore also. In my former report,‡ I stated from private information that the currency was estimated at from 2 to 3 crores in value, and thence estimated the number of silver and copper pieces requisite to stock the country at 17 or 18 crores which may be particularised as follows:

Sixth question.

Statement in former report.

	Value.	No. of Pieces.
Silver coins	250 lacs	400 lacs.
Copper coins	18 lacs	1,200 lacs.
	268	1,600 lacs.

* Bullion	84½
Uncurrent coins	5½
	90

† Report 11th April 1851, para 37.

‡ 11th April 1851, para 42.

45th. Before concluding this report, I trust your Committee will permit me to add a few remarks on the general question, the circumstances of the case having so materially changed, even during the short period which has elapsed since I last had the honor of addressing you, as to call for notice; and 1st I would beg to observe, that the reason of the difference between my present and former estimate of the probable future import of bullion, is the now ascertained existence of facts formerly only matter of conjecture, viz. the actual expansion of commerce, in some degree, consequent upon the improvement of our communications, and the arrangements actually made in connection with the Railway Companies for meeting the demands of the Home Treasury irrespective of bills.

General remarks.

Reason of difference between present and former estimate.

46th. In regard to the latter, it may perhaps be argued that the Honorable Court may possibly still continue to draw bills to the same extent as heretofore, directing a discontinuance of part or all the remittances now made on the public account to Bengal—and thus that the expected replacement of them by bullion will not occur, and this no doubt is true.

Objection met.

47th. It would be presumptuous in me to endeavour to anticipate what the financial adjustments of the Honorable Court may be, but I may venture to remark, that as there can be little doubt that, simultaneously with the disbursements on account of the Railways, to the extent of 40 lacs per annum, and possibly more, an increased outlay by Government, on irrigation, public works, and education, will hereafter be sanctioned, to the extent probably of not less than 20 or 30 lacs per annum, and as it is unavoidable that the revenues of Malabar and Cànara, on average about 20 lacs per annum, should be remitted to Bombay, it does not appear likely that there will be a larger surplus for the next few years, over and above the 90 lacs thus disposed of, available for bills to be drawn by the Honorable Court of Directors, than the 6 lacs which I have already calculated on.

Probability of the future issue of Honorable Court's bills.

48th. I feel bound however to observe, that the outlay above anticipated in public works, may perhaps be more than replaced by increased income, in which case there would still be a surplus of 20 or 30 lacs disposable, and in this case it must remain with the Honorable Court to decide, whether it would not be more expedient to lay it out in improving the Presidency, raising the like amount, if required elsewhere, by loan for many years to come, rather than add to the impoverishment of the country, and the contraction of the currency, which have already been brought to their notice.

In case of future surplus revenue.

Drain of specie.

49th. In the statements and comparisons which have been given above, not a word has been said about the export of Treasure on the *public* account, but it was formerly mentioned* that a drain had existed for the last 25 years, and that the country was then 789 lacs of Rupees poorer in the precious metals than it was in 1825.† Also that the drain still continued, at the rate of 32 lacs per annum, viz. an export of 60 lacs on the public, in excess of a balance of 28 lacs imported on account of trade. This is now somewhat diminished by the large imports from England, as may be seen by Statement C.

State of exhaustion of specie in this Presidency.

50th. Were the Statements not backed by official returns of undoubted authenticity, the exhaustion of the currency shewn by them would be incredible, and it would seem to be absolutely impracticable that the plan of establishing a bullion depôt in Madras, and forwarding it all for coinage to Calcutta could be carried out, *except on the principle of its immediate return* in the shape of coins; for your Committee have estimated the "corpus" of the currency at less than 4 crores, more than half of which is constantly locked up in the Government Treasuries; and the drain as above stated was, till very lately, 32 lacs per annum, so that the closing of the only opening whence the deficiency can be supplied, viz. the trade with Europe, would seem sure to bring about an early bankruptcy. It is true that the establishing of a bullion depôt and the immediate return of the bullion in coins would have precisely the same effect upon commerce and the currency that a Mint would have; and also, that the like arrangement, without the return of coins, would have the same effect as a Mint and the transmission of specie; but it may be remarked that if the coins are to be returned, there is an end of the economy of the bullion depôt; and having in view the exhaustion and contraction of currency abovementioned, and its disastrous effects upon the country, especially in a season like the present, in prospect of a scarcity, by depriving the inhabitants of the possibility of sending abroad for food, the Honorable Court will probably consider it expedient so to adjust their finances as to lead to the smallest possible withdrawal of specie hereafter.

State of exhaustion of specie in this Presidency.

Difference between a bullion depôt and a Mint.

Fatal consequences of contraction of the currency in time of scarcity.

51st. With this object, it may be proper to remark that, as a system, it would be far better for the country that any surplus which Honorable Court may decide upon taking from the revenues of this Presidency should

Preference for bills over export of specie.

* Supplementary Report, 16th December 1851, paras 30 and 35.

† Do. do. paras 30, 31 and 32.

be drawn by bills, than by the exportation of specie to other Presidencies; because in the former case, although the bills would interrupt bullion to their own value, yet not a particle of silver would be taken out of the country, and the whole amount of the further remittance in bullion required by commerce would come into use immediately, instead of being dependent upon return from Bengal.* There is another reason also why the bullion ought not to be sent for coinage to Bengal.

Reasons for the preference.

52d. In my former report† I pointed out that the Calcutta Mint had already nearly as much work as it was calculated to perform; it was shewn that the average number of pieces coined by it during the preceding 5 years was nearly 58 out of 62 millions, its full complement; that in two out of the 5 years it had exceeded the complement, although a large part of its most important work had never been adequately performed, viz. the small currency. Moreover that the work was increasing; since then I have been informed the Mint has actually had to work *extra* hours for many weeks, and this too from the mere increase of the bullion trade, consequent on the ordinary fluctuation or expansion of commerce.

Incapability of the Calcutta Mint to feed the currency of all this side of India.

Statements in former reports quoted.

53d. Since my last report the following events have occurred.

Those arguments strengthened by additional facts.

1st. A large part of the Hyderabad territories has been added to the British dominion.*

2d. The whole of the Nagpore territories have also lapsed to the state.

3d. The Province of Pegu has likewise been annexed.

54th. I am not able to state correctly the size and population of the countries above mentioned, but I should suppose that in point of area, they were unitedly at least as large as France‡. That is to say, since the first discussion of this question, our territories have been increased by a space equal to the whole area of the Madras Presidency and its dependent States; and if the Calcutta Mint was not, as I believe, equal to the maintenance of the currency of Madras, in addition to the proper performance of the duties it ought then to perform, it is "a fortiori" more incompetent to it now, in addition to this new burthen.

Large increase of the territories to be supplied.

* An exception might perhaps be made in regard to gold, as it is not part of the proper currency, and it comes to the Mint in such very small quantities, and at such irregular periods, that it would be a great convenience if the supplies of two or three Mints were gathered together so as to amount to a sufficient sum to operate on. The aggregate amount of all the gold tendered to this Mint during the last 9 years, does not constitute a single day's work, though its value is 6 lacs of Rupees.

† 11th April 1851, para 53.

‡ Vide report 16th December, para 50.

Inadequacy of the powers of the Calcutta Mint.

55th. But besides this, I must point out to your Committee, that the same circumstance which promises to add to the bullion trade of this Presidency, tells with the like effect upon that of Calcutta and its Mint. If the Honorable Court formerly have drawn bills on this Presidency to the amount of 30 or 40 lacs of Rupees, they have drawn them on Calcutta to the extent of 6 or 7 times that amount; and while the arrangements for the prosecution of railways in this Presidency will probably add 30 or 40 lacs to the bullion trade here, those for the Bengal Presidency will probably increase the previous importations by from one to two crores. With a Mint already called upon to meet an average demand of 577 lacs, with the power of 625, and since saddled with the provision of the future currency of Burmah, besides the addition of 1 or 2 crores annually to that of its own Presidency, I would respectfully leave it to your Committee to state your opinion whether, adverting to the impolicy of allowing a Mint to remain, as a matter of system, pressed to the edge of its resources by the average demand, and therefore sure of embarrassment in event of a crisis, it would be expedient, or even reasonable, to further add the nearly 2 crores of average demand of this, besides the currencies of Hyderabad and Nagpore.

Further reason.

Large increase to be expected in bullion trade of Calcutta.

Immense increase in the demand on Calcutta by the currencies of this Presidency, Hyderabad, Nagpore, Burmah, &c.

56th. In my former report* I stated my opinion that in the ordinary progress of civilisation and improvement the abolition of the Madras Mint was a measure which we must expect, but I must beg permission now to modify that opinion. In fact I think it doubtful whether, even when there is direct railway communication with Calcutta, the event I then contemplated, it will be expedient. I am certain that, long before that time arrives the demand will be infinitely beyond the powers of the Calcutta Mint, and that short of that time it would be the reverse of economy to send the bullion to Calcutta.

Former opinion modified.

57th. On further reflection, and especially with reference to the caution expressed in my Supplementary Report,† I would respectfully state my belief that, instead of abolishing Mints, the Honorable Court, if they should succeed in their present purpose of attracting British capital to the public works of

* 11th April, para 88.

† 16th December 1851, para 53.

Enlargement of the powers of the Mints will probably be required.

India, and carrying out the projects of improvement so urgently required by the country, will have to add considerably to the powers of their Mint establishments, or seriously check the advancement of the country, and cramp the springs of industry, by the want of facilities of exchange. We must remember that though the reduction of Mint establishment is the consequence of matured civilisation, there is an intermediate stage of progress which requires the multiplication of them.

Progress of civilisation as to Mints.

58th. In a state of barbarism a nation has no Mints, in a state of the utmost refinement she has reduced them to a minimum, but there is a previous stage of a maximum. Sixteen years ago France had 8 Mints at work, she may hereafter perhaps reduce the number, but she previously had thirteen. In my Supplementary Report,* contrasting the currencies of India and France, I stated that we are far behind that empire in the march of civilisation, but if roads and communications be fully supplied to India, the difference between our civilisation and that of the French provinces will be comparatively small. Already the population is as large, and I should suppose that it will not be questioned that the comparison as to fertility and latent wealth is in our favor. If then France, in the earlier stage of her progress required the united power of 13 Mints to keep up her currencies, I think we may fairly doubt the soundness of the conclusion that our Indian possessions, much more than 4 times her area and population, will in a similar stage require less than 3. It is true that improved communications afford the opportunity for concentrating labour and diminishing the number of establishments, but they do not diminish, but rather increase the amount of work; and it seems undesirable to enlarge a Mint beyond a moderate size, otherwise than on the clearest grounds of economy, which I think it is by no means sure would exist, even if there were direct communication.

France contrasted with this Presidency.

Comparison of the coinage demands of France and India.

59th. If the currency of France now requires an annual coinage of the value of 3 millions sterling† (on further reflection I see no reason to suppose that this is an exaggeration,) can it be thought an unreasonable expectation that, in a similar stage of progress, our territories will require a coinage of 12 millions annually, thus needing the manufacture, including copper coins and small currency, of at *least* 36 crores of pieces per annum; in other words, the full powers of five or six such Mints as that of Calcutta.

Larger powers than those of the Mints of Calcutta, Madras and Bombay will hereafter be required.

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* Para 51.

† Parliamentary evidence of 1837, Art. 1956.

60th. To what extent such a state of advancement is likely to be realised, and how soon we may reasonably look for it, none but the Honorable Court can possibly anticipate, nor indeed can it otherwise be judged of than by observation of the success which may attend their present endeavours to apply the capital of Great Britain to the development of the resources of our vast possessions here; but enough has been said, I trust, to show that the present tendency of events is not properly towards the diminution of Mint establishments, but the contrary; and to account for my qualifying the opinion I formerly gave, by saying that I think the day is far distant, if it should ever arrive, when the abolition of this Mint will be either economical or expedient.

How soon depends on higher authority.

Doubts whether it will ever be expedient to abolish this Mint.

61st. I am the more desirous to submit the above explanation, as I trust that, if your Committee should be satisfied of the accuracy of my views as to the future prospects of the bullion trade of this Presidency, and the inexpediency of abolishing this Mint, you will do me the honor of supporting my proposal, that no time should be lost in enlarging its powers, (more especially with reference to the Honorable Court's orders regarding the Hyderabad currency) and greatly increasing the economy of th[illegible] substituting steam for animal labour in one or two of the processes, and in the repair and improvement of the buildings; I think I may venture to say I am sure, that a comparatively trifling sum laid out in this way would be sufficient to render this Mint equally, if not more economical and efficient than any other in this part of the world.

Steam proposed.

Expense stated to be trifling.

62d. I refrain from troubling your Committee with any details upon this subject at present, hoping to have the honor of doing so in a separate communication hereafter. I may however state, that since my former reports were written, a method has suggested itself to me of adapting steam to the present laminating machinery, so that I have little doubt of being able at an expense of 4 or 5,000 Rupees to double the outturn of the Mint, and greatly increase its economy.

Steam may be supplied to the Laminating department for 4 or 5,000 Rupees.

63d. Should the anticipations set forth in this report be realised, the formation of a depôt here, and removal of the bullion to Calcutta for coinage, would involve a loss of more than forty thousand Rupees per annum; and a few years would prove the disadvantages of the measure. In a few more, when the increasing development of the civilisation of the empire has brought with it the demand for other depôts, and the requirement for

Loss by establishing a bullion depôt 40,000 Rupees per annum.

Mints at other stations on our widely extended coasts, such as Coringa, Cochin, the Punjab, Rangoon, &c. and it is discovered that up to a certain point only bullion depôts are economical, it will perhaps be seen to be a fortunate circumstance, that the Honorable Court have not been induced to destroy the evidence this establishment affords, that for a sum short of half a lac of Rupees, exclusive of buildings, a cheap and perfectly efficient Mint may be constructed, any where, from the resources of the country, capable of executing 3 crores of pieces per annum.

J. T. SMITH,
Mint Master.

Fort St. George, Mint, 28th January 1854.

P. S.—It will be apparent, that throughout the foregoing report, no reference has been had to the possibility of a general European war. Such an event might occur, and have a material influence upon the commercial relations of the whole world; but it is out of my power, and appears to me would be beyond my province, to endeavour to predict either the event or its consequences.

J. T. S.

APPENDICES.

A.

Statement shewing the actual expenses incurred in the Madras Mint from 1843-44 to 1852-53 being 10 years, including Assay and Mint Committee Offices.

Years.	Mint Master's salary including establishment.			Contingent, servants and charges including bullocks purchased and hired.			Value of articles supplied from Stores including all charges from other Departments, and certain losses in the value of store articles, omitting value of acids.			Amount expended in making new and repairing old machinery and Mint buildings.			Total Mint expenses for each year.			Total Assay Office expenses for each year.			Total Mint Committee Office expenses for each year.			Grand total Mint, Assay & Mint Committee Office expenses for each year.		
	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.
1843-44	39,965	13	11	38,144	8	11	14,321	14	7	1,517	13	1	93,950	2	6	30,593	10	3	4,117	0	0	1,28,660	12	9
1844-45	44,259	2	11	36,922	8	9	8,996	3	6	982	7	1	91,160	6	3	30,970	15	4	4,444	15	5	1,26,576	5	0
1845-46	41,363	4	7	37,536	4	4	11,137	14	11	6,287	10	2	96,325	2	0	28,987	2	5	3,850	6	7	1,29,162	11	0
1846-47	43,028	2	2	48,324	9	3	8,208	14	2	981	7	1	1,00,543	0	8	24,351	8	1	3,670	3	10	1,28,564	12	7
1847-48	49,894	7	5	45,453	4	0	6,849	13	7	......	..	..	1,02,197	9	0	33,059	1	9	3,685	10	8	1,38,942	5	5
1848-49	45,480	14	1	25,118	13	4	4,451	14	5	......	..	..	75,051	9	10	30,542	11	11	3,671	4	2	1,09,265	9	11
1849-50	45,279	13	4	20,019	0	1	3,047	0	2	875	8	2	69,221	5	9	30,587	11	5	3,639	4	0	1,03,448	5	2
1850-51	45,609	11	5	24,708	2	5	5,172	8	9	......	..	..	75,490	6	7	30,087	12	11	3,683	6	10	1,09,261	10	4
1851-52	47,860	5	9	26,198	13	5	5,834	8	10	......	..	..	79,893	12	0	30,974	4	7	3,647	13	1	1,14,515	13	8
1852-53	48,110	14	3	28,084	5	7	5,356	7	5	934	10	0	82,486	5	3	25,363	15	11	3,673	9	9	1,11,523	14	11
																†2,183	8	1				†2,183	8	1
Total ..	4,50,852	9	10	3,30,510	6	1	* 73,377	4	4	11,579	7	7	8,66,319	11	10	2,97,702	6	8	38,083	10	4	12,02,105	12	10

Fort Saint George, Mint, 28th January 1854.

* The value of Nitric and Sulphuric acids is omitted in the charges under this head, as the acids were produced from Sulphur and Nitre already debited, and of labour and other charges debited in the contingent bills.

† Value of articles supplied from Mint Stores, Assay Muffles received from England, and loss in gold and silver sustained in Assay processes—during the 10 years.

E. E. per J. T. SMITH,

Mint Master.

B.

Statement shewing the net gain on the Gold, Silver and Copper coinage from 1843-44 to 1852-53 being 10 years.

Years.	Seignorage and refining charge.			Gain on copper coins after deducting the value of the copper.			Gold and silver recovered from old dross.			Silver alloy recovered from the gold.			Excess in gold and silver.			Unserviceable articles, acids, &c., sold at the Mint.			Excess copper scissel sold.			Total.		
	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.
1843-44	23,943	9	6	66,386	5	1	296	13	8	......	..	..	324	12	0	146	13	0	......	..	..	91,098	5	3
1844-45	8,130	15	3	1,39,504	10	11	510	14	5	2,580	7	10	1,829	8	0	503	6	5	......	..	..	1,53,059	14	10
1845-46	10,841	2	6	1,28,027	9	6	80	8	2	107	15	9	2,414	12	8	501	6	9	......	..	..	1,41,973	7	4
1846-47	4,305	2	4	1,02,669	14	2	142	6	8	7,354	2	6	6,623	3	10	1,171	3	0	......	..	..	1,22,266	0	6
1847-48	2,254	3	3	1,04,004	15	5	......	..	..	4,934	13	0	2,182	7	3	859	0	0	......	..	..	1,14,235	6	11
1848-49	3,639	3	0	44,375	8	0	......	..	..	......	..	..	683	13	6	2,539	14	10	......	..	..	51,238	7	4
1849-50	4,898	1	6	57,713	6	3	......	..	..	......	..	..	697	2	8	598	9	4	......	..	..	63,907	3	9
1850-51	24,044	8	9	62,498	10	0	......	..	..	......	..	..	1,842	2	9	698	14	1	......	..	..	89,084	3	7
1851-52	34,623	14	8	47,341	5	7	......	..	..	......	..	..	3,318	12	4	1,786	13	10	......	..	..	87,070	14	5
1852-53	1,17,342	15	3	54,724	2	10	258	2	8	......	..	..	7,484	0	9	1,644	5	4	484	4	5	1,81,937	15	3
Total...	2,34,023	12	0	8,07,246	7	9	1,288	13	7	14,977	7	1	27,400	11	9	10,450	6	7	484	4	5	10,95,871	15	2

DEDUCT.

	C. Rs.	A.	P.	C. Rs.	A.	P.
Difference between gain and loss of copper scissel sold..................	35,269	5	0			
Wastage and loss of gold and silver in 1843-44 and 1845-46............	299	6	8			
Wastage and loss of copper in 1843-44, 1844-45 and 1851-52............	277	1	7			
				35,845	13	3
Net Profit...				10,60,026	1	11

Fort St. George, Mint, 28th January 1854.

E. E. per J. T. SMITH, *Mint Master.*

C.

Statement shewing the Imports and Exports of Public and Private Merchandise, Company's Bills and Private Treasure, from 1824-25 to 1852-53, being 29 years.

Years.	Imports.						Exports.			
	Merchandise.		Company's Bills.		Private Treasure.		Merchandise.		Private Treasure.	
		Lacs		Lacs		Lacs		Lacs		Lacs
1824-25		104.55		00.20		44.00		176.21		4.42
1825-26		100.30		00.19		37.05		173.86		5.38
1826-27		88.46		00.08		32.74		148.77		8.98
1827-28		98.10		00.32		36.28		163.27		10.12
1828-29	94.17	94.26	0.17	00.37	29.85	26.31	154.74	166.07	12.77	9.91
1829-30		96.39		00.09		22.40		165.20		12.65
1830-31		86.82		00.16		20.39		133.53		7.85
1831-32		75.03		00.08		26.33		141.67		17.90
1832-33		94.70		00.00		25.43		140.36		26.93
1833-34		103.10		00.20		26.76		138.46		23.67
1834-35		97.72		1.13		33.42		167.00		11.06
1835-36		89.65		2.66		32.65		191.46		8.41
1836-37		105.62		30.18		33.28		221.07		8.49
1837-38		100.45		19.55		25.35		163.17		17.25
1838-39	101.59	103.48	10.79	15.44	30.64	35.28	198.18	189.72	9.79	15.66
1839-40		104.77		3.73		27.88		199.83		11.10
1840-41		113.76		6.85		30.32		198.80		10.02
1841-42		105.24		11.42		28.89		225.60		3.33
1842-43		93.66		6.17		28.68		227.00		2.82
1843-44		98.47		20.28		49.08		222.96		18.33
1844-45		142.45		24.65		65.43		268.34		7.42
1845-46		124.10		50.90		66.01		241.06		9.06
1846-47		126.67		38.53		49.60		241.08		31.30
1847-48	124.84	120.51	36.23	46.61	56.72	37.00	243.	195.90	17.26	35.52
1848-49		124.92		17.00		26.75		197.34		22.38
1849-50		123.93		43.02		42.30		229.28		9.10
1850-51		131.30		37.77		60.42		256.37		11.97
1851-52	129.11	128.25	40.46	31.30	77.	61.79	278.17	249.65	13.18	23.42
1852-53		127.72		52.31		108.78		328.50		4.15
Total..		3,104.52		461.19		1,141.56		5,761.53		388.50

Fort St. George, Mint, 28th January 1854.

E. E. per J. T. SMITH, *Mint Master.*

REPORT OF THE 11TH APRIL 1851.

ABSTRACT.

INTRODUCTION.—Analysis of the subjects to be investigated, and division into five Sections.

SECTION I.—*Expenses.*

Paras 1 to 6. The supposition that the Mint expenses have increased of late years, seems to be founded on a mistake, owing to the copper used for coinage being reckoned in the expenses. They have not increased but fallen off. Latterly as much as 22 per cent.

6 to 9. Review of aggregate expenses and profits for 9 years. Reason of the former being heavy, stated to be the extraordinary demand for the recoinage of the currencies previous to 1835. The whole expenses have been less than they could have been by any other arrangement.

9 to 16. Economy of the Mint of late years shown by comparison with former years, and with the results obtained when copper coinage was carried on by the late Dr. Bannister, without Mint Master or any establishment. By the latter comparison, a saving of 3,38,000 Rupees in 9 years is exhibited.

16 to 22. The reason of the expenses having exceeded the profits shown to be, the excess of the expenses of assaying the bullion; which instead of reaching the Mint with a net profit of seignorage, to pay costs of coinage, has of late years come to it with a balance of debt of 1¾ lacs of Rupees.

22. Statement of the expenses of coinage for various amounts of work in silver and copper.

SECTION II.—*On the decline of Merchants bullion and Seignorage.*

23 to 27. The former amount of bullion purchased by the Mint stated to be 32½ lacs of Rupees per annum. The nature of the commerce on which this was founded, stated, and the change which it is undergoing pointed out. In consequence of the transition, the bullion trade has declined. Reasons given why it must be revived.

Paras 28 & 29. Evidences of the revival pointed out, a great change has taken place since 1847-48 and in the present year there is a large importation of bullion.

SECTION III.—*Decline of Uncurrent coins and Copper coinage.*

30. The quantity of Uncurrent coins requiring recoinage is not likely to fall off for a considerable time. The average amount likely to be brought to the Mint for some years to come estimated at 15 lacs Rupees value per annum.

31 to 34. Statement of the amount of copper coinage, it has increased steadily from its first issue. The same has been the case in Bengal for the last 50 years.

36. Reason stated why it cannot decline for many years to come.

37. The probable future demand of copper coins estimated at 80 lacs of pieces, the value 1,20,000 Rupees.

38 & 39. Summary of future ordinary demand for Mint work.

40. Future profits estimated at 1,40,605 Rupees.

41 to 46. Extra demands for Mint work stated. Hyderabad currency calls for reform, requiring 17 or 18 crores of pieces. Ceylon, a currency required—A coinage of single anna (silver) pieces called for. Increase of demand on the Madras Mint, whenever the Mints in the Hyderabad state may be closed, adverted to. The demand for the coinage of gold which would ensue, if the restriction to the Company's standard were removed, pointed out.

47. General review of the work of the last 9 years, and the necessary improvement in the profits pointed out.

SECTION IV.—*Capability of the Calcutta Mint to coin for the Madras Presidency.*

48 to 52. Power of the Calcutta Mint stated, its average yield 2½ lacs per day, or 625 lacs per annum.

53, 55. The average demand at present shown to be 577 lacs per annum, and it is increasing so quickly that in the course of 11 years there will be nearly 2 crores of pieces per annum unprovided for.

56, 58. The wants of the country are not satisfied, the small silver coins have not been manufactured in due proportion, proved by reference to the out-turn of the Calcutta Mint since 1833-34.

Paras 59, 60. In Madras, for every 100 whole Rupees there are coined 85 small coins—in Calcutta only 15½. No small copper coins have been fabricated.

60. A still smaller currency necessary. All these demands would exhaust the powers of the Calcutta Mint for the next century.

61, 62. Objection to close the Madras Mint on account of the small coins. Better employ it in coining small coins for all India. Conclusion that the Calcutta Mint is not able at present to undertake the coinage for the Madras Presidency.

Section V.—*The saving to be effected by reducing the Madras Mint to a bullion depôt, and executing all the coinage in Calcutta.*

63. The real economical question shown to be the comparison of expense of the various methods of performing the necessary work.

64. A *supposition* made in order to an estimate.

65 to 68. Method of calculating the *increase* of expense occasioned by an increase of work, *supposing* the coinage done in the Calcutta Mint. The cost shown to be 132-6-3 per lac of pieces.

69 & 70. The wear and tear of the machinery calculated, and the proportion chargeable on the Madras coinage shown to be 3,750 Rupees per annum.

71 to 73. The costs of transport, shipping, contingent charges, and insurance for treasure sent to and from Calcutta for coinage, stated.

74 & 75. Cost of the establishments which must be retained at Madras, in event of the coinage being done in Calcutta, stated.

76. Summary of all the expenses of employing the Calcutta Mint, amounting to Rupees 1,14,555.

77 & 78. Objection to part of the estimate obviated.

79 to 83. The expenses of the same coinage if done in Madras calculated at 1,13,399 Rupees.

84 & 85. Reductions from this estimate.

86. The net comparison stated at Rupees 1,10,355 in Calcutta, and Rupees 1,05,699 in Madras. Further reduction by steam machinery stated to be 20,000 Rupees per annum.

Para 88. Conclusion. The abolition of the *Madras* Mint stated to be eventually probable, in the progress of improvement and civilisation, but that certain preliminaries first need to be established.

89. 1st. The commerce of the Presidency should assume a settled condition.

89. 2d. The completion of the stock of small coins, and their *fixture* in the country. The necessary conditions for this.

91. 3d. The same with regard to copper coins.

92 & 93. It is inferred from the Statements of probable coinage demands and profits already given, that no reduction in the Assay Office, at present, except that mentioned para 84 will be considered necessary; and that there is no fear of the Mint, paying its own expenses and yielding a profit.

94. It is stated that, except upon the supposition of all or most of the bullion sent to Calcutta *not* being returned thence, the present arrangement is more economical than any which can be devised.

REPORT.*

UPON THE VARIOUS POINTS OF ENQUIRY REGARDING THE MADRAS MINT SUGGESTED BY THE GOVERNMENT OF INDIA.

Para 1. The subjects to which attention is particularly called by the Government of India are the following.

Subjects of enquiry.

1st. The increased charges of the Madras Mint of late years.

2d. The falling off of the bullion brought by merchants to the Madras Mint, and of the seignorage paid thereupon.

3d. The large proportion of Uncurrent coins recoined of late years on account of Government, and the probable decline of this supply, by the exhaustion of the old currency; as well as the probable failure of the profits of the copper coinage, by the completion of the stock requisite for the country.

4th. The capabilities of the Calcutta Mint to execute the coinage of the Madras Presidency; in connection with the facilities for its transport, to and fro, by the P. and O. S. N. Company's Steam vessels.

5th. And lastly, the saving to be effected by reducing the Madras Mint to the simpler duties of a bullion depôt, and causing all the coinage to be executed by the Calcutta Mint.

SECTION I.—*Increased charges of the Madras Mint of late years.*

Supposed increase a mistake.

2. This part of the enquiry seems to have been founded upon a mistake, arising from the grand totals at the foot of the debit side of Table B, forwarded by the Govern-

* With 13 Appendices.

ment of India (of which copy is annexed Appendix I) having been taken to represent the charges of the establishment. The progressive increase up to 1848, as shown in the margin, is occasioned by the circumstance of their including under the heads of "Value of Stores received from England," and "Purchase of Copper" the cost of the copper used in coinage, which has no connection with the expenses proper of the Mint. If this item amounting in the 9 years to nearly 10½* lacs of Rupees, be struck out from the abovementioned heads, the sum total of which is 11,18,062 Rupees there will remain only 70,684 Rupees; which sum, together with the item "supplied by other Departments" (7,493 Rupees) applies to store articles intended for the Mint consumption, but not actually used, the value of such part of them as has been consumed being already charged in the annual expenses exhibited in the upper part of the Table B, and the rest of the articles being still on hand.

1841-42	1,17,779
1842-43	1,95,927
1843-44	2,13,387
1844-45	3,17,427
1845-46	2,35,218
1846-47	4,71,726
1847-48	5,49,082
1848-49	1,07,540
1849-50	1,10,629

3. All the other items in the lower two Sections of the Table, besides the two just remarked upon, are marked by the Government of India as being of doubtful application. They have no connection with the expenses of the Mint.

4. There is no expense actually incurred in the working of the Mint which is not included in the upper Section of Table B,† of which an abstract, showing the total for each year, is given in the margin. On examining these totals it will be observed that there is a remarkable falling off in the two last years, the average expense of the first seven years ending 1847-48 being 1,20,606 Rupees, and the expenses of the two following 1,05,085 Rupees, and 99,579 Rupees, the last a reduction of more than 20,000 Rupees per annum.

1841-42	1,06,011
1842-43	1,40,042
1843-44	1,15,023
1844-45	1,17,612
1845-46	1,12,222
1846-47	1,21,404
1847-48	1,31,931
1848-49	1,05,085
1849-50	99,579

Madras Mint expenses have been reduced in 1848-49 and 1849-50.

* 10,47,378 Rupees. There have been also other purchases of copper which are not included in Table B, but they are of small amount comparatively.

† The entries in Table B cannot be exactly traced in the Mint books, but the general result is not far from the truth, the difference being nearly 38,000 Rupees in the total of the 9 years expenses. It has therefore been considered better to adhere to it in this place than to substitute fresh Statements. The true expenses of each year will be found in Appendix 13, after deducting the Assay and Mint Committee Offices.

5. All these sums, however, include the expenses of the Assay and Mint Committee Offices, and as this Department has no control over those expenses, which have on average of the 7 years come to 33,399 Rupees per annum, the real saving has been in a greater ratio than appears by the above Statement; namely from an average of 87,461 Rupees previous to 1848, to 70,870 Rupees in 1848, and 65,220* Rupees in 1849, the latter being a reduction of more than 25 per cent.

Reduction in 1849-50 was 25 per cent.

6. The aggregate expenses of the Madras Mint for the 9 years ending April 30th 1850 have been 10,48,909 Rupees as shown in Statement B, sent by the Government of India. Of this 2,67,187 Rupees are on account of the Assay Department, 33,406 Rupees for the Mint Committee Office, and the remainder 7,48,316† Rupees for the actual Mint expenses. The net profits during the same period have been 8,20,734‡ Rupees, as shown in Appendix 7, which it will be observed falls short of the entire charges by 2,28,175 Rupees, a sum less than the charges of the Assay Department. Irrespective of them, the Mint and Mint Committee Office charges are more than covered by the net profits.

Review of aggregate charges and profits.

Results of work stated.

7. One reason why the profits are below the expenses is, that it has been impossible to reduce the latter to correspond with the profits, owing to the extraordinary demand for the recoinage of Uncurrent coins on account of Government, consequent on the recall of the currency previous to 1835, for which no duty or profit is credited to the Mint, but the labour and expenses of which the Mint has been obliged to bear.

Reason why the charges have been high of late years.

8. By inspection of the Statement given in Appendix 8 it will be seen that the Uncurrent coins melted in the Mint during the last 9 years have amounted in value to 220¼ lacs of Rupees, which have been coined into 348 lacs of pieces,|| and if credit be given to the Mint, not at the usual coinage

Extraordinary recoinage of Uncurrent coins.

* This is the amount stated in Table B, which is an estimate; the actual outlay was 67,945 Rupees, which is a reduction of rather more than 22 per cent.

† This is short of the actual expenses by 57,297 Rupees.

‡ This is exclusive of profits from the iron foundry and acid distilleries, which have been but small till 1849.

|| The whole value of precious metals coined in 9 years was nearly 256 lacs, and the number of pieces was 404 lacs; and as 256 : 404 :: 220¼ : 348 vide para 38.

charges, but at the *additional* cost which, upon the lowest scale of computation, their transmission to Calcutta and coinage there would have involved, the result would be to show that the establishment has, even during the past 9 years, unprecedentedly unfavorable as they have been, realised a saving to the State.

A saving has been effected by the employment of the Madras Mint.

9. With the view to prove that the deficiency in profits above mentioned, has been in no degree occasioned by any want of economy or strict management of the Mint of late years, I consider it a duty I owe to myself and the Officers of the establishment to observe, that from 1821 to 1834 when annual average out-turn was 59 lacs of pieces, the annual expenses, *exclusive* of the Assay and Mint Committee Offices, amounted to 1,53,893* Rupees. Since 1841, when the number of pieces has been on average of the last 9 years (as shown in Appendix 6) 130¼ lacs, the average expenses have been reduced to 83,146 Rupees.

Table showing the number of pieces coined from 1821 to 1834.

1820-21	67,19,655
1821-22	82,29,150
1822-23	92,44,160
1823-24	97,09,000
1824-25	79,45,000
1825-26	65,17,000
1826-27	80,25,250
1827-28	66,92,800
1828-29	29,14,000
1829-30	33,04,500
1830-31	38,96,994
1831-32	1,12,000
1832-33	30,05,240
1833-34	58,60,560
	827,63,309
Average per year	59,11,665

Proof of the economy of the work done by comparison with former years.

10. This comparison needs to be qualified, however, by the observation that two-thirds of the coins stamped of late years have been copper, of which the cost is in round numbers only one half that of the precious metals, so that the more recent out-turn may be considered as equivalent to only 87 lacs of pieces of the like more expensive workmanship with the 59 lacs above mentioned.

Caution, in respect to the above comparison.

11. I may also observe, that even during the period that the Mint was in the temporary charge of the late Assay Master Dr. Bannister, executing a copper coinage, from July 1837 to September 1839, without any fixed establishment; the number of pieces executed by the department amounted in the 27 months to 167 lacs, and the expenses, exclusive of the salary of the Officer in charge, were Rupees 77,454-6-4½; allowing for the salary of the Officer in charge at the rate of 16,000 Rupees per annum for the 27 months, the whole expenses amount to Rupees 1,13,454-6-4½ being at the rate of 677 Rupees per lac of pieces.

Economy of management of late years contrasted with the copper coinage under the late Dr. Bannister.

* Vide Statement attached to the Mint Master's letter of the 17th September 1834.

12. Since 1841 the aggregate expenses of the copper coinage, as stated in the accounts sent in at the close of each settlement, from May 1842 to April 1851, have been Rupees 4,03,582-14-3* and the number of pieces executed during the same period 845,52,681, being at the average rate of 477 Rupees per lac.

	Expenses.			Pieces.
1842-43	28,135	0	0	46,77,000
1843-44	44,700	0	0	81,99,000
1844-45	56,486	8	0	106,55,000
1845-46	58,061	8	0	156,19,000
1846-47	43,595	11	7	132,40,050
1847-48	49,491	8	1	118,98,828
1848-49	33,066	13	2	55,65,932
1849-50	46,776	1	8	70,93,550
1850-51	43,269	11	9	77,53,321
Total	4,03,582	14	3	845,52,681

13. It thus appears, that although during the later period, the copper coins have had to bear their share of the expensive fixed establishment of the Mint, and during portions of the time, when no silver coinage was in progress, have been debited with the *whole* of it; while there was no establishment at all entertained by Dr. Bannister; yet that the expenses of manufacture have been so much economised, as to effect a reduction of 200 Rupees per lac; a difference which upon the 845 lacs executed during the last 9 years has saved the Government the sum of 1,69,000 Rupees, or 18,778 Rupees per annum, a sum exceeding the whole salary allowed for Dr. Bannister.

Saving shown of 18,778 Rupees per annum.

14. Had we an opportunity of comparing the cost of silver coins executed under a similar arrangement to the above, with the actual outlay upon the 444 lacs of silver coins† (equal in cost of workmanship to 888 of copper) stamped since 1841, I think I may fairly assume that it would be seen that there has been a further reduction of outlay equal in extent to that upon the copper; or upon the whole amounting to 3,38,000 Rupees.

Total saving shown to be 3,38,000 Rupees.

15. I refer to this comparison the more gladly, because I feel assured that the Honorable Court of Directors, from their intimate knowledge of the zeal and ability of the late Dr. Bannister, will be quite satisfied that everything was accomplished during his time which the state of the machinery and the nature of its management was capable of effecting.

16. And, as I trust it will now be apparent that there has not been any undue expenditure in the Executive Department of this Mint, I hope I shall not be misunderstood, if I draw attention to the misapprehension which is apt to be occasioned by dealing in the aggregate with the expenses of the

Chief cause of the deficit of profits shown to be that the bullion has been purchased at a loss.

* The expenses stated in the accounts are the *estimated* cost of the work done, and are rather in excess of the true cost than otherwise.

† Up to April 1851.

Mint and Assay Office, and contrasting them with the gross profits; such a contrast appearing in the present case to have led to the belief that a net deficiency in the operations of the joint establishments may be counteracted by abolishing the Mint. The unsoundness of such a conclusion will I trust be made apparent in a few words.

17. Wherever there is a bullion trade there must be some provision for assaying; whether the metal be coined or not. Let us assume that it shall be coined in the cheapest and most efficient manner practicable; but *however* done, it would be desirable, if possible, to make such an arrangement for the assay, that the bullion should be handed over to Government with some surplus profit to pay for the expense of its coinage.

Bullion ought to be purchased at a net profit after assay.

18. If, however, the expenses of the assay, have so far exceeded the seignorage of the bullion, as to leave a large deficit,* instead of a profit, I think it will be admitted to be not a just conclusion to assume, as in the case before us, that, because the Mint has been unable to pay that deficit, besides the expenses of coining the bullion, besides the charges of an extraordinary coinage of Government bullion, and besides the coinage of the copper coins, out of the profits of the latter coins alone, this affords a proof that the deficiency will be remedied by abolishing the Mint. I would respectfully observe that matters might be made worse by abolishing the Mint.

Loss created by assaying bullion *cannot* be removed by the Mint.

19. The deficit was in this case created by the act of assaying the bullion for purchase, and existed prior to its delivery to the Mint; and I trust therefore it will be plain that the abolition of that establishment would leave it where it was; and would no more facilitate its removal than the abolition or reduction of any other establishment would, by the general diminution of the burdens of the state. In regard to the Mint, this can only be done by the discovery of some cheaper plan of executing the coinage; which I must respectfully state my belief to be impossible here, except by the introduction of steam machinery. When I come to the proper section of this report, I think it will appear that it would be equally impossible to effect any real economy by causing the coins to be fabricated elsewhere.

20. At present I trust it will be allowed, that it is not the want of any practicable economy in the Mint operations, but the accidental circumstance

			C. Rs.
* Expenses of the Assay Department for 9 years		....	2,67,187
Seignorage for	do	do	92,814
		Difference or deficit....	1,74,373

of the expense of the Assay Department not having been defrayed out of the seignorage receipts from private bullion, owing to the temporary decline of the trade, as will be presently shown,* which has caused the deficiency in the profits. I feel it to be the more important to mention this fact, because the loss is one which, *under any arrangement for the coinage of* the silver and copper, must have been equally sustained.

Mint is not chargeable with the expenses of Assay Department.

21. Before quitting this subject, it is proper that I should meet the objection that the Mint is chargeable with the expenses of the Assay Office, because the services of an Assayer are indispensable to Mint work. This is no doubt true; but, as the services of a Mint Assayer competent to the performance of all its work could be obtained for 4,200 Rupees per annum, and including contingencies 5,000 Rupees, it would not be just to debit the establishment with more than that sum, even if it were admitted to be right to charge anything when the profits are altogether withheld.

Statement of expenses, for various amounts of work.

22. In 1849-50 with a coinage of 87½ lacs of pieces, 16½ silver, and 71 copper, the expenses were, 67,945 Rupees. During the present year† for a coinage of 117 lacs of pieces; 40 lacs of silver, and 77 of copper, they will be under 76,000 Rupees. For the future probable demand, which will hereafter be shown to be of 80 lacs of copper, and 75 lacs of silver pieces, the expenses would be short of 86,000 Rupees per annum. This includes every Mint charge, but not those of the Assay and Mint Committee Offices,‡ and is not qualified by any deduction on account of profit.

SECTION II.—*On the decline of Merchants bullion and Seignorage.*

Former average supply of merchants bullion.

23. In former years, the average annual supply of merchants bullion brought to the Mint amounted to 32,46,847 Rupees as shown by Appendix 2, which gives the results of the 14 years previous to 1834. This was founded upon a commerce which consisted of manufactured articles, piece goods, punjums, chintzes, calicoes, &c. In 1834 when the Act granting the present Charter of the East India Company came into operation, its effect was to sap the foundation of this commerce, by the admission of British manufactures, and the supply of bullion gradually declined from 32½ lacs previous to 1834, to little more than 1 lac in 1847-48. It probably would not have fallen quite so low on this occasion, had it not been for the combination of two

Reason of its decline.

* Vide next Section.

† Ending 30th April 1851.

‡ Which amount to 33,399 Rupees per annum vide para 5.

adverse circumstances, in addition to the decline in the export of manufactures, viz. the balance of trade being against India, and the great commercial panic and crisis of 1847-48.

Prospects of its revival.

24. But I would respectfully submit, that this cannot be considered as the natural or normal condition of the commerce of this Presidency. It is a work of time to effect so great a transfer of the Industry of a nation, as that from ordinary manufactures, to the wholesale preparation of raw products; more especially when, as in this case, the change essentially requires the aid of European capital, energy, and skill; but we know that the transfer has been in part effected, and that within these few last years much has been done towards the export of sugar, cotton, oilseeds, coffee, tobacco, spices, linseed, &c., and that each succeeding year witnesses the further progress in the development of these new and comparatively inexhaustible sources of exchangeable value.

Reasons for supposing the bullion trade will be restored.

25. If the commerce of the Presidency, at a time when it had nothing to export but its own rude manufactures, when there were comparatively no roads, and no means of communication with England, except viâ the Cape, attained such a magnitude as to maintain a steady average flow* of bullion of 32½ lacs of Rupees, may we not expect that when the new state of things is fully established, it will revive and give motion to a current at least as large as formerly, if not more so?

26. And on general principles, if we take into consideration the size and fertility of the provinces belonging to and connected with the Madras Presidency, and their facilities for production, is there not reason to conclude, that they are capable of, and will eventually maintain a foreign commerce, and with it a bullion trade,† proportioned to their extent and capabilities, as compared with those of Calcutta and Bombay? If this be admitted, I think there will be allowed to be grounds, in addition to the argument just stated, for the expectation that the latter will not only equal but surpass the former average of 32½ lacs of Rupees.

The late decline only temporary.

27. I have above mentioned that the balance of trade being against India in 1847-48 was the reason why the imports of bullion fell so low, while the exports were comparatively large; but I would respectfully observe, this does not, as apprehended by the Government of India, necessarily argue against the flow of bullion into this Mint at other times, or in general. In the same year (1847-48) the imports of bullion were low in the Calcutta

* Vide para 78.

† Vide do. do.

Mint, as well as in this; and it will doubtless be admitted, that the export of bullion from a country at any one period, generally speaking, necessitates a corresponding import at another. These observations of course only apply to the bullion transactions of the foreign trade with this Presidency, the exports and imports of treasure in connection with the internal and coasting trade, chiefly in Company's Rupees, being very considerable.

Further reasons for the above conclusion.

28. The balance of trade was against India with England in 1847-48. It has been so in the main for years, and we have had expensive wars. We have now peace, and vigorous efforts are making in every part of the country to promote its industry and develope its wealth. The balance of trade is now in our favor, English capital is now, for the first time on a large scale, seeking investment in India, (in railroads, &c.) and our new trade in raw produce, though but in its infancy, has already begun to manifest its effects. All these circumstances may account for the change which has taken place very lately. In 1847 the bullion imported to the Madras Mint was only 1,12,676 Rupees, next year 1848 it was 1,77,896 Rupees, in 1849 it was 2,44,319 Rupees. *This* year 1850-51 it will probably be 12 lacs, for we have already received 11½ lacs, and I have authentic intelligence of the shipment of ½ lac* more.

A change has already taken place.

29. The figures given in the margin, which represent the value of silver purchased by the Mint during the last three, and five previous years, appear to establish the fact that the reaction in the commerce above alluded to has already taken place, and that the imports of bullion, which reached their minimum in 1847-48 are progressively but quickly improving;† which fact, coupled with the considerations above submitted, will probably be sufficient to satisfy the Honorable Court of Directors that there is no probability of the imports of bullion remaining what they were in 1847-48, but on the contrary, that there are grounds for belief that they will in the course of time equal, if not surpass, the former average of 32½ lacs of Rupees per annum; in which case I need scarcely observe, that the seignorage will be "pari passu" increased to 65,000 Rupees per annum, or more.

1843-44	11,93,613
1844-45	4,00,059
1845-46	5,40,614
1846-47	2,10,160
1847-48	1,12,676
1848-49	1,77,896
1849-50	2,44,319
1850-51	12,00,000

Conclusion that the bullion trade will improve.

* I have intelligence of the shipment of much more than this, but it is not likely to arrive within the present official year.

† It is not intended that the comparatively large sum received in this official year should be taken as an index of the rate of increase in the importations, but simply as showing that a turn has been taken towards improvement.

SECTION III.—*On the decline in the amount of Uncurrent coins requiring recoinage, and also the probable failure of the demand for Copper coins and the profits thereon.*

Uncurrent coins, probable quantity likely to require recoinage.

30. In regard to the Uncurrent coins it is obvious that the supply must gradually fall off, but not for many years to come. The fact mentioned by the Government of India, of there being only 7,90,833 of Madras, and 1,56,165 of Bombay Uncurrent Rupees (making altogether 9,46,998) in the Treasuries in April 1850, does not give any idea of the whole number in the country requiring recoinage, but only of the collection which had accumulated during a limited time. That there must be very many still remaining, would appear from the fact that less than 152 lacs Rupees value of the old Rupees, including small coins, has as yet been brought to the Mint; and as the annual revenues of the Presidency amount, I believe, to upwards of 4 crores, it is probable that at least that number of pieces must have existed prior to their being called in. I am however unable to judge what the exact residue is, or of the rapidity with which it is likely to be brought for recoinage, but perhaps, as the number must be so large, as the annual average value of uncurrent coins ordered for recoinage during the last 9 years has been 24½ lacs, and during the present year 1850-51 has already been upwards of 19 lacs, it will be considered as near the truth as practicable, if we assume that for some years to come the demand will amount to 15 lacs per annum. Of course, it will be better as regards the exhibition of a profit on the operations of the Mint, the smaller the amount may be.*

About 15 lacs per annum.

Copper Coinage.

31. The Government of India, admitting the profit on the copper coins to be a legitimate offset against the expenses of the Mint, express an apprehension that, as the demand for copper coinage decreases, the profit derivable from this source must cease also.

Copper coins, statement of work hitherto done in Madras Presidency.

32. With reference to this probability, I beg to state, that the present copper currency has been only manufactured in this Mint since 1837, that is for 14 years; during the first five of which the average annual value called for was Rupees 72,413-12-9, and during the last five, the average value has been Rupees 1,58,622-2-6 as exhibited in Appendix 3, showing, it would appear, an increase rather than a falling off in the demand.

The demand has been increasing of late years.

* It is to be observed that, besides the obsolete Indian currencies, there are other "Uncurrent coins" such as Dollars, Chuckrums, Sicca Rupees, &c. which are paid as revenue and sent to the Mint. Some are imported in the course of trade, and their amount is rather likely to increase than to diminish. Such coins as these yield a profit like merchants bullion, but the Government currencies, which have been chiefly received of late, yield none.

33. The same appears to have been the experience of the Calcutta Mint also, as shown by the accompanying Statement Appendix 4, taken from the Official Returns of 14 years from 1835-36 to 1848-49 both inclusive. This shows a steady demand from the first introduction of the existing copper currency till now; and if any thing an increase, the average value of the first five years being Rupees 3,58,003-6-10 and of the last five Rupees 5,46,913-4-4.

Has also increased in Bengal Presidency.

34. If we go back to a more remote period, and examine the experience of the same Mint for 50 years, we find the same result. It is stated in Mr. Prinsep's "useful tables"* that the copper coinage during the 13 years from January 1801 to December 1813 was in value Rupees 11,70,616-6-7† being on average Rupees 90,047-6-7 per annum. For the 7 years from January 1826 to December 1832 the coinage was Rupees 17,16,206-0-11‡ or an annual average of Rupees 2,45,172-4-8.

Has been increasing for the last 50 years

35. The figures given in the margin show the average annual issue of copper coins in both Presidencies, at each of the periods above mentioned, and exhibit a steady progressive increase in the demand; which taken in connection with the circumstance that the Honorable Court of Directors have just proposed a coinage of half pice pieces, which will require an extensive issue, seems to establish the belief that there is no immediate prospect of decline in the Madras Presidency, but rather the contrary.

Bengal.		Madras. Annually do.	
1801-13....	90,047		
1826-33 ...	2,45,555		
1835-40....	3,58,003	1837-42..	72,413
1844-49....	5,46,913	1845-50..	1,58,622

Probable cause of a still greater demand for copper coins.

36. Moreover, there is a reason, which does not appear to have been adverted to by the Government of India, why the demand for copper currency can never cease entirely, nor materially for a lengthened period; namely that, in spite of the high seignorage upon these coins at the place of issue, it is profitable after they have been carried into the interior at the expense of the state, to melt them up for domestic purposes and the arts, owing to the high *retail* price of the copper in the Native bazars.

Reason for the demand for copper coins continuing for many years.

37. The average annual value of the copper coins struck in Madras during the last five years is, as above shown, 1,58,622 and the average number of pieces 106,71,672. Considering, therefore, that all the

Estimate of the probable future demand of copper coins.

* Page 57.
† Sicca Rupees 10,99,170-5-6
‡ Sicca Rupees 16,11,401-1-5

experience above quoted tends to show the probability of increase, I think that it will be considered a moderate calculation, if I assume the average future demand at 1,20,000 Rupees value, and the number of pieces at 80 lacs. This part of the coinage would then be attended with a profit of about 64,367 Rupees.*

Profits to be expected from copper coinage.

38. I have in Section II para 29 shown, that the probable future amount of merchant's bullion brought for coinage may be calculated at 32½ lacs of Rupees; and in this Section para 30, that for some years at least, the value of recoinage for Government may be assumed at 15 lacs per annum; making altogether 47½ lacs per annum in value. In *tale* the estimate amounts to 75 lacs of *pieces*, the proportion of the value to the number of silver pieces during the last 9 years† having been as 256 to 404 : and 256 : 404 : : 47½ : 75 very nearly.

39. Irrespective, then, of any further sources of demand, it will I think be apparent from what has been above said, that the average ordinary coinage wants of this Presidency, for the future, cannot be estimated at less than the following:

Summary of future ordinary demand for Mint work.

	Value.		No. of pieces.
Merchant's bullion......	32½	Lacs	75 lacs.
Uncurrent coins........	15		
Total silver value..	47½ lacs	pieces..	75 lacs.
Copper coins......		....	80 lacs.
		Total of both..	155 lacs.

40. The profits which may be anticipated are, 1st the seignorage on merchant's bullion. 2d. The seignorage on copper coins. 3d. Minor profits. 4th. The profits derived by Government from the services of the iron foundry and the acid manufactories. It appears by the information given in Appendix 12 that the iron foundry during the last two years has effected savings to Government at the rate of Rupees 8,812-8-0 per annum, and the acid distilleries Rupees 353-5-4, total Rupees 9,165-13-4. There is every reason to believe that for some years to come similar profits may be realized, but to avoid the risk of excess, I will only estimate the two to yield 7,000 Rupees per annum. The statement of future profits then will stand as follows:

Statement of the profits.

* At the average rate for the copper of 254 Rupees per candy.
† Appendix 6.

	Seignorage on private bullion	65,000*
	Do on copper coins	64,367†
Estimate.	Profits from minor sources as shown in Appendix 7..	4,238‡
	Profits by the iron foundry and the acid distilleries para 40	7,000
		1,40,605

Extra demands.

41. The following considerations will tend to show that the above is by no means the probable future limit of the operations of the Mint, and that in the course of time, as soon as circumstances which now stand in the way are removed, further calls for the employment of the Mint must arise, some of a limited, and some of a permanent character, which will add materially to the estimate.

Hyderabad.

42. 1st. An extensive coinage will probably soon be required to rectify the indescribable confusion of the Hyderabad currency. Its value is I believe estimated at from 2 to 3 crores, which, with a due proportion of small silver and copper coins would require a coinage of 17 or 18 crores of pieces.‖

Ceylon.

43. 2dly. A similar coinage is likely soon to be required on account of Ceylon.

Single annas.

44. 3dly. No provision has yet been made for the coinage of *single* silver anna pieces, which I believe are much required for the convenience of the Native community throughout India.

45. 4thly. No notice is taken in the estimate of the permanent increase of the bullion brought for coinage which would ensue if the Mints in the Hyderabad State were closed, and the Company's Rupee circulated throughout those dominions. At present, of course, all bullion imported at Madras, and intended for the interior, passes by this Mint.

Gold.

46. 5thly. No notice is taken of the large demand for the coinage of gold which would probably ensue, if our present restriction to the Company's standard, which is not approved of by the Natives, were removed, and the pure standard adopted. This is not the place to discuss this question, but I may perhaps be permitted

* Para 29.

† Para 37.

‡ After leaving out the items of seignorage on private bullion, and copper coins.

‖ These could easily be executed by the Madras Mint, which has already stamped 1,50,000 pieces in a day; and it will probably be found most advisable to employ it; unless, when the time arrives, it be thought preferable to send machinery to the spot, which could be done at a trifling expense. Under any circumstances, it may perhaps be thought unwise to dispense with the establishment of this Mint before that coinage has been provided for.

to say, that I think it will be found on full investigation, that this restriction is wrong in principle; that as the gold coins have nothing to do with the standard of value, the State has no concern with the wear and tear of these coins (which is now the chief argument for the Company's standard) and as the gold coins are in fact articles of merchandise, the merchants ought to be allowed a choice as to the fineness most suited to their purpose.

General view of the past experience.

47. Finally, to take a general view of the past and future, we may remark, that the value of the precious metals brought to the Mint for coinage has, upon the average of the last 9 years, been upwards of 29½ lacs per annum.* Owing to a combination of accidental circumstances, this has been composed of a large quantity of Government, and a small quantity of merchant's bullion. In the nature of things the former must decrease, and the latter increase, and thus the unfruitful part of the Mint charges will be diminished while its profits are enlarged.

SECTION IV.—*The capability of the Calcutta Mint to execute the coinage of the Madras Presidency.*

48. In 1842 I visited the Calcutta Mint by order of Government, and spent some weeks in examining its machinery and mode of work; I can therefore speak in some measure from personal observation as to its capabilities.

Power of the Calcutta Mint as originally started.

49. It is stated by Mr. James Prinsep in his Useful Tables, page 37, that "when the establishment of the new Calcutta Mint was planned and arranged "in England in 1820, it was calculated that a "daily coinage of 2,00,000 pieces would provide "for the whole currency of this side of India." It is afterwards mentioned that "the coinage presses are capable of striking 3,00,000 pieces in a working day of seven hours," and in a note, that 3,08,000 pieces had been lately struck in a working day.

50. This is the maximum effect of which the machinery was capable when it was new and in prime working order, but it is probably much in excess of the *average* daily out-turn; even at the time to which the statement was applied, and still more so when the machinery has been deteriorated by wear and tear for 20 years.

Present average yield of coins.

51. When I was in Calcutta, I gathered that the fair *average* performance of work might be calculated at 2½ lacs† of pieces daily. The number of Mint working

* Vide Appendix 8. For the ensuing year 1851-52 the value is estimated to exceed 35 lacs of Rupees.

† In the Report of the Commissioners on the Royal Mint, Statement C, para 12, page 88, Colonel Forbes states, that each press can stamp 30,000 pieces in a working day of 10 hours—in Calcutta the working day is 7 hours (Useful Tables, page 38) and there are 12 presses of the same kind as those of the Royal Mint.

days allowed for by Mr. Prinsep* is 200, which would give 5 crores of pieces as the full annual yield; but I think this is a small calculation, and it allowing business to be suspended annually for a month, to recover drosses d settle accounts, there ought not to be less than 250 days of employment, ich number I shall accordingly reckon.

52. At this rate, the maximum yield of the Mint when in full work oughout the year is 6¼ crores of pieces. More might be done, no doubt, emergency, but that would be by a pressure which might be allowed as exception, not as the rule of business.

mands upon Calcutta Mint.

53. And of late years the coinage demand has been little, if at all, short of this. Taking the last five years of which accounts have been received, that is up to 1848–49 lusive, the *average* out-turn is 577 lacs of pieces, although one of them is year of the commercial panic. In two of these five years, the ordi-y full out-turn was exceeded, the yield in 1848–49 having been 629¾ s of pieces—in 1845–46, 645 lacs. These particulars are shown in Ap-ndix 5, of which an abstract is given in the margin.

d, silver and copper coins issued from the Calcutta Mint.

	No. of Pieces.	
833–34	288 lacs.	385 lacs.
834–35	326 do.	
835–36	343 do.	
836–37	414 do.	
837–38	557 do.	
838–39	603 do	512 lacs.
839–40	503 do.	
840–41	500 do.	
841–42	489 do.	
842–43	376 do.	
843–44	595 do.	
844–45	577 do.	577 lacs.
845–46	645 do.	
846–47	503 do.	
847–48 Panic	473 do.	
848–49	630 do.	

54. By comparing the average of the last five years with a similar average of five of the earlier years, viz. from 1833–34 to 1837–38 we find that the coinage has gradually increased to the above mentioned out-turn, the average of the earlier years being only 385 lacs of pieces, and of the latter 577.

55. It appears from these facts, not only that the Calcutta Mint has already as much work as it is calculated to perform, but also that the demands upon it are increasing, and that at such a rate, that if the progress in the next 11 years be equal that of the last, there will at the end of that time be nearly 2 crores of pieces unprovided for.

* Useful Tables, page 37.

The wants of the country are not satisfied.

56. When we further consider how much still remains to be done for the wants of its own Presidency, the inexpediency of diverting the Calcutta Mint from its special and proper duties will be still more apparent. The circumstance alluded to is the fact that, with all the resources of that establishment, the business of supplying the country with the smaller currency appears never yet to have been adequately fulfilled.

The small silver coins have not been manufactured in full proportion.

57. The coinage of the fractional parts of a Rupee, from whatsoever cause, has hardly been entered upon comparatively,* and of the $\frac{1}{12}$th Anna there has been but a very small proportion executed. Intimately associated as an abundance of these trifling coins is with the prosperity and comfort of the poorer classes, (the *vast* majority in this land) it seems to be most important that it should be no longer withheld.

This fact proved by reference to the out-turn of the Mint.

58. In thus drawing attention to the subject, it is not in my power to attempt explanation, as I am unacquainted with the reasons which have prevented the issue of the due proportion of small coins, unless it be the difficulty of executing them with the steam machinery. I merely state the fact, which will be abundantly established by reference to the accompanying table (Appendix 5) where are shown all the coins issued from the Calcutta Mint in each successive year since 1833, and from which the justice of my remark will be apparent.

Madras issues 100 whole Rupees and 80 small coins.

Calcutta has issued 100 whole Rupees and 15 small coins.

59. In the issues of the Madras Mint, every 100 whole Rupee pieces has been accompanied by 85½ of the smaller silver coins,† while in those of the Calcutta Mint the proportion has been less than 15½ to 100. To make up *now* for this deficiency, which has been accumulating ever since the Mint began its operations, would require the employment of its whole resources for many years to come; and after that, the additional work entailed upon the establishment by the future systematic multiplication of all the silver coins in the proportion of 100 to 185 instead of 115½ as hitherto, would for ever place beyond its reach the opportunity of providing for the coinage demands of any other Presidency; unless its powers be enlarged.

* Vide para 59.

† If we include 1851–52, (vide Appendix 6) the proportion is [illegible] 100 whole Rupee pieces.

60. There seems to be no room to speak of the like want in regard to the copper currency, but it is nevertheless the fact, that hitherto the Calcutta Mint has stamped comparatively few, if any copper coins below the value of the pice or quarter anna.* The Honorable Court of Directors have lately turned their attention to this subject, and proposed that a coinage of a half pice, or $\frac{1}{8}$ anna pieces should be undertaken, which alone would occupy all the (if any) spare power of the Calcutta Mint for many years to come; and it is probable that when the subject is fully investigated, it will be found that we must carry the coinage still lower down the scale of value, to meet the abject poverty of the millions over whom the Government rule. This would place an embargo on the powers of the Calcutta Mint for the next century.

Small copper coins have not been fabricated by Calcutta Mint in due proportion.

61. Were there even strong reasons to recommend the measure on other grounds, I think it probable that, on full consideration, the closing of this Mint would be found inexpedient on this principle alone, namely, that it would shut the door to the further introduction of small coins into this Presidency for an indefinite time. If not for ever, at least till such time as the Honorable Court should be induced, by statements of the felt inadequacy of the Calcutta Mint, owing in part to the unsuitableness of its steam machinery to the coinage of minute pieces, to send out another Mint, either to assist or supersede it. In the absence of any such strong arguments, the measure would appear to be doubly inexpedient, since the Madras Mint is pre-eminently fitted to execute the fractional pieces, as well as others, with accuracy and economy. So much do I feel this to be the case, that I am serious in stating my belief, that if the Honorable Court wish for the speedy introduction of the fractional currency throughout the empire, they would do wisely, in lieu of stopping the operations of this Mint, to appoint it to assist in the difficult duty of fabricating the small coins for the whole of this side of India.

Objection to close the Madras Mint, on account of the want of small coins.

Better to employ it in coining fractional pieces for all India.

62. If the country be deprived of the services of the Madras Mint, that of Calcutta must be looked to, alone to supply, not only the ordinary future coinage wants of this Presidency, besides its own, in the larger and smaller coins; remembering that a pressure in one Presidency is a pressure in both, but also all the extraordinary demands alluded to in paras 41 to 46. Adverting, therefore, to the unfinished and incomplete state of the currency in the country generally, as to small coins; and the portions of it, such as Hyderabad, the Punjab,* perhaps Ceylon, and other states unknown to me in Northern India,† which need to be thoroughly stocked with new coins, of all descriptions, I would respectfully submit my opinion, that the Calcutta Mint is not at present in circumstances to undertake the coinage required by this Presidency.

Conclusion that the Calcutta Mint is not able at present to undertake the coinage for this Presidency.

* Vide Appendix 5. No allusion is made to the whole, half, and quarter cents, which it is presumed were coined for some other state.

SECTION V.—*On the saving to be effected by reducing the Madras Mint to the simpler duties of a Bullion Depôt, and causing all the coinage to be executed by the Calcutta Mint.*

63. In the former part of this report I trust that I have succeeded in showing, that it has not been any want of economy in the management of the Mint, but the accidental circumstance of the coincidence of an extraordinary demand for coinage on account of Government, with an unusual deficiency in the supply of the merchants bullion, which has occasioned a temporary excess of the Assay Office and Mint charges over the Mint profits; and that, as the demand for the coinage on account of Government abates, and the bullion trade improves, the wished for net gain cannot fail to be realised. Were it otherwise, however, and were there even a prospect of a *permanent* annual expenditure involved in the maintenance of the Madras Mint, I feel assured that the Honorable Court of Directors would not decide upon abandoning the present arrangement, if it were apparent that an equal or greater loss would accompany any other plan; the question therefore in respect to economy simply reduces itself to the comparison of the cost and charges accompanying the execution of the anticipated coinage demands of the Madras Presidency; supposing it *possible* that they could be undertaken by the Calcutta Mint, in addition to its own duties.

Real question as a measure of economy.

Shown to be the comparison of the expenses of the various methods of performing the work.

64. I have already stated my reasons for supposing it to be impossible for the Calcutta Mint to coin for this Presidency, without neglecting duties indispensable to the welfare of the country; because already the increasing demands upon it have reached an average of 577 lacs, and there is a great portion of the currency, and large extraordinary demands still to be supplied. Let us however in order to an estimate, *suppose* that it needs only

Hypothetical basis for an estimate of the expenses.

* The currency of the Punjab is estimated at about $1\frac{1}{2}$ crores, which with a due proportion of small silver and copper coins would require 7 or 8 crores of pieces.

† Nepal, Gwalior, Indore, Jeypoor, &c. &c.

450 lacs, and that the Mint should work up to 605 lacs, the remainder being the coinage on account of the Madras Presidency; we may then be in a position to estimate the comparative cost of the latter coinage. That is, to make a comparison between what the cost will be if the Madras Mint be retained, and what it would be if it were reduced to a bullion depôt, and the coinage executed in Calcutta.

Reduced coinage charges do not mean reduced out-lay.

65. The despatch of the Government of India alluding to the facilities of steam communication adds, that either of the Steam Mints (of Calcutta or Bombay) could perform the whole work, not only without inconvenience, but with "positive advantage" in the shape of diminished per centage of coinage charges &c. By this expression, a relative, not an absolute saving must be intended. The coinage of 155 lacs of pieces would certainly cost less if done in company with 450 lacs of other money, than if fabricated alone, but it could not be done for *nothing*. There would not be a diminution of absolute, but only of relative expense. The absolute costs of the Mint doing the work would certainly be increased, although the relative cost per lac or crore of pieces might be lessened; and a question then arises how to ascertain the real, actual, *increase* of cost by an increase of coinage.

Method of calculating increase of charge by an increased coinage.

66. To do this, it is necessary to pick out from the gross expenses of the Mint that part which is essentially dependent upon the work, and fluctuates with the amount of it; and on doing this we at once obtain the measure we require. This part is the contingent expenses, the extra establishment, and refining charges, which vary essentially with the amount of work executed. In comparing *single* years together, the amount of work done is not necessarily in exact accordance with number of pieces,* because of the variable proportions of silver and copper pieces, of which the former cost more in fabrication than the latter, and there are other causes of fluctuation; but in comparing averages of combined series of years together, the various coins may be clubbed together "en masse" and compared with accuracy.

Applied to the out-turn of Calcutta Mint.

67. Taking, therefore, the whole coinage executed in the Calcutta Mint since 1833-34 we find the number of pieces amounts to 79 crores (78,86,45,713 vide Appendix 9) and the total sum charged in the various successive years under the head contingencies, extra establishment, and refining charges, amounts to 10,44,076 Rupees, being at the rate of about Rupees 132-6-3 per lac.

* For instance the work done in 1836-37 in Calcutta is worth more than that of 1848-49, although the out-turn in the first case was 413½ lacs and in the latter nearly 630 lacs.

The accordance of this calculation with the facts shown.

68. In order to show that these expenses fluctuate with the amount of coinage, I may point out that the 3 years of smallest out-turn were those of 1833-34, 1834-35 and 1835-36 during which the aggregate number of coins issued was 957 lacs nearly.* The contingent charges during the same period were 1,07,990 Rupees. This gives Rupees 112-13-5 per lac. The six years of largest out-turn were 1838-39, 1843-44, 1844-45, 1845-46, 1846-47 and 1848-49 during which the aggregate number of 3,618 lacs of pieces was executed† and the total contingent expenses of the six years 4,63,758 Rupees. This gives Rupees 128-2-8 per lac. The correspondence of these charges with their respective out-turns, with one another, and with the more accurate deduction obtained from the whole series of years, will I think be quite sufficient to establish the *additional* cost of an increased coinage, at the sum before calculated viz. Rupees 132-6-3 per lac. At this rate the cost of 155 lacs would be Rupees 20,520-7-2.

Rate of *additional* expense shown to be 13,239 Rupees per crore.

The additional expense of the coinage of the Madras Presidency 20,719 Rupees.

Further expense in wear and tear of machinery.

69. We have next to estimate the fair allowance for wear and tear of machinery; and here I must premise, that it would be a mistake to assume, because the machinery is kept in working order, that therefore it does not deteriorate. Machinery is not exempt from the law of decay which applies to all human fabrics, and unless the Mint establishment undertake to *make* it anew, we must be prepared for a time when an extensive, if not total, renovation will be called for. From what I observed when on the spot, after only 12 years work, I should say that this time is by no means indefinitely distant; and it is because every addition to the work done tends to accelerate this period, that it is necessary to fix a proportionate charge for deterioration.

Amount calculated.

70. I will estimate the deterioration of the machinery at a minimum rate of 1 per cent per annum, upon a value of 15 lacs of Rupees, or 15,000 Rupees per annum, and one fourth of this, the proportion chargeable to the work done for Madras, amounts to 3,750 Rupees per annum.

71. The above are the *additional* charges of executing the Madras coinage in Calcutta, to which must be added the charges for transport of the bullion, the sea risk or insurance, the packing and shipping charges, and contingencies, and the cost of the establishments which it would be necessary to maintain at Madras, in event of the Mint being done away with.

* Vide Appendix 9. The average, 319 lacs per annum.
† Being at the average rate of 603 lacs per annum.

Freight of the bullion to and from Calcutta.

72. The cost of transport has been already stated by the Government of India as ¼ per cent either way, that is ½ per cent altogether.

Insurance or sea risk.

73. The cost of transport of the copper coins is calculated at the rate for ordinary merchandise, at the P. and O. Company's charge of 60 Rupees per ton.* The sea risk or insurance has not been adverted to by the Government of India; the mercantile charge for bullion and treasure is 1 per cent each way.† Let it however be assumed that the *actual* risk is only ¼ per cent each way, or ½ per cent on the whole. The packing and shipping charges and contingencies for the silver and copper coins are shown in two memorandums framed from actual experience, with which I have been kindly favored by the Sub Treasurer, and of which copies are given in Appendices 10 and 11.

Packing and contingent charges.

Charges to be incurred in Madras in case of closing the Mint.

74. The remaining charges are the establishments which must be kept up in Madras, viz. the Assay Office and Bullion Depôt, which I shall set down at the same on either side of the comparison, at the average of the past 9 years, viz. Rupees 29,687; because the expenses must continue as they are during the incumbency of the present Assay Master, and any reduction which might then be proposed, might equally be made whether there be a Mint or not.

Assay Office and Bullion Depôt.

Iron foundry and acid manufactories.

75. The only other items of charge are the cost of maintaining an iron foundry and the sulphuric, nitric, and muriatic acid manufactories, which are now included in the Mint charges, and which could not be dispensed with, as they are of value and importance to the service and public generally, but the cost of keeping them up would be trifling, and may be estimated at 1,500 Rupees per annum.

Summary of charges.

76. Summing up all the above items of expense, we have the following, as the cost of an arrangement such as that referred to by the Government of India.

* The P. and O. Company's charge is double what is above stated, as I have been informed after a reference to Calcutta on the subject, that it is 60 Rupees per ton of 10 cwt. I have however taken the lower rate, as I think it probable a reduction might be made on a large scale.

† Vide Price Current of 29th September 1849.

1.	Package and shipping charges upon 47½ lacs of Treasure, at Rupees 72-13-9½ per lac..................	3,460	15	1¼
2.	Half expenses of the same on return................	1,730	7	6
3.	Do. do. of 1,20,000 Rupees worth of copper coins sent, only, from Calcutta, at Rupees 263-14-5 for 10,000 Rupees value	3,166	13	0
4.	Cost of transport of 47½ lacs of Treasure to Calcutta at ¼ per cent, and insurance risk at ¼ per cent..........	23,750	0	0
5.	Do. do. of copper coins *one* way, weighing 49 tons at 60 Rupees per ton..........................	2,940	0	0
6.	Cost of transport of 47½ lacs of Treasure from Calcutta at ¼ per cent, and insurance risk at ¼ per cent.........	23,750	0	0
7.	Sea risk on 12,000 Rupees worth of copper coins at ¼ per cent *one* way..............................	300	0	0
8.	Coinage charges for 155 lacs of pieces—75 silver and 80 copper (including wear and tear of machinery).....	24,270	0	0
9.	Assay Office and Bullion Depôt.....................	29,687	0	0
10.	Acid manufactory, and Iron foundry	1,500	0	0
	Total....	1,44,555	3	7¼

Freight and charges of bullion necessarily sent to Calcutta to be deducted.

77. If it be considered certain, that for independent financial reasons, any large part of the 47½ lacs of treasure referred to in items 1 and 4, must necessarily be sent to Calcutta, or England, this would seem to demand a corresponding proportionate reduction in those items; but it may be observed, that we may hope the time is not far distant when the surplus revenues of this Presidency will be laid out in its own improvement; in the mean time, the remittances are, I believe, as far as practicable, made up of Uncurrent coins, which would otherwise be so much *more* brought for recoinage to the Madras Mint. Hence, the fact of the necessary transmission of specie, in so far as they are concerned, does not affect the soundness of the estimate.

But a corresponding increase in private bullion may be looked for.

78. Besides which, viewing the bullion trade as a continual efflux and reflux of treasure, to correct and adjust the temporary irregularities of the commerce of commodities, it may be inferred that, independently of the fact just stated, the estimate is not invalidated by the necessary transmission of specie; as this export if steadily persevered in must, in time, re-act on the bullion trade, and produce a corresponding *increased* import of private bullion.

79. The expenses of executing the same coinage in this Mint I have already stated at 86,000 Rupees,* besides the Assay and Mint Committee Offices; but upon this charge it is necessary I should make a few remarks.

Charge for coinage in Madras.

80. The Madras Mint is not subject to any charge for wear and tear of machinery because, unlike the sister establishment in Calcutta, it was not set on foot with a large outlay of capital, which is gradually deteriorating. Starting in 1841 with the refuse of old machinery, the cost of its re-establishment was comparatively *nothing* (the sum of all the grants made in 10 years being less than 30,000 Rupees) and its working charges include every further cost of *making* new machinery, and raising the power and efficiency of the establishment from its former scale of 50,000 pieces a day to 1,50,000. Every part of the machinery is now in a high state of efficiency, two thirds of it having been *made* in the course of work, and I am sure that I am moderate in the assertion that the establishment is richer in implements and machinery by upwards of half a lac of Rupees than when it began business in 1841.

No allowance for wear and tear of machinery necessary in Madras.

81. This method of carrying on the work is economy in the end, as may be proved by attention to the charges of manufacture and the whole expenses of the Mint, now and formerly; but were it decided that it should be soon abandoned, a saving of 6,000 Rupees on the estimate of 86,000 Rupees† might be made, by not keeping up the improvement of the machinery, as hitherto; and as, under other circumstances, it would be always advisable to do.

Estimate includes improvement of machinery.

82. The fair entry, therefore, for cost of coinage in Madras, including iron foundry, acid manufactories, salaries, contingencies, and in short every charge, except improvements, is 80,000 Rupees. To this we have only to add the Assay Department, and Mint Committee Office, and that completes the estimate of the present arrangement for the supposed scale of work, as follows:

83. Coinage charges and expenses of the

	Rs.
Madras Mint	80,000
Assay Office	29,687
Mint Committee Office	3,712
Total..	1,13,399

* Para 22.
† Para 22.

84. The Assay Office charges include 4,200 on account of an Assistant Assay Master, an appointment which I believe might be abolished without any inconvenience, on the next vacancy. This would cause a reduction on both sides of the comparison.

Reduction of 4,200 Rupees practicable.

85. The Mint charges include a salary for the Mint Master of 22,800 Rupees; and a reduction of 3,500 Rupees has been ordered to be made from this on the next appointment.

Further reduction of 3,500 Rupees already ordered.

86. Deducting these two items from the last estimate, and the first of them from the former one, they will be as follows:

Net comparison after these reductions.

Calcutta Mint.	Madras.
1,10,355 Rupees.	1,05,699 Rupees.

and it is important to observe, that if the circumstances should appear to recommend the measure, the adoption of steam machinery would reduce the charges in Madras by 20,000 Rupees per annum.

Further saving by the use of steam.

87. I have already estimated the future profits in para 40 at 1,40,605 Rupees per annum.

88. Conclusion. As your Committee have done me the honor of requesting me to state my opinion of the suggestion of the Government of India, I would beg to observe, that in the ordinary progress of civilization and improvement, the abolition of the Madras Mint is a measure which must be eventually looked for, but that to make the measure expedient, it appears to me that there are certain preliminaries to be established which will clearly indicate the time for its accomplishment. These are as follows:

Opinion as to the abolition of the Mint. Preliminaries requisite to make it desirable.

89. First, the commerce of the Presidency and the bullion trade dependent upon it* ought to have arrived at a settled state (instead of a state of transition as at present) so that an accurate judgement may be formed of the probable permanent call for the services of the Mint: and all the extraordinary demands for Mint work, such as those alluded to in paras 41 to 46 ought to have been satisfied.

Commerce should be in a settled state.

* Vide Para 73.

90. Secondly, the country ought to be fully stocked with the fractional silver coins, and they should be *fixed* in it, so that the annual demand in either Presidency should be only to replace the pieces removed by fair wear and tear, and casual loss and destruction. This can never be the case till we have altered the *principle* of the fractional silver coins,* for the experience of this Presidency has I believe been, that whatever issue be made of small coins they disappear in the course of a few years; and they will continue to do so, till we contrive to make it a loss to the holders of them to melt or export them.

Currency of small coins should be complete and fixed.

91. Thirdly, the country must be fully stocked also with the copper currency, of all denominations, and the fair steady annual drain upon this stock, by wear and tear and ordinary casualties, established. At present, in regard to the fractional silver and copper pieces, we have not yet reached the limit of saturation; and I believe the process in both Presidencies is, in some degree, that of a Mint at one end of the country, and a melting pot at the other. The reason of this is with the fractional silver coins, because we have neglected to put a *discriminating* seignorage upon them, to save them from exportation and the crucible; and with the copper coins, because our roads and communications with the interior are still too bad to allow an equalization of prices with the sea ports, even in regard to metals.

Copper currency should be complete.

Reason why the silver and copper subordinate currency do not remain permanently.

92. When these points have been ascertained in regard to both Presidencies, the uniform constant demand upon each Mint will be known, and a sound judgment may then be formed as to the sufficiency of a single Mint, and the expediency and economy of employing only one.

93. From the Statements now submitted, of the expected coinage demands and profits, there appears to be fair probability of a sufficient influx of merchant's bullion, eventually, to defray the expenses of the Assay Office, and leave some surplus to pay the charges for coinage; so that any further reduction in the Assay Department, beyond that referred to in para 84, may not be considered necessary. And under such circumstances, or indeed if we may only take it for granted that the recoinage of Government bullion will be moderate; and the merchants bullion not saddled with a debt of assay charges, I feel confident there need be no apprehension as to the Mint's defraying

No reduction of Assay Department called for.

* Vide Mint Master's letter of 17th March 1848.

its own expenses from the profits of the copper coinage and other sources: indeed, if the expectations held out in the early part of this report be realised, there will be a considerable surplus.

94. I am also sure that, unless it be thought certain that, of the bullion which may hereafter be brought for coinage, only a small proportion will be returned from Calcutta, the existing arrangement is more economical than any other which can be devised.*

J. T. SMITH,
Mint Master.

Fort St. George, Mint, 11th April 1851.

P. S.—It has occurred to me on attentive reperusal of the foregoing report that, as it may possibly be many years before we can expect the bullion trade to be fully re-established, and as during that time the Uncurrent coins to be recoined on account of Government may have declined below the amount stated by me, the estimate of $47\frac{1}{2}$ lacs for the future receipt of bullion may require modification.

It would detain the report too long were I now to make any correction to allow for this, as it would affect the calculations throughout the whole paper; but it will perhaps be thought of the less importance, if it be remembered that the difference could only be small, as there can never be a total cessation of the coinage of Uncurrent coins,† and the effect on the results would be even less than the difference, as it would operate on both sides of the comparison, by diminishing the estimate for charges of coinage in the Madras Mint.

Moreover, when we reflect that long before the period above referred to, all coinage in the Hyderabad country will have ceased, and due consideration is given to the arguments stated in paras 25 and 26, I think it will perhaps be admitted that, including the permanent supply of Government bullion, there is reason to think that the whole receipts will probably rather exceed than fall short of $47\frac{1}{2}$ lacs of Rupees per annum.

J. T. S.

* *Note.*—If, for instance, the precious metals were sent to Calcutta, and the copper coinage executed in Madras, with part of the present establishment under the Mint Master, the whole expenses would be 1,40,000 Rupees. Under the charge of the Assay Master they could not be less than 1,18,000 Rupees; and at the rates which prevailed under the late Dr. Bannister, mentioned in para 11 they would be 1,33,000 Rupees. These calculations suppose that all the bullion sent for coinage to Calcutta is sent back again.

† Vide note to para 30.

APPENDIX 1.—B.

MADRAS.*

Memorandum of the Receipts and Charges of the Mint from 1841-42 to 1848-49 and the Estimate of 1849-50.

	Actual.								Estimate
	1841-42	1842-43	1843-44	1844-45	1845-46	1846-47	1847-48	1848-49	1849-50
RECEIPTS.									
Ordinary.									
Seignorage on gold bullion.	260	572	……	75	142	224	122	13	……
Do. on silver do.	9,856	18,399	23,943	8,056	10,699	4,081	2,132	3,626	4,000
	10,116	18,971	23,943	8,131	10,841	4,305	2,254	3,639	4,000
Other Items.									
Extraordinary									
Value of copper used in coinage and copper scissel sold, &c	……	……	……	……	1,37,486	1,27,215	1,28,704	52,210	81,300
Profit and Loss.									
Profit on copper coinage	*	*	*	*	a 1,30,230	1,02,670	1,04,005	44,375	63,000
Gain on the recoinage of Uncurrent coins	……	……	……	……	……	20,605	12,750	2,792	1,800
Gain above the invoice valuation on the out-turn produce at the Calcutta Mint of Uncurrent gold & silver coins sent from Madras	……	……	……	745	……	……	……	……	……
	……	……	……	745	1,30,230	1,23,275	1,16,755	47,167	64,800
Grand Total	10,116	18,971	23,943	8,876	2,78,557	2,54,795	2,47,713	1,03,016	1,50,100

* The item of gain on copper coinage is mixed up with gain by exchange on bills the aggregate sums entered are as follows:

1841-42	64,567
1842-43	90,651
1843-44	2,44,556
1844-45	4,52,137

a Including profit on copper scissel sold.

	Actual.								Estimate.
	1841-42	1842-43	1843-44	1844-45	1845-46	1846-47	1847-48	1848-49	1849-50
CHARGES.									
Ordinary.									
Mint Master's salary	27,076	22,320	29,803	23,987	20,625	20,625	27,210	22,820	65,220
Office Establishment	12,525	20,282	19,457	20,272	20,739	22,403	22,684	22,601	
Extraordinary & Contingent charges.	34,704	64,505	39,770	37,965	38,120	50,358	45,206	25,389	
Assay Master's salary & Establishment	27,683	26,537	29,993	29,305	28,473	28,342	32,083	29,895	30,686
Do. Contingencies	1,307	595	601	1,048	415	1,009	976	649	
Mint Committee Office	2,716	3,303	4,399	4,445	3,850	3,667	3,682	3,671	3,673
	1,06,011	1,40,042	1,15,023	1,17,612	1,12,222	1,31,404	1,31,931	1,05,035	99,579
Other Items.									
Value of stores received from England	……	……	60,788	1,70,459	1,49,685	2,68,056	3,92,590	56,624	6,500
Do. supplied by other Departments	……	……	1,977	5,516	……	……	……	……	……
Extraordinary.									
Purchase of copper coinage	……	……	13,360	……	……	……	……	……	……
a Value of 2 gold medals including expense for making them forwarded to the Mint Committee for transmission to Government	……	……	……	520	……	……	……	……	……
	……	……	13,360	520	……	……	……	……	……
Profit and Loss.									
a Net loss on the out-turn produce of the Calcutta Mint of gold and silver bullion, &c. below the invoice valuation at Madras	11,768	9,592	1,649	12,850	13,281	……	……	……	……
Do. on recoinage of Uncurrent silver coins and in the Madras Mint	……	46,670	20,081	10,185	10,030	……	……	5,831	……
a Difference between the rate of copper coins transferred to the Mint for recoinage and the stamp value of the coins	……	623	509	285	……	……	……	……	……
Out-turn loss on the recoinage of Uncurrent coins, &c.	……	……	……	……	……	a 82,266	a 25,461	……	4,750
	11,768	56,885	22,239	23,320	23,311	82,266	25,461	5,831	4,750
Grand Total	1,17,779	1,96,927	2,13,387	3,17,427	2,85,218	4,71,726	5,49,982	1,67,540	1,1[illegible]829

a It is not clear whether these charges are properly debitable to the Mint in particular or whether they should be considered as general charges of the State.

(Signed) J. DORIN, *Secy. to the Govt. of India.*

(True copy.)

(Signed) S. D. BIRCH, *Secy. Mint Committee.*

(True copy.)

J. T. SMITH, *Mint M*

Fort William, Financial Department, the 9th January 1851.

APPENDIX 2.

Extract from the Mint Records, shewing the amount of Bullion purchased from Merchants, and the Mint Customs from May 1820 to April 1834.

	Amount of private bullion purchased for coinage.	Mint customs.
	C. Rupees	C. Rupees
From 1st May 1820 to 30th April 1821	52,74,674	1,48,335
From 1st May 1821 to 30th April 1822	54,95,185	1,12,143
From 1st May 1822 to 30th April 1823	92,44,500	1,88,659
From 1st May 1823 to 30th April 1824	38,36,687	78,297
From 1st May 1824 to 30th April 1825	44,55,958	90,934
From 1st May 1825 to 30th April 1826	37,94,522	77,436
From 1st May 1826 to 30th April 1827	20,02,958	40,865
From 1st May 1827 to 30th April 1828	18,57,448	37,906
From 1st May 1828 to 30th April 1829	10,09,727	20,606
From 1st May 1829 to 30th April 1830	5,47,578	11,174
From 1st May 1830 to 30th April 1831	7,00,547	14,206
From 1st May 1831 to 30th April 1832	6,31,101	12,879
From 1st May 1832 to 30th April 1833	13,96,428	28,497
From 1st May 1833 to 30th April 1834	52,08,551	1,06,291
14 Years Total	454,55,864	9,68,318
Average for 1 year	32,46,847	69,165

Fort St. George, Mint, 17th September 1834. (Signed) A. F. BRUCE, *Acting Mint Master.*

(A true Extract.)

Fort St. George, Mint, [illegible] 1851. J. T. SMITH, *Mint Master.*

APPENDIX 3.

Statement shewing the number of Copper pieces and their value, issued from the Madras Mint from 1837–38 to 1849–50.

		Half Annas.	Quarter Annas.	Single Pice.	Total number of Coins in each year.	Value of the Coins.			Profits after deducting the cost of the Copper *not* cost of coinage.		
		Pieces.	Pieces.	Pieces.	Pieces.	C. Rs.	As.	P.	C. Rs.	As.	P.
Average value for 5 years. Rs. A. P. 72,413 13 4	1837–38....	....	95,60,000	....	95,60,000	1,49,375	0	0	84,559	4	8
	1838–39....	44,68,000	13,38,000	....	58,06,000	1,60,531	4	0	90,883	7	10
	1839–40....	175	13,75,250	....	13,75,425	21,493	12	0	12,165	9	3
	1840–41....	18,480	....	57,77,600	57,96,080	30,660	2	8	17,392	8	10
	1841–42....	No Coinage.									
	1842–43....	17,53,000	16,10,000	13,14,000	46,77,000	86,781	4	0	47,090	7	4
	1843–44....	20,81,000	27,60,000	33,18,000	81,09,000	1,28,875	0	0	66,386	5	1
	1844–45....	47,84,000	53,40,000	5,31,000	106,55,000	2,35,703	2	0	1,39,504	10	11
Average value for 5 years. Rs. A. P. 1,58,622 2 6	1845–46....	33,99,000	49,84,000	72,36,000	156,19,005	2,21,781	4	0	1,28,027	9	6
	1846–47....	26,25,550	52,44,500	53,70,000	132,40,050	1,91,962	8	0	1,02,669	14	2
	1847–48....	24,63,848	62,39,300	31,30,680	118,33,828	1,90,946	3	0	1,04,004	15	5
	1848–49....	9,59,532	27,33,900	18,73,500	55,66,932	82,460	6	0	44,375	8	9
	1849–50...	16,55,620	24,86,380	29,51,550	70,93,550	1,05,960	7	6	57,713	6	3
	Total....	241,63,205	436,71,330	315,02,330	993,36,865	16,01,639	5	2	8,94,773	10	2
	Average for 1 year..	18,58,708	33,59,333	24,23,256	76,41,297	1,23,195	5	4	68,828	11	11

Average number of pieces for 5 years from 1845–46 to 1849–50 ..106,71,672.

E. E. per J. T. SMITH,
Mint Master.

Fort St. George, Mint, 11th April 1851.

APPENDIX 4.

Statement shewing the value of the Copper Coins issued from the Calcutta Mint from 1835–36 to 1848–49.

		C. Rupees.	As.	P.
Average C. Rs. 3,58,003 As. 6 P. 10	1835–36..........	2,5[illegible],450	9	8
	1836–37..........	1,45,000	0	0
	1837–38..........	4,76,531	4	0
	1838–39..........	5,06,348	12	0
	1839–40..........	4,06,391	6	6
	1840–41..........	5,03,174	0	9
	1841–42..........	3,71,406	14	3
	1842–43..........	2,24,[illegible]	3	0
	1843–44..........	[illegible]	14	0
Average C. Rs. 5,46,913 As. 4 P. 4	1844–45..........	[illegible]	0	5
	1845–46..........	6,89,[illegible]	14	0
	1846–47..........	[illegible]	10	8
	1847–48..........	[illegible]	0	10
	1848–49..........	[illegible]	3	4
	Total....	61,9[illegible]	7	10

E. E. per
J. T. SMITH,
Mint Master.

Fort St. George, Mint, 11th April 1851.

APPENDIX 5.

Statement shewing each description of Coin with its value stamped in the Calcutta Mint from 1833-34 to 1848-49.

Gold. — Silver Coins.

Gold: Standard, Mohurs Company's double and single Mohurs — Pieces	Value C. Rs.	A.	P.	Silver: Calcutta, Madras, and Furruckabad Whole Rupees — Pieces	Value C. Rs.	A.	P.	Silver: Calcutta, Madras, and Furruckabad Half Rupees — Pieces	Value C. Rs.	A.	P.
,191	26,44,454	10	2	104,84,3[illegible]	108,44,236	15	4	20,54,869	15,73,467	11	10
,721	16,82,205	13	6	118,7[illegible]	119,89,814	6	5	13,97,985	6,97,900	5	1
,823	11,95,472	12	....	157,58,[illegible]	167,83,129	7	4	5,21,389	2,77,639	10	3
,543	68,145	....	....	284,63,01[illegible]	284,63,012	..	..	17,94,825	8,97,412	8	..
,951	2,51,265	....	....	187,63,7[illegible]	187,63,780	..	..	22,21,933	11,10,966	8	..
,721	3,44,705	10	$3\frac{7}{8}$	259,84,[illegible]	259,84,195	..	..	7,34,599	3,67,299	8	..
,838	7,91,557	2	$9\frac{3}{8}$	201,18,[illegible]	201,18,274	..	..	19,48,729	9,74,364	8	..
,848	5,67,720	....	....	157,61,[illegible]	157,61,107	..	..	5,85,184	2,92,592	..	..
,401	2,31,015	....	....	251,20,[illegible]	251,20,26[illegible]	..	..	....	....	..	..
....	....	....	....	192,50,[illegible]	192,50,686	..	..	14,92,991	7,46,495	8	..
,089	1,66,335	....	....	211,05,[illegible]	211,05,163	..	..	8,73,588	4,36,779	..	..
,984	1,79,760	....	....	274,82,[illegible]	274,82,999	..	..	8,02,479	4,01,239	8	..
,969	1,64,535	....	....	210,60,3[illegible]	210,60,363	..	..	22,62,744	11,31,372	..	..
,489	4,27,335	....	....	160,50,[illegible]	160,50,422	..	..	2,77,020	1,38,510	..	..
,862	1,62,930	....	....	96,92,040	96,92,040	..	..	....	....	..	..
6,980	7,04,700	....	....	126,34,830	126,34,830	..	..	5,27,867	2,63,933	8	..
9,540	95,85,136	....	$8\frac{1}{4}$	2,996,09,579	3,009,13,393	13	1	183,96,202	93,09,972	3	2

Silver: Calcutta, Madras, and Furruckabad Quarter Rupees — Pieces	Value C. Rs.	A.	P.	Double Annas — Pieces	Value C. Rs.	A.	P.	Copper: Double Pyce — Pieces	Value C. Rs.	A.	P.
4,15,259	1,10,562	11	4	....	....	..	..	39,654	1,319	11	9
24,09,939	6,01,543	5	11	....	....	..	..	14,03,420	3,707	9	2
9,21,836	2,45,458	13	4	....	....	..	..	....	....	..	..
18,15,512	4,53,878	..	..	....	....	..	..	....	....	..	..
42,37,428	10,59,357	..	..	....	....	..	..	....	....	..	..
16,48,993	4,12,248	4	..	....	....	..	..	....	....	..	..
21,39,752	5,34,938	..	..	....	....	..	..	....	....	..	..
14,15,989	3,53,997	4	..	....	....	..	..	....	....	..	..
....	....	..	..	401	50	8	..	....	....	..	..
24,53,731	6,14,682	12	..	....	....	..	..	....	....	..	..
8,96,534	2,24,133	8	..	....	....	..	..	....	....	..	..
14,43,081	3,60,770	4	..	7,24,749	90,593	8	..	....	....	..	..
13,62,430	3,40,607	8	..	....	....	..	..	47,93,685	1,[illegible]177	10	6
8,16,997	2,04,249	4	..	6,79,529	84,941	2	..	28,02,518	[illegible],578	11	..
9,56,282	2,39,070	8	..	15,10,617	1,88,827	2	..	4,84,306	[illegible],131	9	..
11,87,185	2,96,791	4	..	8,61,718	1,07,714	12	..	2,07,688	[illegible],490	4	..
241,25,928	60,52,268	6	7	37,77,016	4,72,127	[illegible]	..	92,31,271	2,[illegible]408	7	5

Copper Coins.

Single Pyce — Pieces	Value C. Rs.	A.	P.	Company's Single Pyce — Pieces	Value C. Rs.	A.	P.	Pie Pyce — Pieces	Value C. Rs.	A.	P.
147,22,223	2,44,986	15	11	....	....	..	..	224	1	3	10
89,06,317	1,43,215	..	..	....	....	..	..	64,82,905	35,849	4	1
51,19,178	85,091	7	6	103,52,127	1,61,499	3	11	15,97,276	8,859	14	3
92,80,000	1,45,000	..	..	....	....	..	..	....	....	..	..
304,98,000	4,76,531	4	..	....	....	..	..	....	....	..	..
324,06,000	5,06,343	12	..	....	....	..	..	....	....	..	..
260,28,253	4,06,691	8	6	....	....	..	..	....	....	..	..
322,03,189	5,03,174	..	9	....	....	..	..	....	....	..	..
237,70,169	3,71,408	14	3	....	....	..	..	....	....	..	..
143,71,596	2,24,556	3	..	....	....	..	..	....	....	..	..
360,2[illegible],064	5,72,322	14	..	....	....	..	..	....	....	..	..
272,03,813	4,25,059	9	3	....	....	..	..	....	....	..	..
355,51,182	5,55,487	3	6	....	....	..	..	....	....	..	..
192,21,872	3,00,341	12	..	....	....	..	..	....	....	..	..
234,28,723	3,66,073	12	9	....	....	..	..	....	....	..	..
304,57,241	4,75,894	6	3	....	....	..	..	23,24,547	12,107	..	3
3,697,91,175	58,07,178	11	8	103,52,127	1,61,499	3	11	103,85,012	56,817	6	5

Whole Cents — Pieces	Value C. Rs.	A.	P.	Half Cents — Pieces	Value C. Rs.	A.	P.	Quarter Cents — Pieces	Value C. Rs.	A.
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
....	....	..	..	....	....	..	..	....	....	..
[illegible]0,41,583	23,435	9	11	41,74,735	46,965	12	3	112,33,391	63,[illegible]87	13
[illegible]3,10,600	29,458	4	5	30,78,739	34,635	13	1	68,13,073	34,328	9
[illegible]2,71,813	28,615	12	9	28,14,961	31,668	5	..	106,48,678	60,895	7
[illegible]6,23,986	81,539	11	1	100,68,435	1,13,269	14	4	286,95,442	1,61,411	13

Particulars of Coins from 1833-34 to 1848-49.

	Pieces		Value C. Rs.	A.	P.	C. Rs.	A.	P.
Gold	5,89,540					95,85,136	0	$8\frac{1}{4}$
Silver	2,996,09,579	Whole Rupees	3,009,13,393	13	1			
	183,96,202	Half do.	93,09,972	3	2			
	241,25,928	Quarter do.	60,52,268	6	7			
	37,77,016	Double Annas	4,72,127	0	0	3,167,47,761	6	10
	3,459,08,725							
Copper	92,31,271	Double Pyce	2,81,408	7	5			
	3,697,91,175	Single do.	58,07,178	11	8			
	103,85,012	Pie do.	56,817	6	5			
	103,52,127	Company's Single Pyce	1,61,499	3	11			
	36,23,986	Whole Cents	81,539	11	1			
	100,68,435	Half do.	1,13,269	14	4			
	286,95,442	Quarter do.	1,61,411	13	9	66,73,125	4	7
	4,421,47,448							
Total	7,886,45,713					Total 3,330,06,022	12	$1\frac{1}{4}$

Number of Whole Rupee Pieces 2,996,09,579
Do. of ½, ¼, & ⅛ do. do. 462,99,146
2,996,09,579 : 462,99,146 : : 100 : 15.45

Fort St. George, Mint, 11th April 1851.

E. E. per J. T. SMITH, *Mint Master.*

APPENDIX 6.

Statement shewing each description of Coin with its value stamped in the [illegible] remitted to the General Treasury from 1841-42 to 1850-51.

Year.	Gold Coins. Pieces.	Gold Value C. Rs.	A.	P.	Silver Coins. Single Rupees. Pieces.	Value C. Rs.	A.	P.	Half Rupees. Pieces.	Value C. Rs.	A.	P.	Quarter Rupees. Pieces.	Value C. Rs.	A.	P.	Double Annas. Pieces.	Value C. Rs.	A.
1841-42..	....	....	..	..	25,86,000	25,85,077	12	..	....	....	..	..	....	....	..	..	....	....	..
1842-43..	....	....	..	..	8,67,300	8,67,249	11	..	....	....	..	..	15,81,400	3,95,349	12	..	30,21,500	3,77,693	11
1843-44..	....	....	..	..	39,06,400	39,06,254	10	..	1,69,810	84,969	9	..	5,88,620	1,47,234	12	..	....	....	..
1844-45..	5,573	83,628	12	..	28,65,550	28,65,553	2	..	24,945	12,469	8	..	3,92,000	98,067	9	..	15,70,086	1,03,245	3
1845-46..	6,703	1,00,494	1	..	11,76,594	11,76,602	5	..	5,57,880	2,79,024	..	..	17,42,850	4,35,848	9	..	27,23,751	3,40,[illegible]	13
1846-47..	....	....	..	..	54,15,038	54,15,469	[illegible]	..	11,21,370	5,60,811	8	..	3,12,329	78,101	2	..	2,37,113	29,611	8
1847-48..	20,000	2,99,982	8	..	30,06,332	30,06,391	14	..	415	207	10	..	9,75,460	2,43,873	7	..	19,53,930	2,44,227	13
1848-49..	....	....	..	..	11,60,411	11,60,441	12	..	....	....	..	..	3,96,484	99,624	13	..	2,92,969	36,620	10
1849-50..	....	....	..	..	6,87,600	6,87,528	3	..	....	....	..	..	4,59,367	1,14,876	..	..	4,95,700	61,967	12
Total..	32,276	4,84,105	5	..	217,61,225	217,61,461	10	..	18,74,420	9,37,473	3	..	64,50,510	16,12,976	..	..	103,03,573	12,87,804	6
1850-51..	....	....	..	..	15,37,993	15,38,115	15	..	....	....	..	..	8,75,217	2,18,836	5	..	15,78,968	1,97,318	0
Total..	32,276	4,84,105	5	..	232,99,218	232,99,576	10	..	18,74,420	9,37,473	3	..	73,25,727	18,31,812	5	..	118,82,541	14,85,123	12

Year.	[illegible]	Value of Silver Coins.			Copper Coins. Half Annas. Pieces.	Value C. Rs.	A.	P.	Quarter Annas. Pieces.	Value C. Rs.	A.	P.	One-twelfth Annas. Pieces.	Value C. Rs.	A.	P.	Total Gold, Silver and Copper Pieces.	Total value of Gold, Silver and Copper Coins. C. Rs.	A.	P.
1841-42..	[illegible]	25,85,077	12	..	....	....	..	..	....	....	..	..	....	....	..	..	25,86,000	25,85,077	12	..
1842-43..	[illegible]	18,40,293	2	..	17,53,000	54,781	4	..	16,10,000	25,156	4	..	13,14,000	6,845	12	..	101,47,200	17,26,984	9	..
1843-44..	[illegible]	42,28,458	15	..	20,31,000	63,468	12	..	27,00,000	43,125	..	..	33,18,000	17,281	4	..	128,63,830	45,52,338	15	..
1844-45..	[illegible]	31,72,429	11	..	47,84,000	1,49,500	..	..	33,40,000	83,437	8	..	5,31,000	2,765	10	..	155,18,754	34,01,761	9	..
1845-46..	[illegible]	22,32,[illegible]	11	..	33,99,000	1,06,218	12	..	49,84,000	77,875	..	..	72,36,000	37,687	8	..	218,29,778	25,54,556	..	..
1846-47..	[illegible]	60,84,016	2	..	26,25,550	82,048	7	..	52,44,500	81,945	5	..	53,70,000	27,968	12	..	203,25,900	62,75,078	10	..
1847-48..	[illegible]	34,95,300	12	..	24,68,846	77,151	8	..	62,30,300	97,469	1	..	31,80,680	16,305	10	..	177,99,985	39,86,220	7	..
1848-49..	[illegible]	12,96,676	3	..	9,59,532	29,985	6	..	27,33,900	42,717	3	..	18,75,500	9,767	13	..	74,18,696	13,79,150	9	..
1849-50..	[illegible]	8,64,371	15	..	16,55,620	51,738	2	..	24,86,980	38,849	11	..	29,51,550	15,372	10	6	87,56,226	9,70,332	0	6
Total..	[illegible]	255,99,715	3	..	196,76,550	6,14,892	3	..	313,98,080	4,90,595	..	..	257,24,780	1,33,982	15	6	1 172,21,360	273,23,290	10	6
1850-51..	[illegible]	19,54,27[illegible]	..	..	16,34,848	51,088	13	6	32,57,328	50,895	12	..	28,61,150	14,901	13	2	117,45,494	20,71,157	6	8
Total..	[illegible]	275,53,986	3	..	213,11,398	6,65,981	..	6	346,55,408	5,41,490	12	..	285,85,880	1,48,884	12	8	1,289,66,863	293,94,448	1	2

Particulars of Coins from 1841-42 to 1849-50.

	Pieces.		Value. C. Rs.	A.	P.	C. Rs.	A.	P.
Gold......	32,276					4,84,105	5	0
Silver	217,61,225	Single Rupees	217,61,461	10	0			
	18,74,420	Half do.	9,37,473	3	0			
	64,50,510	Quarter do.	16,12,976	0	0			
	103,03,578	Double Annas	12,87,804	6	0			
	403,89,733					255,99,715	3	0
Copper	196,76,550	Half Annas	6,14,892	3	0			
	313,98,080	Quarter Annas	4,90,595	0	0			
	257,24,730	One-twelfth Annas	1,33,982	15	6			
	767,99,360					12,39,470	2	6
Total....	1,172,21,369				Total..	273,23,290	10	6

Number of single Rupee pieces 217,61,225
Do. of ½, ¼ [illegible] do. 186,2[illegible],508
217,61,225 : 186,2[illegible],508 :: 100 : 85.60

Particulars of Coins from 1841-42 to 1850-51.

Number of single Rupee pieces 232,99,218
Do. of ½, ¼ & ⅛ do. do. 210,82,688
232,99,218 : 210,82,688 :: 100 : 90.48

Fort St. George, Mint, 14th April 1851.

E. E. per J. T. SMITH,
Mint Master.

APPENDIX 7.

Statement shewing the net gain on the Gold, Silver and Copper Coinage from the year 1841–42 to 1849–50.

	Seignorage and refining charges.			Gain on copper coins after deducting the value of the copper.			Silver recovered from the old dross.			Silver alloy recovered from the gold.			Excess in gold and silver.			Unserviceable articles sold at the Mint.			Total.		
	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.
1841–42	*5,877	11	7	......	..	..	......	..	..	......	..	..	2,473	13	7	87	8	..	18,342	3	2
	9,953	2	..																		
1842–43	19,970	15	5	47,090	7	4	......	..	..	......	..	..	......	..	..	38	..	..	66,099	6	9
1843–44	23,943	9	0	66,386	5	1	296	13	8	......	..	..	324	12	..	146	13	..	91,098	5	3
1844–45	8,120	15	3	1,39,504	10	11	510	14	5	2,580	7	10	1,829	8	..	503	6	5	1,53,059	14	10
1845–46	10,841	2	6	1,28,027	9	6	80	8	2	107	15	9	2,414	12	8	518	6	8	1,41,990	7	3
1846–47	4,905	2	4	1,02,669	14	2	138	15	1	7,354	2	6	6,623	3	10	1,171	3	..	1,22,262	8	11
1847–48	2,254	8	3	1,04,004	15	5	......	..	..	4,934	13	..	2,182	7	3	859	..	..	1,14,235	6	11
1848–49	3,689	3	..	44,375	8	..	......	..	..	......	..	..	683	13	6	2,599	14	10	51,238	7	4
1849–50	4,898	4	6	57,713	6	3	......	..	..	......	..	..	697	2	8	598	9	4	63,907	3	9
Total	92,814	2	4	6,89,772	12	8	1,027	3	4	14,977	7	1	17,229	9	6	6,412	13	3	8,22,234	..	2

DEDUCT.

	C. Rs.	A.	P.	C. Rs.	A.	P.
Difference between gain and loss of scissel sold	95	9	11			
Wastage and loss of gold and silver in 1842–43, 1843–44 and 1845–1846	1,404	2	3	1,499	12	2
Net Profit				8,20,734	4	..

* Calculated on the merchants silver bullion received from the General Treasury on the 31st July 1841.

E. E. per J. T. SMITH,
Mint Master.

Fort St. George, Mint, 11th April 1851.

APPENDIX 8.

Statement shewing the amount value of Merchants Bullion and Uncurrent Coins, received into the Madras Mint from 1841–42 to 1849–50.

	Merchants gold and silver out-turn value.			Gold and silver Uncurrent coins out-turn value.			Total.		
	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.
1841–42	7,81,951	0	11	22,53,679	6	9	30,35,630	7	8
1842–43	9,39,328	2	9	8,07,270	9	8	17,46,598	12	5
1843–44	11,93,612	11	11	36,17,818	7	4	48,11,431	3	3
1844–45	4,00,059	15	11	22,06,815	3	6	26,06,875	3	5
1845–46	5,39,034	3	8	25,51,078	11	0	30,90,112	14	8
1846–47	2,11,739	9	5	55,55,400	7	8	57,67,140	1	1
1847–48	1,12,676	11	0	28,90,539	8	9	30,03,216	3	9
1848–49	1,77,895	12	7	12,11,847	7	7	13,89,743	4	2
1849–50	2,44,319	1	7	9,46,903	8	6	11,91,222	10	1
Total	40,00,617	5	9	220,41,353	6	9	260,41,970	12	6

The average value for the last 9 years of precious metals brought for coinage is Company's Rupees 29,93,318–15–7.

E. E. per

J. T. SMITH,

Mint Master.

Fort St. George, Mint, 11th April 1851.

APPENDIX 9.

Statement shewing the gross Out-turn and Expenses of the Calcutta Mint for each of the last 16 years, also shewing in a separate column Contingencies and Extra Establishment and refining Charges.

Year.	Contingent expenses, extra establishment and refining charges.			Establishment and other charges.			Total charges.			Out-turn of pieces coined during the year.
	C. Rs.	A.	P.	C. Rs.	A.	P.	C. Rs.	A.	P.	
1833–34....	29,618	0	0	1,84,090	6	10	2,13,708	6	10	287,71,726
1834–35....	40,392	1	8	2,29,601	3	6	2,69,993	5	2	325,50,100
1835–36....	37,979	15	6	2,27,030	15	5	2,65,010	14	11	343,34,736
1836–37....	90,906	15	11	2,25,808	6	10	3,16,715	6	9	413,57,392
1837–38....	53,712	15	10	2,10,508	5	4	2,64,221	5	2	557,38,092
1838–39....	77,723	14	6½	1,97,067	2	8	2,74,791	1	2½	607,94,508
1839–40....	88,775	12	8	2,03,123	1	6	2,80,898	14	2	502,84,081
1840–41....	74,275	0	3	1,85,633	12	8	2,59,908	12	11	500,06,357
1841–42....	76,565	12	6	1,67,975	2	6	2,44,540	15	0	480,12,256
1842–43....	59,008	10	5	1,88,760	11	6	2,47,769	5	11	375,74,004
1843–44....	77,921	7	6	1,89,766	0	10	2,67,687	8	4	595,15,038
1844–45....	70,465	3	3	1,88,032	12	6	2,58,497	15	9	570,60,104
1845–46....	91,639	4	8	1,88,647	10	6	2,80,286	15	2	645,41,363
1846–47....	82,975	6	7	1,92,891	12	4	2,75,867	2	11	563,26,556
1847–48....	40,082	15	4	1,90,622	0	7	2,30,704	15	11	472,86,132
1848–49....	63,033	5	7	1,88,538	5	10	2,51,571	11	5	629,82,888
Total....	10,44,076	14	2½	31,64,067	15	4	42,08,144	13	6½	7386,45,713

Fort St. George, Mint, 11th April 1851.

E. E. per J. T. SMITH,
Mint Master.

APPENDIX 10.

Memorandum of expenses attendant upon the package and shipment of One Lac of Rupees in Silver Specie.

16 Boxes of 6,000 Rupees each........	96,000	0	0
1 Box of........	4,000	0	0
17 Boxes. Company's Rupees..	1,00,000	0	0
Cost of 17 boxes at Rupees 2–14–1½ each........	49	0	1½
2 Carpenters for packing, at Annas 6–3 each........	0	12	6
4 Carts for conveying the boxes from the Fort to the Beach at Rupees 13–4–10 each per month....	1	12	4
3 Boats at Rupees 1–14–0 each........	5	10	0
Gunny sewed and ropes lashed on the boxes at Annas 14 per box........	14	14	0
2 Extra Gollahs for attending the packing at Annas 3–9 each........	0	7	6
⅜ lb. sealing wax at Annas 14–3 per lb........	0	5	4
Company's Rupees..	72	13	9½
Single Rupees, each box contains 3 bags at Rupees 2,000 per bag........ Half Rupees, each box contains 3 bags at 4,000 Half Rupees per bag, is Half Rupees 12,000 or.... Quarter Rupees, each box contains 3 bags at 8,000 Quarter Rupees per bag, is Quarter Rupees 24,000 or........ Double Annas, each box contains 12 bags at 4,000 Double Annas per bag is Double Annas 48,000 or	6,000	0	0

(Signed) S. D. BIRCH,
Sub Treasurer.

General Treasury, 1st March 1851.

(A true copy.)

J. T. SMITH,
Mint Master.

APPENDIX 11.

Memorandum of expenses attendant upon the packing and shipment of Copper Specie to the extent of Ten Thousand Rupees.

Outer dimensions per box. Ft. In. Length ... 1 7; Breadth ... 1 0; Depth ... 1 4.

83 Boxes containing Copper Coins to the value of Rupees 120 each....................	9,900	0	0
1 Box do. do. to the value of Rupees	40	0	0
84 Boxes. Company's Rupees..	10,000	0	0
Cost of 84 boxes at Rupees 1–14–3 each........	158	13	0
4 Carpenters for packing at Annas 6–3 each	1	9	0
17 Carts for conveying the boxes from the Fort to the Beach at Rupees 13–4–10 each per month	7	8	7
14 Boats at Rupee 1–8–0 each...............	21	0	0
Gunny sewed and ropes lashed on the boxes at Annas 14 per box......................	73	8	0
4 Extra Gollahs for attending the packing at Annas 3–9 each	0	15	0
¾ lbs. sealing wax at Annas 14–3 per lb........	0	8	10
Company's Rupees..	263	14	5
Half Annas, each box contains 4 bags at 30 Rupees of Half Annas per bag is			
Quarter Annas, each box contains 4 bags at 30 Rupees of Quarter Annas per bag is......	120	0	0
Single Pice, each box contains 12 bags at 10 Rupees of Single Pice per bag is			

(Signed) S. D. BIRCH,

Sub Treasurer.

General Treasury, 1st March 1851.

(A true copy.)

J. T. SMITH,

Mint Master.

No. 100.

From Lieut. Colonel A. COTTON,

Civil Engineer, 1st Division.

To the MINT MASTER,

Madras.

Sir,

I have the honor to request that the wheels already cast may be sent up as soon as possible.

With respect to the saving by having them cast at Madras, I beg to state that the only place where we could now get them is Calcutta where the price per ton is 600 Rupees so that the cost of the set of wheels would be 300 Rupees instead of 50 Rupees as now charged at the Mint, shewing a saving of Rupees 250 per set.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) A. COTTON, Lieut. Colonel,

Civil Engineer, 1st Division.

Rajahmundry District, Camp Dowlaishwarum, 14th March 1851.

(A true copy.)

J. T. SMITH,

Mint Master.

APPENDIX 12.

The quantity of finished work delivered by the iron foundry for the use of the Department of Public Works at the Rajahmundry Anicut during the 2 years from March 1849 to March 1851 is as follows:

228 Wheels weighing		lbs.	63,840
36 Smaller wheels weighing		lbs.	5,048
72 Bearings weighing		lbs.	1,080
21 Pairs of large sized lock hinges weighing		lbs.	7,812
4 do. small sized do.	do.	lbs.	864
4 do. third sized do.	do.	lbs.	432
		Total lbs.	79,076 or 35¼ tons.

Colonel Cotton's letter of which copy is annexed, in speaking of the saving to Government effected by the rates at which the work has been done at the Madras Mint states it to be 250 Rupees per set of wheels.

Each wheel weighs 280 lbs. so that the set of 4 wheels weighs exactly ½ a ton, and a saving of 250 Rupees in ½ a ton, is equal to 17,625 Rupees upon 35¼ tons.

This is less than the true amount, because the rates of charge in Calcutta for the smaller articles are much higher than for simple heavy castings like railroad wheels.

The above mentioned profit is at the rate of Rupees 8,812-8-0 per annum.

The profit derived by Government from the use of the Nitric and Sulphuric Acids is shewn in the accompanying copy of a Statement submitted by the Deputy Assistant Commissary General where it is shewn to be at the rate of Company's Rupees 353-5-4 per annum. The total profit derived from both these sources is therefore Rupees 9,165-13-4 per annum.

J. T. SMITH,

Mint Master.

Fort St. George, Mint, 11th April 1851.

Statement of Nitric and Sulphuric Acids purchased during the last 3 years, viz. 1848-49 and 50 shewing the difference between the bazar rate and that charged by the Mint.

Year.		Quantity.	Bazar rate.			Mint rate.			Difference.			Total for 3 years.		
		lbs.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1848	Acid Sulphuric	100	0	7	0	0	4	0	18	12	0			
	Do. Nitric	300	2	4	0	1	0	0	375	0	0	393	12	0
1849	Acid Sulphuric	220	0	7	0	0	4	0	41	4	0			
	Do. Nitric	300	2	4	0	1	0	0	375	0	0	416	4	0
1850	Acid Nitric	200	2	4	0	1	0	0	...	...	...	250	0	0
						Company's Rupees			...	...	...	1,060	...	...
						On average of one year			...	...	...	353	5	4

(Signed) C. J. ELPHINSTONE, *Depy. Asst. Comy. General.*

Commissary General's Office, Madras, 14th March 1851.

(A true copy.)

J. T. SMITH, *Mint Master.*

APPENDIX 13.

Statement shewing the actual expenses incurred in the Madras Mint from 1841-42 to 1849-50 without the Mint Committee and Assay Offices.

	Expenses including all charges. C. Rs.	A.	P.
1841-42	73,431	3	7
1842-43	96,022	10	1
1843-44	92,089	12	0
1844-45	91,590	15	4
1845-46	90,127	10	7
1846-47	1,00,815	10	6
1847-48	1,00,573	13	9
1848-49	73,017	0	9
1849-50	67,945	1	5
Total....	7,85,613	13	9

E. E. per

J. T. SMITH,

Fort St. George, Mint, 11th April 1851.

Mint Master.

No. 201.

Fort St. George, Mint,
16*th December* 1851.

From Major J. T. SMITH, Engineers,
Mint Master,

To Sir T. V. STONHOUSE, Bart.
S. D. BIRCH, Esq.
W. H. BAYLEY, Esq.
} *Mint Committee.*

Gentlemen,

Para. 1st. In acknowledging the receipt of your Secretary's communication of the 18th October last, giving cover to copies of the extracts from your minutes on the subject of the abolition of this Mint, with which you kindly favored me, I have the honor now to forward a Supplementary Report,* which I regret to have been prevented submitting at an earlier period, owing to the length of time occupied in examining and abstracting the information taken from the Reports of external commerce, from 1810 to the present date.

2d. I trust that your Committee will be enabled from the information which I have now the honor to lay before you, to pronounce your opinion as to the probable future wants of the country, in circulating medium, and for the coinage of bullion imported in trade, with reference; not merely to the bullion trade with the Eastern Settlements, which as your Committee observe has, for the present at least, nearly ceased; and with respect to which you have already stated your views; but on the ground of the eventual and permanent demands of the vast territories whose currency falls within the scope of this establishment, as determined by the prospective necessities of our rapidly increasing commerce, whenever the obstructions which now prevent the inward flow of bullion shall have ceased to operate; and I trust that, if you should see reason to agree with me as to the transition which our commerce is undergoing, and its rapid development, you will be led thereby, as well as by a consideration of the circumstances of the other Indian Mints; relatively to the commerce of

* In Quadruplicate.

the Presidencies to which they are attached, to agree in the belief that a bullion trade of 32 or 33 lacs of Rupees per annum, at no very distant period, may be not unreasonably expected.

3d. The information to which I have above alluded has been taken under my own directions from the trade returns, which are already published and in the hands of Government and the Honorable Court of Directors, I have therefore thought it unnecessary to encumber this report by any tables or statements other than those given in the margin, as they would be possessed of no additional authority. Should your Committee, however, be anxious to guard against any error in the abstracts, I would respectfully suggest that a copy of the report should be forwarded to the office of the Reporter of external commerce, for the verification of such of the entries as have been extracted from the trade returns.

4th. The information respecting the Calcutta Mint, I beg to state, has been taken from the series of abstract statements furnished officially to this department, of which copies are in your possession, and partly from private sources; that respecting Bombay from a private source only. On all other points I believe the authorities will be found to have been referred to.

I have the honor to be,
Gentlemen,
Your most obedient Servant,
J. T. SMITH,
Mint Master.

ABSTRACT OF A SUPPLEMENTARY REPORT ON THE ABOLITION OF THE MADRAS MINT.

Para 1 to 5. Statement of the opinion recorded by the Mint Committee
as to the future imports of bullion by sea and land. The
9. estimate of 11 lacs per annum applicable to the present cir-
cumstances of the trade, but a different distribution of the
two items suggested, in consequence of a defect in the trade
10 & 11. returns. The estimate of 32½ lacs per annum of bullion from
all sources was based on the future wants of our commerce,
in connection with—1st its altered character and increasing
development; 2d, the comparative circumstances of Bom-
12 to 21. bay and Bengal. Statements of the commerce of Madras
with the Straits of Malacca, Sumatra, Manilla, Pegue, Persia,
and Arabia, China, Great Britain, Bengal, Bombay, and
Ceylon. With the first five our trade in manufactured articles,
piece goods, shown to have greatly declined, trade in raw
25. produce immensely increased. General increase of the com-
merce of the Presidency 1 crore of Rupees in the last 10
26 & 27. years. Reasons shewn for supposing that the commerce will
28 & 29. increase more quickly hereafter. Remarks on the tendency
of bullion to uniform diffusion, and an exhaustion of cur-
30. rency to tell on *all* the commerce of a country. The Madras
Presidency shewn to be exhausted of its currency, and to
31 to 34. have lost 789 lacs of Rupees since 1825-26. That this
exhaustion still goes on, at the rate of 32½ lacs per annum;
the trade with Bengal, Bombay and Ceylon being incom-
petent to make good the deficiency, and the return of bullion
from other countries being interrupted by the Honorable
Court's bills.

35 to 41. The Honorable Court's bills shewn to have absorbed
all the returns required for the increasing exports; but it is
argued that, when the Hon'ble Court cease to increase their
drafts, the bullion trade will be revived, and take up all
further increase, at the cumulative rate at least of 2½ lacs per
annum, so as to realise a trade of 25 lacs in 10 years.

Para 42. Dependence of the bullion trade upon the commerce of all
43. India and the rates of exchange stated, and prospects in connection with these examined.

45 to 48. Argument on the comparison with Bengal and Bombay stated—Bengal with a commerce of $17\frac{1}{2}$ crores per annum, has 120 lacs of bullion brought to the Mint; Bombay with a commerce of 20 crores has 89 lacs of bullion to coin. At these rates Madras with a commerce of 6 crores ought to receive 41 or $26\frac{2}{3}$ lacs of merchants bullion per annum.

49. Objection to this comparison considered. Coinage wants of

50 to 52. Madras Presidency compared with France, of equal area, and population, requiring 8 Mints, and an *annual* coinage equal to 3 crores of Rupees. The United States have 4 Mints, one of them coining 480 lacs per annum. England, small as it is, coins the value of 3 crores annually.

53. Caution against judging the proper wants of the Presidency from its present degraded condition; and conclusion that the former average of $32\frac{2}{3}$ lacs is rather below than above the fair probability.

55. On the comparative economy of work in the Madras and Calcutta Mints.

56. Cost of *mere* coinage less in Calcutta, irrespective of charges of transport to and fro.

57. Economy of work stated to be greater in Madras, if the interest of capital sunk in Calcutta be reckoned.

Expenses in Madras Mint may be reduced 40 per cent, if the constitution be revised.

58 to 60. Objection to the estimate of comparative cost of coining bullion in Madras and Calcutta answered.

61. Remark that, even if it should be resolved to send bullion hereafter to Bengal and Bombay, over and above the revenues of Malabar and Canara, it might be advisable to coin it previously into small coins. Under any circumstances, the impolicy of parting with the resources of the Madras Mint previous to the reformation of the Hyderabad currency suggested.

SUPPLEMENTARY REPORT UPON THE ABOLITION OF THE MADRAS MINT.

Bullion trade.

Para. 1. In my report dated the 11th April I had the honor of drawing the attention of your Committee and the Honorable Court to the fact that the bullion trade* which, previous to 1834, had supplied this Mint, had declined from $32\frac{1}{2}$ lacs per annum to little more than 1 lac in 1847-48; and I ascribed this declension to the effect of the introduction of British manufactures into the markets supplied by us, consequent on the Act of 1834. I at the same time stated that since that period the commerce of the Presidency has been in a state of transition, and that we have been gradually passing from the export of manufactures to that of raw produce, of which I instanced several. I remarked that our attempts at the substitution of these new and comparatively inexhaustible materials of exchangeable value were as yet only in their infancy, but that every year witnesses a further progress in their development.

Resumé of argument contained in report.

2. Observing then, that it is a work of time to transfer the industry of a country from one branch of commerce to another, I added that it appeared, so far as the bullion trade was affected by this change, the crisis had been reached in 1847, and a turn had taken place for the better.†

Resumé of argument contained in report.

Misapprehension noticed.

3. Your Committee seem to have misapprehended my meaning in this part of my report, for after noticing the very material decrease of the bullion trade with the Eastern Settlements, you proceed to mention the large import of bullion from England last year, respecting which you observe that, on this, coupled with the improvement of the Home trade generally, the Mint Master has chiefly based his arguments that a continued steady supply may be expected from that quarter.

4. It has accordingly been shown in your Committee's report, that during the last 31 years there has been no steady bullion trade with England; and as the unusual import of last year you consider to be accounted for by the high rate of the Honorable Court's bills, you conclude that, with the facilities that

* Para 23.
† Para 28.

now exist for exchange operations, and the requirements of the Honorable Company for their Home Treasury, no steady supply of bullion can be calculated upon; and that in estimating the future import at the average of from 5 to 6 lacs of Rupees per annum, you give the maximum limits to which it is likely to reach.

5. I must first explain to your Committee, that it was never my intention to confine my expectation of the future supply of bullion exclusively to the returns from the United Kingdom, though I am of opinion that, as soon as the circumstances shall be favorable, a large proportion will be derived thence. In pointing out the reaction which had taken place in the bullion trade, I endeavoured to guard* against this misapprehension, my views indeed not being limited to any particular country; I argued on general principles, that when the nation had completed the transition, and a new commerce was established on a firm basis, the bullion trade would be restored to its former magnitude; and judging by a comparison of this Presidency with those of Bengal and Bombay, we might fairly expect even more.

Expectation of bullion trade not confined to England.

6. Had I grounded my expectations upon a continuance of our commerce in the condition in which it has been for the last few years, as your Committee have done; had I not indeed intended it to be an essential part of my argument, that the country is in a state of transition, I should no doubt have arrived at the same conclusion which has been recorded by your Committee, and have considered 11 lacs as amply representing the future imports of bullion by sea and land for the next few years. I should, however, have been inclined to suggest for your consideration a different distribution of the items, by allowing a larger part as the probable future import by sea, and a smaller part by land, an alteration which your Committee will I trust be inclined to approve of, when I mention the reason for it, which is a defect in the tables of the Reporter† of external commerce, which improperly reckon all coins except dollars as treasure, instead of reckoning all coins, as well as dollars, except the Company's currency, as bullion.

Basis of expected bullion trade an enlarged commerce.

7. In consequence of this defect, the statements furnished by the Reporter of external commerce are inapplicable to Mint questions, and lead to errors, the extent of which cannot now be ascertained and allowed for. For instance, the imports from France and the French Indian Ports are marked in the statements given in para 30 of one of the minutes as having ceased, since 1845-46, though we have during the same period received 4,34,224 tolas

Defect in the trade returns regarding bullion and treasure.

* Note to Para 29.

† Vide letter from Reporter of external commerce in Appendix A.

weight of bullion in the shape of francs. These appear in the statements of the Reporter of external commerce as "treasure" instead of "bullion;" and in the same way, the imports from every country, of foreign coins, with the sole exception of dollars, have been entered as "treasure" though for all Mint purposes they are as much bullion as ingots and bars.

8. This circumstance in part explains the anomaly which has attracted your Committee's notice, of the imports of bullion by sea having been only 11½ lacs, when the Mint purchases were 32½ lacs. Possibly, as a guess, we may assume that half the difference may have been included under the head of treasure imported; but I do not think more than this, for after comparison of the trade returns with the Mint records, I think it probable that a good deal of bullion was received from the interior, as your Committee infer, previous to 1834.

Anomaly explained.

9. There appears to have been some mistake as to the precise amount of 11½ lacs, as I find on examining the returns of the Reporter of external commerce, forwarded to me by your Committee, 2,15,31,062 entered as bullion imported by sea from 1820-21 to 1833-34, and this gives an annual average of 15,37,933; adding to which half the difference from 32½ lacs, as the amount of foreign coins probably included under the head of "treasure," the total imports by sea would be 24 lacs, leaving for purchases from the interior 8½ lacs. In this proportion I should have been inclined to divide any future expected purchases of bullion by the Mint.

10. Your Committee have not done me the honor to express any opinion on the points which form the basis of my expectations as to the future bullion trade of this Presidency, viz. 1st the alteration in the character of our commerce, and its rapidly increasing development, and 2dly the comparative similar circumstances of the other two Presidencies engaged in the same transactions, and with the same countries as ourselves, though some years in advance as to progress. In order, therefore, that these points may be more distinctly brought under your observation, it may be proper for me to lay the circumstances before you in fuller detail.

Statement of the grounds of my opinion.

11. First then, with regard to the change which our commerce has undergone, I would beg to refer to the annexed Statements taken from the trade returns, shewing the average annual exports to the various Eastern Settlements, for the 10 years anterior to 1833-34, the date referred to in my report, up to which the Mint purchases were 32½ lacs per annum, and also for the 10 years ending 1849-50.

Facts connected with the alteration in our trade.

Straits of Malacca.

Average annual exports during 10 years ending.

1834.	1850.
16,13,512	10,22,264

Out of which the value of piece goods was

14,58,488	7,60,994

12. Taking first, the trade to the straits of Malacca, we observe that the annual export of piece goods has fallen off by nearly 7 lacs, the trade in general not quite 6 lacs; having as we may infer partly revived, by the substitution of other articles of export, in lieu of part of the piece goods trade.

West Coast of Sumatra.

Average annual exports during 10 years ending.

1834.	1850.
1,59,102	8,213

Out of which the annual value of piece goods was.

1,43,373	5,329

13. Next with regard to the West Coast of Sumatra, it will be seen that our commerce, which was almost wholly in piece goods, has nearly ceased altogether.

Manilla.

Average annual exports during 10 years ending.

1834.	1850.
1,72,899	None

Out of which the annual value of piece goods was.

1,70,644	None

14. In Manilla this event has quite taken place, our export trade, of piece goods mainly, having been totally destroyed.

Pegue.

15. Our export trade with Pegue has not much declined, being about $2\frac{3}{4}$ lacs per annum in each 10 years; and even the trade in piece goods has only declined 25,000* Rupees out of 1,35,000; but this is probably connected with a very large increase in the import trade, which has grown from $4\frac{3}{4}$ lacs, including treasure, to 13 lacs (consisting chiefly of rice and timber) a circumstance which has had nearly as much effect upon the bullion trade as a cessation of our intercourse would have had; for with so large a balance continually against the Presidency, the flow of bullion is naturally outwards, and the imports of treasure are necessarily confined to what is required to meet sudden and temporary fluctuation only.

Gulph of Persia and Arabia.

16. Our annual export of piece goods to these countries has fallen off from 5,46,000 Rupees, to 1,68,000, but they only formed a part of the commerce; the rest consisted of raw produce, the improvement in which has in some degree repaired the loss of our piece goods trade; the aggregate annual exports having only declined from 13,70,000 to 12 lacs.

Loss of trade in manufactures coeval with loss of bullion trade.

17. It was with the countries above mentioned that our export trade consisted chiefly in manufactures, and it was from them too that the Madras Mint in former years derived its most regular supply of bullion;

* 24,166.

as stated in para 34 of the first of the minutes with which you favored me with copies. The trade has died away, and with it the bullion trade, and I trust that the connection between the two will now be apparent. Whatsoever may have been the cause, the loss of our manufactured exports seems to have been coeval with the loss of our returns in bullion.

Increase of trade in raw produce.

18. If we turn now to those other countries, with which our trade consists in produce of another description, we find that the case is very different. With them, instead of a falling off, there is an increase in our exports.

China.

With China, to which our chief shipments are of cotton, the average annual exports in the 10 years ending 1834 were $6\frac{3}{4}$ lacs, in the 10 years ending 1850 they were nearly $14\frac{1}{2}$ lacs.

Britain.

19. To Great Britain, the exports for the same periods were $29\frac{3}{4}$ lacs, and 50 lacs; although the former exports include 16 lacs of piece goods, which in the latter have dwindled down to $5\frac{3}{4}$ lacs. The increase is chiefly in cotton, indigo, saltpetre, grain, oils and oilseeds, sugar, &c.

Bengal.

20. With Bengal, the trade has increased from 9 lacs to $14\frac{2}{3}$ lacs per annum, including an increase in piece goods from 2 to nearly $4\frac{2}{3}$ lacs; the remainder almost entirely raw produce.

Bombay.

21. With Bombay, the trade has risen from 50 to 73 lacs per annum, though the piece goods have fallen off from $12\frac{1}{4}$ to $9\frac{3}{4}$ lacs. The great bulk of exports are raw produce of various kinds.

Ceylon.

22. With Ceylon our trade has increased from $14\frac{1}{2}$ to about $29\frac{3}{4}$ lacs per annum, including an increase upon piece goods from $6\frac{3}{4}$ to $7\frac{1}{2}$ lacs.

23. These, which are the chief countries with which traffic is carried on, will suffice to give a distinct idea of the alteration in our commerce; but perhaps the most satisfactory method of shewing the change, may be that of giving a list of the chief articles, and the amounts exported to all countries during each of the periods above noticed, which will be found in the margin. Here it will be perceived that while our manufactures have fallen off nearly 30 per cent, our raw produce has increased immensely. Some of the articles, such as sugar, oilseeds, coffee, have only begun to be exported of late years, and if their separate histories were traced, they would exhibit a progress

Aggregate Exports.

Articles.	From 1824–25 to 1833–34.	From 1840–41 to 1849–50.
Piece goods	516,80,815	362,73,194
Cotton and cotton wool	82,45,741	426,83,901
Grain	230,42,904	377,90,560
Sandalwood	23,10,754	12,29,680
Spices	86,80,691	111,68,595
Sugar	None	95,73,161
Oils	do.	6,77,141
Oilseeds	do.	2,44,363
Dyes indigo &c.	70,90,670	210,52,363
Turmeric	None	3,68,614
Coffee	3,20,043	18,44,734
Salt	17,47,514	12,06,079
Hides	3,42,030	19,14,624

more marked than what can be shewn by the table which necessarily takes

Sugar.

the exports of 10 years in the aggregate. Sugar for instance, has hardly been exported quite so long as 10 years, and the statement of the export of 95 lacs within that time gives an inadequate idea of its rapid increase; I believe that the exports during the present official year will amount to *from* 30 *to* 35 lacs.

24. From these statements it will be apparent, that while our trade in

Summary.

manufactured piece goods has very materially declined, our exports of raw produce have in a

	Years.	Exports of Company's and private merchandise and private treasure and bullion.
Average of 10 years ending	1833–34...	* 167,51,623
	1834–35...	167,24,985
	1835–36...	169,31,232
	1836–37...	175,49,390
	1837–38...	177,19,645
	1838–39...	180,13,669
	1839–40...	183,44,480
	1840–41...	190,18,933
	1841–42...	197,13,613
	1842–43...	203,38,040
	1843–44...	211,30,438
	1844–45...	221,08,434
	1845–46...	226,10,008
	1846–47...	230,39,169
	1847–48...	235,40,015
	1848–49...	236,02,443
	1849–50...	239,66,881

much greater degree been extended, and the annexed marginal statement, compiled from the trade returns, shews the remarkable fact that, although the former has suffered to the extent of an annual diminution of very nearly 23¾ lacs of Rupees, on comparing the last 10 years with the 10 years preceding 1834, yet so great has been the elasticity of our commerce in general, that if we except the very trifling deficiency shewn in the next year 1834–35, no decline whatever is perceptible, but on the contrary a steady increase. I must explain, that the figures given in the margin do not represent the actual exports of any of the single years to which they are attached; but, with the view to obviate the effect of the fluctuations of different periods, each entry consists of the *average of the 10 years* ending with each successive year.

25. I have only one more remark to submit to your Committee's consi-

Increase of our commerce in general.

deration, before proceeding to shew in what way the circumstances of the commerce in general tell upon the prospects of the bullion trade; namely to draw your attention to the great increase during the last 10 years.

1839–40		
Average exports of Company's and private merchandise and private treasure	......	183,44,480
Average imports of do	do.	124,81,638
Hon'ble Court's bills 5 years average 14½ lacs.	Total	308,26,118

In the margin is a statement shewing the aggregate exports and imports of private and Company's merchandise and private, (not public) treasure,

1849–50		
Average exports of Company's and private merchandise and private treasure	......	239,66,881
Average imports of do	do.	150,79,948
Hon'ble Court's bills 5 years average 99¼ lacs.	Total	390,46,829

on the average of 10 years ending 1839–40, and the 10 years ending 1849–50. The former it will be perceived amounts to a little beyond 3 crores per annum, the latter to very nearly 4 crores; an increase of nearly a million sterling* in our commerce in 10 years.

26. This increase, as I have shewn, is due to the expansion of our com-

Prospects of further more rapid increase.

merce in the raw products, and it is deserving of notice that it has occurred during a time, for the greater part of which it has had all the obstacles to contend against which I have referred to in my report,† and much that still remains to be removed. It is true that a great boon was conferred upon commerce by the removal of the transit duties in 1844, and part of the increase is no doubt attributable to this cause, but I feel sure it will be admitted, that the consequences likely to be produced by the efforts now making for the improvement of our communications, in the construction of common roads; rail roads, and canals, will be beyond comparison more important than even the relief afforded by that measure.

27. When we consider how greatly the construction of roads will tell

Reasons for more rapid increase.

upon the prosperity of Madras; for, unlike either of the sister Presidencies, there is no portion of its soil which cannot command the coast within a distance of 150 or 200 miles; when we make allowance also for the incalculable effects upon our commerce which would ensue from the opening the navigation of the Godavery, Kistna, Cavery and Colleroon rivers, and the construction of canals; thereby bringing the rich produce of the interior into immediate contact with the sea. When we further advert to the fact, above mentioned, that a great part of the present increase of our traffic has arisen from the export of articles of raw produce, only of recent cultivation, and capable of almost indefinite extension; such as sugar and cotton; the last of which has only very recently been stimulated by the discovery of such promising facilities; I allude to the success which has attended the growth of sea island cotton on the waste lands bordering our coasts, we cannot avoid the conclusion that, great as has been the increase during the last 10 years, it is probable that it is small in comparison with the increase which a perseverance

* *Note.*—Including bills 116 lacs.

† Para 25.

Estimate of future commerce.

in enlightened efforts for the improvement of the country will cause to be realised hereafter. If the necessary improvements in our roads and communications be in the mean-time effected, it seems to me that it would be a moderate anticipation were I to say that the united exports and imports will, in 10 years more, amount to 5½ or 6 crores, and in 20 years to 8 or 10.

28. In considering the manner in which the facts above stated tend to influence the prospects of the bullion trade, it must be borne in mind, that while bullion is the universal regulator of commerce, it tends thereby to regulate its own distribution. We cannot therefore suppose that any one country (except such as possess mines) is more able to pay for commodities by means of treasure than another; nor can any country whatever continue indefinitely to suffer a drain of its precious metals. The very fact of exhaustion, in the nature of things, induces the inward current, just as the depression of level in a fluid necessitates its restoration.

Rationale of the spread of bullion.

29. While, therefore, the ordinary fluctuations in commerce will cause an ebb and flow of bullion at all times between countries which are on an equilibrium in point of supply of the precious metals, a disturbance of that equilibrium will cause a permanent current, or *set*, towards that which is lowest on the scale of supply, which nothing but the restoration to equality will put a stop to. Hence one country cannot be relatively depressed as to its stock of the precious metals with respect to only *one* other country. As the precious metals, necessarily tend universal diffusion, so a country depressed in regard to one, is depressed in regard to all; the effect of depression, therefore, tends to influence *all* the commerce of a country exhausted of its currency, and we may infer, all equally. I think we may also infer, that in the course of years, if there be no unnatural obstruction to the free course of bullion, the amount imported in the course of trade will nearly, if not exactly, equal the amount taken out of the country by whatsoever means.

Precious metals tend to countries deprived of them.

Exhaustion of currency tells upon all the commerce of a country.

30. Let us now apply this to the case of this Presidency. Owing to political circumstances, Madras has been long exposed to the drain of its specie. The employment of our troops in foreign warfare, their maintenance in time of peace beyond its frontier, and the necessary contribution of this Presidency to the general charges of the empire, have constantly required the export of large sums on the public account, far in excess of

State of Madras Presidency.

Exhaustion of the currency owing to political causes.

the imports. In the 31 years from 1819-20 to 1849-50 the value of treasure exported on public account, has been nearly 1,720* lacs, while the imports have been only 230½ lacs, leaving a balance of exports of 1,483† lacs. This large amount would, I think, have been restored by the ordinary operations of commerce, had it not been for an obstruction which I shall presently advert to. In spite of this however, and notwithstanding the loss of our chief trade with those countries through which bullion had previously flowed into the Presidency, nearly one half of it has been restored; or rather, to speak more accurately, the exports on public account have been so far balanced by the excess of imports in trade, as to have prevented the exhaustion from being carried to more than one half the extent above mentioned; but still the drain from the Presidency since 1825-26 has been 769‡ lacs.

Effect of commerce in counteracting the drain.

31. Taking the average of the 10 years ending 1849-50, the excess of export over import of treasure on the public account has been very nearly 60|| lacs per annum; and the export on account of trade has been during the same period very nearly 15§ lacs per annum. There has consequently been an annual drain of 75¶ lacs of Rupees to be replaced by the operations of trade. This has not been possible, for owing to the depreciation of our piece goods, we have been in great measure cut off from the Eastern Settlements, and the flow of bullion from Great Britain and China, as well as the Straits of Malacca, has been interrupted by the bills drawn by the Honorable Court on the Madras Treasury; so that the only remaining sources from whence the supply could be made good are the sister Presidencies and Ceylon.

Results of last 10 years.

32. With these, the way for the introduction of bullion and treasure is quite free, and it has been availed of to as great an extent as could have been expected, the annual *imports* from them, and other countries, having been on average of the last 10 years, at the rate of 42¼** lacs nearly; but, spite of the great exhaustion, our limited commerce with Home ports could not effect more; and the remaining difference of 32¾†† lacs annually, still continues to exhaust the currency of the country.

The drain still going on.

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* 1,719,33,001.
† 1,483,07,598.
‡ 769,04,079.
|| 59,87,761. This includes the revenues of Malabar and Canara sent direct to Bombay.
§ 14,93,144.
¶ 74,80,905.
** 42,41,654.
†† 32,39,251.

33. The Honorable Court's bills have tended to interrupt the flow of bullion, by virtually making remittances for parties at a cheaper rate than the actual transmission. The consequence is, that whatever may be the necessities of the country, or wants of commerce, no bullion can be transmitted from England, nor from any country having debts due to it by England, so long as the party wishing to place funds in India can do so by purchasing an order on the Indian treasuries at less than the bullion rate of remittance; and the Honorable Court usually fix their rate within that.

Effect of Honorable Court's bills on Madras.

34. This interruption applies nearly as much to the trade of China, as that of Great Britain, and probably to almost all our foreign commerce; for the facilities of commercial intercourse are so great now a days that it may be taken for granted that the merchant of any country trading with India may find it easy to procure bills; and he would undoubtedly do so in preference to incurring a loss by the transmission of specie.

Honorable Court's bills may interfere with bullion from China.

35. The drain of specie to which I have above referred commenced in 1825-26, though the table* I have given begins with 1819-20, the earliest date to which the statements with which I have been furnished extend; for it will be perceived on examining the table that, up to 1825, the balance of import and export of public and private bullion was rather in favor of than against the Presidency. At that time the trade with the Eastern Settlements had already begun to decline, for although the final blow was given by the Charter Act of 1834, there was a previous partial opening of the trade in 1814 which is stated to have been attended with great effects†. We might have therefore expected any balance of treasure due to the Presidency, which the traffic with the sister Presidencies and Ceylon could not return, would in time have been supplied by its commerce with other countries, had not the Honorable Court's bills interfered to prevent it. Ten years after the drain first began, and before its influence upon the currency and prices could have had much effect upon the exchanges with foreign countries, the Honorable Court were in a position to draw upon the Madras Treasury, and from that time the returns of bullion from Europe and China have been almost wholly prevented, as the increase of their annual bills has kept pace with the increasing demand for imports by commerce, as shewn in the accompanying abstract taken from the Appendix L attached to your Committee's report.

The drain of specie, origin and progress.

Its effect in bringing bullion counteracted by Honorable Court's bills.

The bills have prevented returns in bullion up to this date.

Average value of bills drawn by the Honorable Court for the 5 years ending.

1834-35	31,610
1839-40	14,31,685
1844-45	13,37,596
1849-50	39,21,580

* Vide table B in the Appendix which includes the operations of trade.

† McCulloch's Dictionary of Commerce,—Article East India Company.

36. I beg permission here to explain, that I have made no reference to any other than the Honorable Court's bills, because, with the exception of the orders on the Indian treasuries for the interest of the funded debt, given by the retired Officers of the Honorable Company's Service, and others, and which, we may assume do not vary much in amount from year to year, there are no others which stand in the place of imports, thereby forming returns for the produce sent away in commerce. There are, no doubt, many private bills, by means of which large adjustments of payments are made, but as these only *represent* exports and imports, they do not affect the transmission of bullion, otherwise than by facilitating adjustment, and preventing its unnecessary shipment. The Honorable Court's bills do, for as the rapid growth of our export trade outstrips the possibility of creating a sale for imported manufactures, the taste for which is of slow growth, and requires a change of native habits, our exchanges naturally rise, and bullion importations would follow, but for the intervention of the bills, which supply the place of imports equivalent to their own value.

37. That these drafts have not been more than sufficient to supply the existing demand for imports by this Presidency will I think be evident from the fact, that in two or three years of late merchants have been obliged to import bullion besides purchasing bills. Last year the amount of bullion purchased at the Mint, half of which was imported from England, was nearly 12* lacs, and during the present year it will no doubt be much more, as it has already exceeded 15 lacs in the first seven months of it.

Commerce requires rather more than the bills supply.

38. We cannot however assume that the value taken up by the Honorable Court's bills would otherwise necessarily be returned in bullion. Viewing the circumstances of the Presidency in general, one would expect that the treasure drained out in one direction must return to it in some other, but the return of bullion from England and all countries in connection with her, is regulated essentially by the rate of exchange, and this unfortunately is not governed by the trade of any one Presidency alone.

Returns of bullion regulated by exchanges.

39. Were the Madras Presidency an island, separate from all other countries, it would be easy to predict from the rapid increase of its exports, and the difficulty of quickly increasing the import trade; from the drain of specie, and the already felt exhaustion, that the exchange must rise and bullion importations follow; but, connected as all the countries of the east are with one another, I believe the rate of exchange upon India is governed by the commercial transactions of all of them taken together, and

Madras commerce with England likely to maintain a high exchange.

* 11,96,861.

that the aggregate exports and imports of Bengal, Bombay, Madras, Ceylon, and China, are all implicated in fixing the rate for every successive period.

But Madras exchanges dependent on those of other Presidencies.

Owing to this circumstance, we cannot expect the Madras Presidency to have a much more constant or steady import of bullion from England and the countries connected with her, than the other two Presidencies have, for although its exports might exceed its imports in whatever ratio, a difference in exchange greater than half or three quarters of a penny in a Rupee would suffice to cause the remittance to be made indirectly, and thus the direct import of bullion would be prevented.

Bullion likely to flow in when Hon'ble Court's bills become fixed in amount.

40. But I think we may assume that, considering the great need of bullion in this Presidency, when the Honorable Court's drafts upon their Treasury in Fort St. George shall have reached their maximum, the further extension of the commerce will then begin to cause a return of bullion, at whatsoever times the rates of exchange are favorable to such remittances.

Existing deficiency of the precious metals will be made good.

41. I think we may also argue, that in course of years the existing deficiency of 789 lacs of Rupees will be made good; and seeing that the trade with the sister Presidencies and Ceylon fails to effect the object, inasmuch as they at present* leave a balance of export to the extent of 32¼† lacs per annum, that it must be met by increased importation from other countries, from none of which can it be received, and as from them alone, in the form of the Company's currency.

42. The Honorable Court can alone decide to what further limit they may think proper to increase their drafts upon Madras Presidency, and when that has been ascertained, it will be easy to calculate when bullion returns are likely to be made, and to what extent. On examining the statement given in the margin at para 25, it will be seen that our exports have increased 56 in 10 years, and our imports rather more, if we include the Honorable Court's bills, as amongst the latter; which it is necessary to do, inasmuch as they are in regard to commerce equivalent to bullion remittances. The Honorable Court's bills themselves have increased by 25 lacs in the 10 years, but even this increase has been insufficient, as it has been necessary to import bullion besides, and this import is greatly increased the last two years. This fact proves that the market for import manufactures and commodities cannot keep pace with the increase of exports, even with the assistance of the Honorable Court's bills, augmented by 2½ lacs annually. We may argue therefore, I

* Average of last 10 years.

† 32,39,251.

think, that if the Honorable Court were to resolve that no further extension of their bills should be made, the bullion trade would immediately be augmented by 2½ lacs per annum; so that in 10 years we should have a regular annual import of 25 lacs; and this even supposing that the imported commodities could continue to increase in the same degree during the next, as during the past 10 years, namely by 2½ lacs annually, a prospect which the recent large import of bullion (19 lacs last year and probably 20 this) seems to forbid the expectation of.—Should it not do so, it is evident that the bullion trade would have to supply returns for the whole of the increase of exports, whenever the state of the exchanges permitted it.

43. It only remains, in reference to the concluding part of para 40, and to give a definite value to our expectations, to decide what probability there is of the trade of India, and the countries associated with her, being in such a state hereafter as to maintain a high rate of exchange with Europe. Upon this I cannot presume to express an opinion: I observe statements of the progress of trade in Calcutta and Bombay which lead me to suppose that the

Prospects of high exchange with England.

increase in those Presidencies is at least equal to the increase here; and we learn by late events* that it is impossible in Calcutta, although so large a portion of its imports are replaced by the Honorable Court's bills, to push them to the extent necessary to answer the demands of its export trade. If this state of things prevail generally, we may expect a constant high state of the exchanges.

44. We may remark also that, in the free competition opened out to the world by Great Britain, India has prospect of success in two great staples,

Reason for a permanent flow of bullion into India.

sugar, and cotton. If these products on the large scale be added to the tea, coffee, spices, &c. hitherto exported from the East, we may not unreasonably expect to see the tide of exchange permanently turned, and the current of bullion to the Eastward restored which prevailed half a century ago.

45. The above facts and considerations influence me in the belief, expressed in my report para 25, that when our commerce is fully re-established our bullion trade will be restored, if there be no unnatural hinderance, to its

Second argument referred to.

former magnitude of 32¼ lacs per annum; I will now proceed to lay before your Committee the facts connected with the other argument contained in my report,† founded

* The statements of the failure of many wealthy native houses, and the impossibility of effecting a sale of imports, are here referred to.

† Para 26.

on a comparison of the extent and resources of this Presidency, and its probable future commerce, with those of the sister Presidencies, and the amount of bullion brought to the Mints of Calcutta and Bombay.

46. Your Committee will have observed, that my views as to the future employment of this Mint have been based, not upon the immediate and presently existing, so much as upon the probable future demands of our commerce; you will remember that, considering the latter as in a state of transition, I made special reference to the time when our rising trade in raw produce should be securely established, which I anticipated it would take some years to accomplish; and that it was only in the course of time that I anticipated* that the imports of bullion would equal, if not surpass, the former average.

Expectation based on the results of commerce when settled.

47. I have in a former part of this report stated the value of our present exports and imports, and given facts shewing the rate of their increase during the last 10 years. From these I have drawn the conclusion that at the end of 10 years more we may expect the gross amount of our exports and imports to be 5½ or 6 crores of Rupees per annum. This is upon the assumption of intermediate improvements in the communications and public works of the country regarding the probability of which I can of course only form a conjecture. Should no further steps in that direction be taken, and the rate of increase be restricted to what it is at present, it would take as we have seen, 20 years to effect an enlargement of 2 crores, and the probable date of our arrival at that stage of increase is a question of time, which can be determined only by the highest authority; its solution depending essentially upon the measures which shall be taken in the Department of Public Works. We need not, however, at present attempt to remove the difficulty, but, contenting ourselves with the assurance that it must be at some date between 10 and 20 years hence, proceed to calculate what the fair expectations of the receipt of bullion at the Mint will be at that time.

48. With a gross amount of exports and imports of 17½ crores in 1849-50 the purchases of bullion by the Calcutta Mint have, on average of the last 10 years, amounted to 120 lacs per annum. In Bombay the aggregate exports and imports amount, I believe, to about 20 crores, and I have been informed that the annual purchases of merchants bullion by the Mint amount, on average of the last 10 years, to very nearly 89 lacs per annum. If the purchases by the Madras Mint were assumed to be in the

Comparison with the Bengal and Bombay Mints.

* In para 29.

same proportion, relatively to a commerce of 6 crores per annum, we should have at the Calcutta rate 41 lacs, and in proportion to the Bombay purchases, 26¾* lacs per annum.

49. I can think of no reason why these anticipations, founded on facts, should not be realised, nor why the results of our commerce with the same countries, and in the main the same products, should not, in proportion, be the same for Madras as for Bengal and Bombay; the only objection which occurs to me as possible is, that the trade of Calcutta and Bombay may be considered not to admit of comparison with that of this Presidency in consequence of their large exports of opium to China. Regarding this I am not in a situation to express an opinion, further than by saying that I believe the exports of opium to China from Bengal are by no means necessarily met by returns in bullion, but by purchases of the Honorable Court's and private bills, and that when the exchange calls for it, bullion is not very much more likely to be sent from China, than from any other country in connection with England. From the latter country we hear occasionally of very large amounts of bullion sent to Calcutta, and we may consequently infer that the Mint is supplied from other sources, and not from China alone—besides which, Madras is not destitute of a trade with China, as our exports of Cotton thither during the last 10 years have averaged 13†† lacs of Rupees per annum, our imports being less than 2 lacs; and if we suppose the same rate of increase in this, as of the trade in general, the result would shew a sufficient analogy with the commerce of the other Presidencies to bear out the comparison, on the reduced scale I have chosen.

Objection regarding the opium trade referred to.

Madras cotton trade with China.

50. Finally, while on the subject of comparison with the requirements of other countries, I would beg to draw your Committee's attention to the facts that, including the territories of the Nizam, Nagpore, Mysore, Travancore, and the other minor Principalities in connection with this Presidency, the area of the whole country whose commercial wants for circulating medium have to be supplied by the Madras Mint amounts to 202,150‡ square miles, and its population to 31,562,984‡. These are very nearly equal to the area and population of France, which amount to 204,355‡ square miles and 35,540,908‡ respectively. It was stated before the Parliamentary Committee‖ on the Mint in 1837 that at that time France possessed 8 Mints, having till lately had thirteen.

Madras Presidency compared with France which has 8 Mints.

* Mean of the two 30⅛ lacs.

† 13,70,205.

‡ Malte Brun and Balbis' Geography.

‖ Evidence Select Committee, p. 120, article 1894.

51. It cannot be doubted that we are far behind France in the march of civilisation, and if we contrast the countries as to the abundance of their currencies, it will perhaps be thought immeasurably so; more especially if we refer to the statement (although it may be exaggerated) made before the same Parliamentary Committee,* that France required an annual coinage of 50 millions of francs, and 10 millions of gold, equal to 3 crores of Rupees, to supply its currency, while the whole value of all the currency supposed to be in circulation in the Madras Presidency, is estimated at little more than that sum.

Annual coinage of France stated to be equal to 3 crores of Rupees.

52. The United States possess 4 Mints, one of them viz. that of Philadelphia was increased from a power of 240 lacs of pieces per annum to 480 lacs in 1836. England, small comparatively, and spite of her immense note and bill paper circulation, requires on the average, a coinage of about 3 millions sterling in gold, equal in value to 3 crores of Rupees per annum, in addition to silver and copper. Till the reign of William 3d she retained her provincial Mints.

United States.

England.

53. I do not think it likely that the Madras Presidency will ever need the multitude of Mints mentioned in para 50, but we must be careful how we form an estimate based on the present wants of our wretched population and paralysed internal trade, as to the future demands of a vigorous and healthy industry throughout the country; and although in my former report I have thought it right to take the safe basis of the actual import of bullion formerly experienced, I trust that your Committee will be of opinion from the statements which I have now the honor to lay before you, that, having in view the permanent rather than the immediate prospects of the country, my calculation of 32½ lacs as the probable supply of merchants bullion from all sources, was rather beneath than beyond the fair probability.

Conclusion as to the coinage wants of the Madras Presidency.

54. Upon the second point, respecting which your Committee have recorded an opinion apparently in opposition to that submitted by me, it will I trust be unnecessary for me to trouble you with much explanation; as I observe by reference to the minutes with which you favored me, that in stating your opinion to the effect that "whatever the amount of coinage required here, it can be far more economically done at the Calcutta Mint," you only refer to the charges of mere coinage, and not to the other expenses incident to the transmission and return of the bullion to and fro.

The second point of difference stated and explained.

* Article 1956.

Thus explained, your opinion confirms the statements which I had the honor to submit for your consideration.

55. That the expenses of mere coinage are less in the Calcutta Mint than here, is true; and this is partly owing to the smaller amount of out-turn in Madras, causing the high salaries of the establishment to tell heavily in its expenses, and partly to the saving effected by steam machinery; but it is remarkable that the difference is not more, because in drawing a comparison between the economical working of the two establishments, your Committee will doubtless feel it to be due to that of Madras to take into consideration the interest of the capital sunk in the Calcutta Mint, as well as the deterioration of its expensive machinery; and on the other hand the additional value of new machinery constructed in this Mint during the course of 9 year's work. If due allowance be made for these items, your Committee will, I am sure, be satisfied that the work has been more economically done at Madras, than Calcutta, and not the contrary, as you appear to suppose.

Reasons for this.

Comparative economy.

Greater economy at Madras.

56. Your Committee will I trust excuse my submitting the above brief explanation, which it would be unjust to the establishment here to withhold, in reference to the strong opinions which have been recorded as to the comparative economy of work in the two Mints. I refrain from saying more, as the subject is not material to the object in view. In fact the real point at issue is not the actual, but the additional charge of coinage in Calcutta, and this I have calculated in my report at far less than the outlay in either Mint, namely at 135 Rupees per lac, or 13,500 Rupees per crore.

Additional cost of coinage in Calcutta very small.

57. Your Committee have noticed the statement made in my report of my opinion, that it is impossible to devise any cheaper plan for executing the coinage in Madras, except by steam machinery.—This I still think, but the opinion is limited to operations on the anticipated scale, and the existing constitution of the Mint. With the views which I have recorded in my report, and which I cannot help still holding, as to the amount of the eventual and permanent business of the establishment, such an idea as an alteration of the constitution of the Mint did not occur to me, but such a measure would naturally suggest itself if it were admitted that the future work would never exceed the amount calculated by your Committee, of 23 lacs of Rupees per annum, besides the copper coinage; in reference to which, or a smaller amount of work, I think a saving of from 30 to 40 per cent might be made if the constitution were revised, and the Assay and Mint Establishments

Explanation of opinion stated in report as to impossibility of reducing expenses in Madras.

Expenses may be reduced by altering the constitution of the Mint.

placed on the footing of the Saugor Mint. The saving which would be thus effected would be, not merely the reduction and abolition of salaries, but a diminution of the expenses of work carried on under a single authority. A further saving would also be effected were the number of settlements reduced from two to one per annum.

A reduction by diminishing number of settlements.

58. An objection has been made in one of the minutes to the calculation which I had the honor of submitting, of the expenses of sending the treasure to Calcutta and back after coinage, and it is stated that the charges will not stand much examination. I observe, however, that the exceptions which are made lie, not against the accuracy of the calculations, but against the premises on which they are founded, inasmuch as the errors are stated to be those of assuming first that 47½ lacs of treasure would ever be the subject of calculation at all, and 2dly that if the treasure were sent to Calcutta, the assumption that it would be returned.

Objections against the estimate given in report examined.

59. On the first of these points viz. that regarding the quantity of bullion likely to be for disposal, I need not explain to your Committee that I endeavoured to form the best judgment in my power, and thought it my duty to adapt the calculation thereto; I have now laid before you my reasons in detail, and your Committee will pronounce your decision thereupon; but should it be otherwise than correct, your Committee will be aware that it was the only basis which I possessed for an estimate, the several items of which I trust you will find to be strictly correct, and capable of application to any other amount you may think more in accordance with the truth.

First objection replied to.

60. With regard to the second objection, I may remark, that it seemed to me to be my duty to lay before your Committee and the Honorable Court of Directors a Statement of the whole expenses of executing the required work, either by the existing establishment, or by some other arrangement; and that were I to estimate merely the expense of transporting the bullion to Calcutta, without allowing for the charges of bringing back coins in return, I should suppose the Madras Government to be placed in a more disadvantageous position than if it possessed a local Mint, and one not contemplated by the Government of India.

Reply to 2d objection.

61. If it should be the decision of the Honorable Court, that for financial purposes, treasure, in addition to the revenues collected in Malabar and Canara, should hereafter be exported to Bengal and Bombay, to an extent

greater than the coinage of this Mint is calculated to be, it is obvious, as your Committee have remarked, that its services might be dispensed with; as the bullion and obsolete coins requiring coinage could be selected for transmission. Perhaps, however, as the contributions to the Government loans have now comparatively ceased, there may be less occasion hereafter for these large exports in addition to the bills* drawn; and the Honorable Court, on being acquainted with the deficiency of specie in the country, may resolve to put a stop to the drain from it, either by remission of assessment, or by expending a larger proportion of its revenues upon internal improvements.

The expediency of retaining the Madras Mint depends on financial resolutions of Honorable Court.

Reasons for this.

These decisions it would be presumptuous in me to anticipate, but it may be proper for me to suggest for consideration, whether it would not be advisable, inasmuch as it appears probable that it will be necessary to keep up a Mint in Madras under any circumstances, for the copper pieces, to coin even bullion destined for another Presidency into small coins, which cannot be conveniently executed in the larger Mints; and under any circumstances, whether this ought not to be done pending the reformation of the Hyderabad currency, previous to which it may perhaps be considered unwise to part with the machinery and resources of this establishment.

A Mint probably necessary for copper coins, and therefore desirable for small silver pieces.

Hyderabad currency also to be provided for.

J. T. SMITH,
Mint Master.

Fort St. George, Mint, 16th December 1851.

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* Average annual exports from Malabar and Canara 5 years ending 1849-50 .. 20,70,020
Average bills drawn by Honorable Court 5 years ending 1849-50 39,21,580

Total 59,91,600

APPENDIX A.

Fort St. George, Reporter External Commerce Office, 23d September 1851.

FROM R. H. WILLIAMSON, ESQUIRE,
Acting Reporter External Commerce.

TO MAJOR J. T. SMITH, ENGINEERS,
Mint Master.

SIR,

I have the honor to forward 3 Statements, shewing the private and Company's merchandize and treasure imported and exported by sea, to and from the Madras territories, United Kingdom, and China, as requested in your letter of the 19th Instant.

When treasure and bullion are entered in separate columns, the former means all gold, silver, and copper coinage, excepting dollars, which in the Statements furnished to the Mint Committee have always been included under the head of bullion, and is the case with no other coin.

I have the honor to be,
Sir,
Your most obedient Servant,
(Signed) R. H. WILLIAMSON,
Acting Reporter External Commerce.

(A true copy.)
J. T. SMITH,
Mint Master.