Archives I—10,006—16-8-77.

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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Pub works DEPARTMENT

G.O. No. 1715-16(W) Press.
~~B.P. No.~~ ~~Mis.~~

Dated. 11.9.1881

247

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

11th July 1881, No. 1,715 W.

General.
Establishment.

No. 12. Read the following papers :—

STATEMENT regarding the Native Apprentices entertained in Bezváda Workshop for the half-year ending 31st March 1881.

Name.	Age, about	Pay.	Knowledge of Work.	Work employed upon.	Conduct.	Remarks.
Butha Bhushanam ..	Y. M. 12 0	RS. A. P. 1 0 0	Learning planing and adzing.	Repairing archimedean screws, prepairing reepers, tent pegs, repairing ballasuts and levelling staves and pattern for pintles and heel plates.	Good ..	He can read and write Telugu fairly.
Mamillapally Brahmam.	13 0	1 0 0	Do.	Do...	Good ..	Do. do. do.

KISTNA,
3rd May 1881.

(Signed) J. D. GRANT,
Executive Engineer,
E. Division, Kistna.

(Signed) G. D. WYBROW,
Executive Engineer.
for Supt. of Works, Kistna.

To the Chief Engineer, Public Works Department, Madras.

GODAVARI DISTRICT.

STATEMENT regarding the Native Apprentices entertained in Machine and Carpenter Shops of Government Workshops, Dowlaishweram, for the half-year ending 30th April 1881.

Name.	Knowledge of Work.	Work employed upon.	Conduct.	Remarks.
Mandapati Narasiah.	Slotting, planing and turning.	Screw gearing box, locks making.	Good	Reads English pretty fairly. Reads and writes Telugu. Arithmetic as far as Fractions. Age 15 years 6 months. Pay Rs. 2-8-0.
Darnalacotta Chinniah.	Planing, Morticing and Tenoning.	Boxes, benches, valve shutters, &c.	Good	Reads and writes Telugu and English. Arithmetic as far as Compound Rules. Age 14 years and 6 months. Pay Rs. 2-8-0.

DOWLAISHWERAM,
14th May 1881.

(Signed) J. C. LARMINIE,
Executive Engineer.

To the Chief Engineer, Public Works Department.

No. 12-A. From Lieutenant W. L. C. BADDELEY, R.E., General Superintendent, Public Works Workshops, to the Chief Engineer, Public Works Department, dated Madras, 21st June 1881, No. 676 W.

I HAVE the honor to forward the progress report of the Native Apprentices of the Public Works Workshop for the half-year ending 31st March 1881.

2. All the boys have worked satisfactorily throughout the half year, and without doubt all who remain to complete their five years' apprenticeship will become good workmen, and it may fairly be expected that some of them will eventually be fit for the position of a Foreman in their own trade.

3. Foremen may, I think, be divided into two classes, first the responsible man who has a good knowledge of several trades with sufficient ability and education to manage a large shop, and, secondly, the man who has thorough practical knowledge of one trade, enough education to enable him to look after rough accounts and the necessary tact required to manage the workmen under him.

4. It cannot be expected that any of the Native Apprentices will reach the standard of the first class, but the best of them should in time be fit for the second class of Foremen, and should this prove to be the case I think the intentions of Government, as expressed in G.O., No. 4,464 of 23rd November 1878, will have been carried out.

5. For many years it has been the practice here to take on boys of any race on small pay, or even at first without pay, to enable them to learn firing and engine driving, as well as other trades, and in many cases boys trained here have done well as firemen on railways and in steamers, and in some few instances as drivers on railways and Assistant Engineers in steam-ships. I may also add that a number of the workmen employed here, and in other workshops, first learnt their trade under the system to which I have alluded.

REPORT of the Native Apprentices of the Presidency Public Works Workshop for the half-year ending 31st March 1881.

Names.	Daily Rate.	Works employed upon.	Conduct.	Remarks.
	Rs. A. P.	*Carpenter Shop.*		
Jegganathen ...	0 5 0	Making levelling staves, boxes for instruments, stand for do., boxes for scales, boxes for rulers, fitting instruments into boxes, &c.	Very good...	Entertained on 1st April 1879.
Nagaruthnam ...	0 5 0	Making archimedean screws, shutters for sluices, almirahs, &c.	Do. ...	
K. Soobroyen ...	0 5 0	Do. do.	Do. ...	
Lutchumanan ...	0 5 0	Do. do.	Do. ...	
		Foundry.		
Mooroogasen ...	0 4 0	Moulding and assisting in the general work of the foundry.	Do. ...	Entertained on 1st April 1880.
C. Lazar	0 4 0	Do. do.	Do. ...	
Coopen	0 4 0	Do. do.	Do. ...	
Narasimmooloo ...	0 4 0	Do. do.	Do. ...	

MADRAS,
21st June 1881.

(Signed) W. L. C. BADDELEY, Lieut., R.E.,
Genl. Supt. P. W. Workshops.

No. 13. ORDER THEREON, 11th July 1881, No. 1,715 W.

ORDERED that the purport of the reports be communicated to the Secretary of State and the Government of India.

2. The number of Apprentices now undergoing practical training is as follows:—

Presidency Workshops	8
Dowlaishweram ,, ...	2
Bezváda ,, ...	2

3. In paragraph 6 of G.O., No. 4,465 W., dated 23rd November 1878, it was directed that four Apprentices should be taken on annually at the Presidency Workshops, and two at each of the shops at Dowlaishweram and Bezváda. There should, therefore, now have been the following numbers under training:—

Presidency Workshops	12
Dowlaishweram do.	6
Bezváda do.	6

4. These numbers will now be worked up to, and the sanctioned strength maintained for the future.

(Here enter No. 1,716 W, dated 11th July 1881.)

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the General Superintendent, Public Works Workshops.
,, Superintendent of Works, Godávari.
,, ,, ,, Kistna.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

The GENERAL SUPERINTENDENT,
PUBLIC WORKS WORKSHOPS,
&c., &c., &c.

Dated July, 11*th*.

Issued

Recd. *Encl.*

G. O., 11*th July* 1881, *No.* 1,715 W.

JULY.

Nos. 12-13.

Training of Native Apprentices as Mechanics in Government Workshops.—Orders on papers reporting the progress made in the —.

1715 & 3

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 1,716 W.

No. 14.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—Adverting to my letter No. 69 W., dated 12th January 1881, I am directed to forward herewith copy of a despatch to the Secretary of State, No. 46, dated 6th August 1881, reporting the progress made in the training of Native Apprentices as mechanics in Government Workshops.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
11th July 1881.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of (1881) Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated July, 11*th*.

Issued

Read. *Encl.*

G. O., 11*th July* 1881, *No.* 1,716 W.

JULY.

No. 14.

PROGRESS made in the training of Native Apprentices as mechanics in Government Workshops.

1715 & 16
4

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

22nd May 1877, No. 113 W.

General.

Establishment.

Read the following papers:—

No. 218. Proceedings of the Government of India, Public Works Department, (Establishment—General), dated Fort William, 27th November 1876, Nos. 1,598—1,615 E—G.

Training in India of Natives for the position of Foremen Mechanics.

Read again:—

Public Works Department Circular No. 35, of 29th June 1870.
" " Resolution Nos. 335—45 E—G, of 8th March 1871.

Read also:—

Letter from Government, North-Western Provinces, No. 2,242, of 21st March 1872.
" " " No. 50 E—C, of 23rd May 1876.
" " " No. 225 E—C, of 9th August 1876.

RESOLUTION.—In the Circular of 29th June 1870, No. 35, the Government of India strongly impressed on Local Governments and Administrations and on the superior officers of the department the great advantage of endeavouring, as far as possible, to train the natives of this country in all those branches of handicraft that are necessary to the construction and maintenance of railways. It was at the same time remarked that every large work on a railway or canal, and every shop in connection with them, forms a training school for artizans; that from these there was no doubt that some men suited for the position of Foremen could be obtained, and that to ensure this result it would probably be necessary to attach a school to each large shop which likely men might be encouraged to attend, and where the needful education and scientific knowledge could be imparted to those that gave promise of rising to the position of Foremen.

2. The Government of Bengal has given effect to the wishes of the Government of India in establishing a training school at Dehree for European, Eurasian, and Native youths, and the Government of the North-Western Provinces has also submitted proposals for giving the necessary training to artizans in the workshops and schools at Roorkee.

3. It was decided by the Government of India that the expenditure connected with the training schools at Dehree should be a charge against the Ordinary Public Works Imperial grant. His Honor the Lieutenant-Governor of the North-Western Provinces suggests that the same course might be followed in connection with the experiment at Roorkee, but that the Local Government, which would reap the benefit of obtaining the services of a trained Foreman, should reimburse the Imperial Exchequer the cost of the Foreman's three years' education at a rate to be fixed by the Government of India.

4. After giving the question of the incidence of the charge, which the establishment of these training schools will involve, careful consideration, it seems to the President in Council that it will be better to localize these arrangements so that each Local Government or Administration and each Branch of the Department shall train men for employment in the Province or Branch. Local Administrations which have not the means at their disposal for imparting the necessary training might, it is thought, arrange with neighbouring Provinces—thus Assam might arrange with Bengal for the training of its men. By this means a self-acting arrangement would be established without the Government of India incurring any charge for general training establishments or becoming liable to find employment for men trained for general service; as each Local Government and Administration, and each Imperial Branch of the Department would bear the cost of training its own men from Imperial, Provincial, or Local Funds as the case may be.

5. Before finally deciding on the adoption of this arrangement, the Government of India will be glad to receive any suggestion which Local Governments and Administrations and Heads of Departments may desire to offer on the subject.

ORDER.—Ordered, that a copy of this Resolution be forwarded to the Local Governments, Administrations, and Officers noted on the margin for the purpose indicated.

The Governments of Madras and Bombay, in the Public Works Department.
The Governments of Bengal, North-Western Provinces and the Punjab, in the Public Works Department, General and Irrigation Branches.
The Chief Commissioners of Oudh, Central Provinces, British Burmah, Mysore and Coorg, and Assam.
The Resident at Hyderabad.
The Agents of the Governor-General for Central India and Rajpootana.
The Inspector-General of Military Works.
The Director of State Railways.

(Signed) A. B. SAMPSON,
Under Secy. to the Govt. of India.

No. 1,903.

REFERRED to the Consulting Engineer for Railways for report:

15th December 1876. (Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government, P.W.D.

No. 218-A. From Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 19th December 1876, No. 627.

ADVERTING to the Proceedings of Government, No. 1,903, dated 15th December 1876, I have the honor to request that a copy of the Circular of 29th June 1870, No. 35, referred to in the Resolution embodied in the above Proceedings may be furnished to this office.

No. 218-B. Memorandum from the Officiating Under Secretary to the Government of India, Public Works Department, (Establishment—General), to the Secretary to the Government of Madras, Public Works Department, dated Fort William, 21th March 1877, No. 1,598—1,615-2 E—G.

THE undersigned is directed to again invite attention to Public Works Department Resolution No. 1,598—1,615 E—G, of 27th November 1876, on the subject of the incidence of the charge which the establishment of schools for training natives for the position of Foreman Mechanics will involve, and to inquire if any reply may be expected.

(Signed) J. G. STEEL, Major, R.E.,
Offg. Under Secy. to the Govt. of India, P.W.D.

No. 218-C. Endorsement of the Consulting Engineer for Railways, dated Madras, April 1877, No. 219.

From R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, to Lieutenant-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated Madras, 6th April 1877, No. 579.

WITH reference to your letter of the 19th of December last, No. 1,370, I have the honor to express my regret that, owing to pressure of other work, I have not been able to reply earlier as to the arrangement proposed by the Government of India for training European, Eurasian, and Native youths to skilled trades. The Chief Engineer and the Locomotive Superintendent are the two heads of departments of the Railway chiefly concerned, and though I have not received a reply from the former to a communication I addressed to him upon the subject, I think perhaps the enclosed report which I have received from Mr. Trevithick may suffice, as a far larger number of the class of men referred to are employed in the locomotive than in any other department. You are of course aware that on the Madras Railway a very large proportion of the skilled laborers have learned their trades in this country, and, as a general rule, on this line, and I think that the knowledge which they thus practically acquire has made and is calculated to make them in many respects more useful servants than if they had learned their business at a training school, however well the latter may have been conducted. I however heartily concur with Mr. Trevithick in what he says as to the advantages of a good general education as being conducive to the production of a good class of tradesman.

2. I observe that the question of the incidence of the cost of the proposed training schools is whether it should fall upon Imperial or Local Funds, and of this I am not able to express an opinion.

From F. H. TREVITHICK, Esq., Locomotive Superintendent, to E. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, dated Perambore Works, 3rd April 1877, No. 298.

YOUR endorsement to the Consulting Engineer's letter, No. 1,370, dated 19th December 1876.

Training Schools for Natives.

The proposal to establish schools for training Native Mechanics is to be commended, and it is possible that with such an inducement held out publicly as the chance of attaining the rank of Foreman, a superior class of men might be induced to turn their attention to the mechanics' trade than is now usually to be met with in the workshops.

It must, however, be borne in mind that other qualities are required in a Foremen of Mechanics beside what can be taught in a school, and I am very doubtful if a school for teaching adults such as are now to be found in the workshops would be productive of worthy results.

The Native Mechanics of these shops (I speak only of the Madras Railway Locomotive Shops) are practically all of the cooly class, men who have entered as coolies and picked up a smattering of the trade; these men have not the intelligence to acquire anything beyond the art of handling the tools, and rarely attain proficiency in that; they seem to be quite amused to reason in any way as to the why and wherefore of what they are doing.

The want of an organized system of training Native Mechanics has often occurred to me, but to begin by attempting to train adults into Foremen, or indeed to train novices for Foremen at all, seems like teaching to run before the pupil can walk.

A school to teach boys to speak and write English, to work the first three rules of arithmetic, and possibly to understand something of what is usually called in schools "Natural Philosophy" would turn out good raw material for the production of any class of tradesmen.

Such a school, specially assisted by the State, might be called a training school for mechanics, and boys turned out of it, at say fourteen years old, with a certificate recommending them for apprentices, would certainly be better raw material from which to train Foremen than ignorant adult coolies.

State aid might probably be advantageously applied in awarding premiums to the best scholars in the shape of subsistence money during their term of apprenticeship, which should last say seven years.

This process of training would give the men a fair chance of fitting themselves for Foremen, who would surely be chosen from their ranks as soon as competent men to be found among them.

How far caste prejudice might hinder the benefit of such a school to any but the lower classes I am unable to judge; but it is certain that a man may be a good mechanic and earn good wages without any caste at all, a fact which in time caste men might come to appreciate.

From W. S. BETTS, Esq., Agent of the South Indian Railway Company, to Lieute.-Colonel J. H. M. SHAW-STEWART, R.E., Consulting Engineer for Railways, dated Negapatam, 12th January 1877, No. 2,701.

YOUR letter No. 1,394, of the 19th ultimo. I have no suggestion to offer upon the proposals of the Government of India regarding the incidence of the art of their schools for the training in India of natives for the position of Foremen Mechanics.

SUBMITTED for the consideration of Government, with reference to their Order No. 1,903, dated the 15th December 1876.

2. If the proposal to train Natives for the position of Foreman Mechanics is approved, I agree with Mr. Trevithick that it will be useless to begin with adults. Some such school as he suggests will probably be found in this Presidency to be the best method of attaining the desired end.

(Signed) J. H. M. SHAW-STEWART, Lt.-Col., R.E.,
Consulting Engineer for Railways.

TRANSFERRED to the Secretary to Government, Public Works Department, for disposal.

(Signed) J. H. M. SHAW-STEWART, Lt.-Col., R.E.,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

No. 219. ORDER THEREON, 22nd May 1877, No. 113 W.

IN their Resolution of the 27th November 1876, Nos. 1,598 and 1,615 E—G, the Government of India, referring to the subject of training natives of the country for the position of Foreman Mechanics, request the opinion of Local Governments as to the incidence of the cost of maintaining such training schools as may be established with this view. The Government of India consider that the cost should be purely local; each Government and Administration and each Imperial Branch of the Public Works Department bearing the charge of training its own men from Imperial, Provincial, or Local Funds as the case may be.

His Grace the Governor in Council has no objection to offer to this view.

On the subject of the detailed arrangements for carrying into effect, in this Presidency, the special objects which the Government of India have in view, the opinion of the Locomotive Superintendent of the Madras Railway has been obtained, and will be found recorded with the papers printed with these Proceedings. Mr. Trevithick recommends the establishment, by State aid, of special schools in which preliminary instruction of a general character shall be imparted; boys from these schools being drafted into the Workshops where they would be further qualified for the positions which they may be designed to fill. His Grace the Governor in Council, however, remarks that preliminary instruction of the required character

is provided by numbers of schools throughout the Presidency. If the Railway would intimate to such schools that they are prepared to admit qualified boys into their workshops as apprentices, any required number would soon be forthcoming. The establishment of special schools in connection with either Railway or Government Workshops is therefore unnecessary, but it seems very desirable that a proper system of apprenticeships at the workshops should be maintained by means of which the boys could obtain a thorough training in practical work. The future prospect of possibly rising to the position of Foreman might be held out to those found fully qualified for responsible posts at the end of a certain term of apprenticeship and subsequent employment.

(Here enter No. 114 W, dated 22nd May 1877.)

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government, P.W.D.

To the Consulting Engineer for Railways.
" District Engineer, Presidency.
" " " Godavery.
" " " Kistna.

Exd T. D. Ryan.

Spare Copies

GENERAL
ESTABLISHMENT.

Govt. of {1877} Madra

PUBLIC WORKS.

To

THE CONSULTING ENGINEER
FOR RAILWAYS
&c., &c.,

Dated May 22nd.

Issued

Read.

Encl.

G. O., 22nd May 1877, No. 113 W.

MAY.

Nos. 218-219.

Foreman Mechanics.—Passing orders papers regarding the training in India Natives for the position of —.

17134-6
7

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 114 W.

No. 220.

FROM
THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department.

To
THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—I am directed to acknowledge the receipt of the Proceedings of the Government of India, Nos. 1,598—1,615 E—G, dated 27th November 1876, and of the subsequent reminder of the 24th March 1877, on the subject of the incidence of the charge which the establishment of schools for the training of Natives for the position of Foreman Mechanics will involve; and, in reply, to forward the accompanying copy of Proceedings in which the views of His Grace the Governor in Council are recorded.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government, P.W.D.

FORT ST. GEORGE,
22nd May 1877.

Exd. T. D. Ryan.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of India, Madras.

PUBLIC WORKS.

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated May 22nd.

Rec'd. Encl.

G. O., 22nd May 1877, No. 114 W.

MAY
No. 220.

FORWARDING copy of Proceedings containing the views of Government on the subject of the incidence of the charge which the establishment of schools for the training of Natives for the position of Foreman Mechanics will involve.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

4th January 1878, No. 16 W.

General.

Establishment.

Read the following paper:—

No. 28. Resolution of the Government of India, Public Works Department, (Establishment—General,) dated Fort William, 17th December 1877, Circular No. 71 Public Works.

Incidence of the charge for training in India of Natives for the position of Foremen Mechanics.

Read again:—

Public Works Department Resolution Nos. 1,598—1,615 E—G of 27th November 1876.

Read also:—

Replies to the above.

RESOLUTION.—The majority of the local authorities consulted on the subject being in favor of the proposal to localize the arrangement for the training of Natives for Foremen Mechanics as suggested in paragraph 4 of Public Works Department Resolution Nos. 1,598—1,615 E—G of 27th November 1876, the Government of India is pleased to decide that this arrangement shall be adopted in future.

It is now left to the Local Governments and Administrations, and to Heads of Imperial Branches of the Department, to give effect to the measure to which the Government of India attaches much importance.

ORDER.—Ordered, that a copy of this Resolution be forwarded to the Local Governments, Administrations and Officers noted on the margin for information and guidance.

The Governments of Madras and Bombay, in the Public Works Department.
The Governments of Bengal, North-western Provinces, and Oudh and Punjab, in the Public Works Department, General and Irrigation Branches.
The Chief Commissioners, Central Provinces, British Burmah, Mysore and Coorg, and Assam.
The Resident, Hyderabad.
The Agents to the Governor General for Central India and Rajpootana.
The Inspector-General of Military Works.
The Directors of State Railways.

(Signed) A. B. SAMPSON,
Under Secy. to the Govt. of India.

To the Secretary to the Government of Madras, Public Works Department.

No. 29. ORDER THEREON, 4th January 1878, No. 16 W.

COMMUNICATED to the officers concerned, who will report what steps they have adopted or propose to adopt to give effect to the wish of Government that a proper system of apprenticeship should be maintained at the workshops to give a thorough training in practical work to the boys employed in them.

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Government, P.W.D.

To the District Engineer, Presidency.
" Superintending Engineer, Kistna.
" " " Godavery.
" Consulting Engineer for Railways.

Exd. E. C. Shunker.
Spare Copies

GENERAL ESTABLISHMENT.

Govt. of [1878] Madras

PUBLIC WORKS.

To

THE DISTRICT ENGINEER,
PRESIDENCY,
&c., &c., &c.

Dated January 4th.

Issued

Recd.

Encl.

G. O., 4th January 1878, No. 16 W.

JANUARY.

Nos. 28-29.

Foremen Mechanics.—Resolution of the Government of India regarding incidence of charge for training in India of Natives for the position of —, communicated to the officers concerned with instructions.

17157-16
9

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

13th April 1878, No. 352 R.

Railway.

Read the following papers :—

No. 59. Endorsement of the Consulting Engineer for Railways, dated Madras, 2nd April 1878, No. 152.

From R. B. ELWIN, Esq., Agent and Manager of the Madras Railway Company, to the Consulting Engineer for Railways, dated Madras, 29th March 1878, No. 453.

ADVERTING to your letter, No. 134, of the 4th ultimo, I have the honor to enclose for your perusal a copy of the Locomotive Superintendent's letter, No. $\frac{1565}{755}$, of the 19th instant, upon the subject of training natives of India for the position of Foremen Mechanics.

From F. H. TREVITHICK, Esq., Locomotive Superintendent, to the Agent and Manager of the Madras Railway Company, dated Perambore Works, 19th March 1878, No. $\frac{1565}{755}$.

YOUR endorsement to the Consulting Engineer's letter, No. 134, dated 4th February 1878.

Training in India of Natives for the position of Foremen Mechanics.

Under the above heading in Proceedings of Government, dated 22nd May 1877, No. 113 W, alluded to by the Consulting Engineer, it is "remarked that every Railway Workshop forms a training school for artizans, that from these there was no doubt that some men suited for the position of foremen could be obtained, and that to ensure this result it would probably be necessary to attach a school to each large shop where the needful education and scientific knowledge could be imparted to those that gave promise of rising to the position of foremen." Your endorsement to this correspondence was replied to in this office letter, No. 398, of 3rd April 1877.

2. In G.O., No. 219, His Grace the Governor in Council observes "the establishment of special schools in connection with either Railway or Government Workshops is therefore unnecessary, but it seems very desirable that a proper system of apprenticeship at the Workshops should be maintained by means of which the boys could obtain a thorough training in practical work."

3. In reply to the Consulting Engineer's question of what measures have been adopted to give effect to the wishes of Government in regard to the adoption of a proper system of apprenticeship I am unable to report that any special changes have yet been introduced.

4. A large number of the men now employed at Perambore—Natives, East Indians, and Europeans—entered the shops as boys, and have been trained here entirely. The subject under correspondence refers however only to natives, and the system under which they are recruited seems peculiar to the country.

5. When a man dies his widow or other relations who were dependent upon him bring forward another representative of the family who, unless there may be some special objection to him, is generally employed. The older workmen also bring their sons who are always given the preference over outsiders, and many of our very best native workmen have been thus trained under their own fathers.

6. The supply of boys from this source is always in excess of the demand, they learn their trade by slow and sure degrees as they grow up, and many of them turn out excellent workmen.

7. Certain trades are exclusively in the hands of the natives, viz., smiths, carpenters, and painters, and competent adult workmen of these trades can always be procured in all the other trades; also the great majority of the men are natives.

8. The old-fashioned system of apprenticeship by which boys were bound under indentures to serve a given term of years and by which also the masters were bound to employ the boys for a given term has, I believe, been almost entirely abandoned in England as imposing irksome restrictions on both sides for no useful purpose; the same system of indentures was formerly in operation at Perambore, but has been abandoned several years ago.

No. 59-A. From W. S. BETTS, Esq., Agent of the South Indian Railway, to the Consulting Engineer for Railways, dated Negapatam, 18th March 1878, No. 5,067.

IN reply to your letter of the 4th ultimo, No. 131, I have the honor to state that twelve East Indian lads have already been apprenticed, and that a few more lads likely to develop into good mechanics can conveniently be admitted. A copy of the form of agreement which has been adopted for the admission of apprentices is attached. In regard to the apprenticeship of native youths the desire has been to admit them on precisely the same terms as East Indian lads, but it has unfortunately been found that whenever a native youth possesses the requisite preliminary instruction in English he is averse to obtaining his livelihood as an artizan. Some native lads acquainted with English have been offered a place in the shops as fitter-apprentices, but I am sorry to say they have declined. It is known in the neighborhood at the schools, &c., that the Company can employ apprentices, but there is the unfortunate difficulty I have mentioned that the Company is not prepared to accept native or other lads unless they possess some preliminary elementary instruction, and that natives possessed of this qualification will not follow a handicraft.

2. The schools in the various districts traversed by the South Indian Railway are too numerous to admit of my personally communicating with all the Head Masters. I have therefore inserted an advertisement in the newspapers calling attention to the fact that there are a few vacancies for native fitter-apprentices.

Fitters' Agreement Copy.

Agreement between the South Indian Railway Company on the one hand, and Fitter-apprentice on the other.

I, of agree to enter the service of the South Indian Railway Company as a fitter-apprentice for the term of four years from this date , and honestly, faithfully, and zealously to serve the said Company in any way which they may direct whether that may be in the shops or out of doors.

I, J. M. Budge, Acting Locomotive and Carriage Superintendent, agree on account of the said Company to receive the said as fitter-apprentice, and in consideration of his servitude to grant him the following advantages:—

He shall have every opportunity of learning the art of a fitter, both in the shops and out of doors, and during the time of his service he shall receive the following rates of pay:—

For the first year	Rs.	
" second year	8	per mensem.
" third year	12	"
" fourth year	18	"
	25	"

When an apprentice is required in the discharge of his duties to move up-country or residing temporarily from home such an allowance shall be made to him for this expense as the Superintendent may consider proper. And, further, a satisfactory report of the said from the Foreman of the Department in which the said is apprenticed will be required to ensure his annual promotion and increase of pay.

Witness.

NEGAPATAM,
18th March 1878.

Ag. Loco. and Carriage Supt.

1715+16
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SUBMITTED with reference to the Proceedings of Government, under date the 4th January 1878, No. 16 W.

(Signed) J. H. M. SHAW-STEWART, Col., R.E.,
Consulting Engineer for Railways.

No. 60. ORDER THEREON, 13th April 1878, No. 351 R.

ORDERED to be forwarded to the Government of India.

(True Extract.)

(Signed) J. H. M. SHAW-STEWART, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.

No. 61. (DOCKET No. 352 R, dated 13th April 1878.)

COPY of the above forwarded to the Government of India with reference to their Resolution, dated 17th December 1877, Circular No. 71, Public Works.

(True Extract.)

(Signed) J. H. M. SHAW-STEWART, Colonel, R.E.,
Joint Secy. to Govt., P.W.D.,
Railway Branch.

Exd. C. Howarth.
Spare Copies

RAILWAY.

Govt. of [1878] Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated 13*th April.*

Issued

Recd. *Encl.*

G. O., 13*th April* 1878, *No.* 352 R.

APRIL.

Nos. 59-61.

THE Government of India informed with reference to the practicability of natives being trained as Foremen Mechanics.

17158 TL
11

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

23rd November 1878, No. 4,465 W.

General Establishment.

Read the following papers:—

No. 259. From Major J. O. HASTED, R.E., Superintending Engineer, Kistna District, to the Chief Engineer and Secretary to Government, Public Works Department, dated Masulipatam, 21st January 1878, No. 197.

WITH reference to G.O., No. 16 W, dated 4th January 1878, I have the honor to report that I have lately taken into the Bezwada Workshop three East Indian lads as apprentices.

2. The apprentices are not bound in any way, but have been selected by me on the understanding that they will serve in the shops for three years. They are all intelligent lads, and have been educated to some extent, and are placed specially under the Superintendent of Workshops, who is a trained mechanic, for instruction. Their pay is 7 Rupees per mensem.

3. I hope to be able to arrange shortly that they shall be instructed daily in writing, arithmetic, and drawing to begin with, but at present I have no one available to instruct them.

No. 259-A. Endorsement of the District Engineer, Presidency, dated 14th February 1878, No. 6,423.

From J. N. GRAINGER, Esq., General Superintendent, Public Works Workshops, to the District Engineer, Presidency, dated Madras, 11th February 1878, No. 3,442.

WITH reference to your endorsement, No. 5,809, of 17th January 1878, on G.O., dated 4th idem, No. 16 W, I have the honor to state that apprentices are entertained only in the Instrument Department of the Workshops.

2. These apprenticeships were sanctioned in G.O., Nos. 1,189, 2,251, dated 11th May 1863 and 17th July 1866. They attend work with the workmen and receive Rupees 10 per mensem for the first year, working up to Rupees 25 to the fifth year, according to qualification and conduct. After their apprenticeship has expired they are retained in the Instrument Department as workmen. All repairs to instruments are now done by them.

3. The Mathematical Instrument Maker received Rupees 15 per mensem for each of the six apprentices sanctioned in the above Government Orders.

4. In the Mechanical Department no apprentices are entertained, but lads are taken on in the different shops, where they are supposed to serve five years, on similar terms as the Instrument Department Apprentices, before they are considered workmen.

5. Neither apprentices nor boys pass any examination when entertained, but are simply taken on when a vacancy occurs on the recommendation of gentlemen in Madras who give them a letter.

6. With few exceptions they do not prove a success, for lads of their age and inclinations require to be kept under restraint similar to that of the Artificer School in the Gun Carriage Factory. The Workshops, being self-supporting, could not incur the expense of such a school without a fixed budget allotment for that purpose. If this is granted we may commence, say with 20 boys, locating them in part of the late Civil Orphan Asylum building situated about a quarter of a mile from the Workshops, and where there is ample accommodation in the way of sleeping, dining, and school-rooms. The number may be increased by five yearly admittances by examination in reading, writing, and arithmetic. A Sergeant would be required to look after them when not at work; also a Schoolmaster and house servants, so that the cost per boy per mensem, including Superintendent's allowance of Rupees 5 for each boy, would probably be Rupees 30, or Rupees 7,200 per annum for 20 boys.

7. Such a scheme is, I think, too expensive for the results that are likely to be obtained; for at the end of the apprenticeship they may seek other employment than Government service.

8. The above scheme is intended for Eurasians or Europeans domiciled in Madras, who, I believe, are considered natives, but if all classes are to have the benefit of the apprenticeships we must give up the idea of feeding and clothing them.

9. My experience is that the Native is better than the Eurasian for out-door work such as these men would have to do if employed in the districts where, I suppose, it is intended they shall have the standing of an Overseer, and be available for general use. I think, therefore, that the best means for obtaining the best men from these two classes will be to engage them in the Workshops as apprentices at from fifteen to eighteen years of age when they should pass an examination in reading, writing, and arithmetic. That the apprenticeship should be for five years, during which time they should pass three months in each of the shops, viz., blacksmiths' foundry and carpenters' after being two years apprenticed, and that the last six months of their time be spent in the drawing office. During the whole of the five years two half days a week should be set apart for attending school.

10. Their pay to be Rupees 15 per mensem for the first two years, and then increase yearly by Rupees 5 up to Rupees 30 for the fifth year, but no increase of pay to be given until the suitable examination, for each increase, has been passed. Five apprentices may be taken on yearly if Government can guarantee them employment after they have served their time.

11. A budget allotment of two-thirds of their pay should be made by Government, the remaining one-third being paid by the Workshops. By the adoption of the latter scheme a better class can be obtained with less cost to Government.

SUBMITTED to the Chief Engineer, Public Works Department, with reference to G.O., No. 16 W, dated 4th January 1878.

(Signed) ROSS THOMPSON, Major, R.E.,
District Engineer, Presidency.

No. 159-B. From Lieutenant-Colonel J. BEATTY, R.E., Superintending Engineer, Godavari, to the Chief Engineer, Public Works Department, dated Dowlaishvaram, 29th March 1878, No. 4,104.

As directed in G.O., No. 16 W, of 4th January 1878, I have the honor to report on the steps to be adopted for giving effect to the wish of Government for maintaining a proper system of apprenticeship, and giving a thorough training to the boys employed at the Dowlaishvaram Workshops.

2. At present the Native and East Indian lads who come to these Workshops have little or no education, and do not receive such a training as would fit them for employment as Foremen Mechanics.

3. The young natives are perfectly ignorant even of reading and writing their own language when they enter the shops, and receive no education while there. They usually commence as bellows boys, and according as they show an inclination for some particular kind of work they are employed as carpenters, vicemen, smiths, or moulders. In course of time, according to the ability each man shows in his work, his pay is raised. Good carpenters can earn 13 Rupees a month, and first class smiths 20 Rupees. But the shops cannot afford to offer inducements to these men to enter into an engagement to serve for a term of years and go through a training in the different kinds of work, nor can they afford to maintain a school for the boys and give them some education.

4. There are generally four or five East Indian boys in the shops, who enter about thirteen or fourteen years of age, are allowed 5 Rupees a month from the shops at starting, and have their pay raised according to the value of their work up to 20 or 25 Rupees. Present inducements are insufficient to attract any but the very poorest East Indians with little or no education.

5. To improve the system and attract a better class of men Government aid is needed. It is proposed that the shops should always have under training ten East Indian and ten Native Apprentices, that these apprentices should be induced by the offer of extra pay to sign written agreements to serve in the shops for a period of five years, and that they should have two or three hours of schooling daily, to teach them to speak and write English and give them some knowledge of arithmetic.

6. The grant required from Government to carry out the new system of apprenticing is as follows:—

	Rs.
Extra pay to ten native boys, at 5 Rupees per mensem	600
Do. to ten East Indians, at 10 Rupees	1,200
One East Indian Schoolmaster, at 60 Rupees per mensem	720
	2,520
Books and writing materials	280
Total annual grant ...	2,800

7. The East Indian apprentices should be allowed free quarters, and be under the constant supervision of the Deputy Superintendent of the Workshops; consequently some extra expense for buildings for their accommodation would be needed on starting the system.

No. 159-C. Read again G.O., No. 351 R, dated 13th April 1878.

No. 160. ORDER THEREON, 23rd November 1878, No. 4,464 W.

THE proposals for carrying into effect the wishes of the Government of India with regard to the training of native apprentices in the Workshops of this Presidency, which have been made in the foregoing letters, are in the opinion of the Government too costly, and any possible return for the expenditure too uncertain, to allow of their being adopted at present. His Grace the Governor in Council conceives that the native artisan caste system may with advantage be taken as the basis of an apprentice system.

2. Experience in England and on the continent has shown that a term of five years is not too long for apprentices, if it be desired that they shall have such a thorough training as will make them really good mechanics; and His Grace in Council considers that for native boys, who most probably begin to assist their parents, as bellows boys or in other ways when about ten years old, the age of twelve is the most suitable at which they can be apprenticed.

3. Those lads who are taken on should be able to pass a simple qualifying examination in reading, writing, and summing in their own vernacular; the last in English figures. During their apprenticeship of five years they should be passed regularly through the machine, handicraft, smiths', braziers, and carpentry shops, according to the class of work carried on, and the peculiar bent of the individual. They should be paid the rates payable to boys of similar age, and encouraged by annual or half-yearly increments according to the proficiency displayed by them.

4. At the expiration of the full term of training a small premium will be paid to such of the apprentices as shall be certified on trial by the Superintendent of the Workshops to be properly skilled, and for each apprentice a sum of Rupees 75 will be paid to the foreman or person in charge of each mechanical department of the shops when the apprentice leaves the department or shop being certified by the Superintendent to have been thoroughly taught and be skilled in the particular branch.

5. These payments should be the only expense to Government, as the lads will earn their own pay.

6. The number of boys to be taken on annually may be at present fixed at four at the Presidency Workshops and two at Dowlaishvaram and Bezwada, respectively; they should be Tamil or Telugu lads, and generally the sons of the workmen. The Government direct that immediate effect be given to these orders, which need not interfere with any existing arrangement at the Workshops for training East Indian or Native boys, provided that no additional expense is involved. The Superintendents must see that the tests are real, and such as will indicate accuracy and correctness of eye and touch, cleverness in manipulation of tools, and, in the case of carpentry, in mode of construction; and in both carpentry, mechanical and smiths' work, it is most necessary that some moving parts should always be formed, the ease of movement indicating, as a general rule, the goodness of the work.

7. Ordered that a copy of these Proceedings be forwarded to the Government of India for information with reference to their resolution on the subject.

Circular No. 71 P W, dated 17th Dec. 1877.

(True Extract.)

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineers, First and Third Circles.
" Educational Department.
" Examiner of Public Works Accounts.

No. 261.

(DOCKET No. 4,465 W, dated 23rd November 1878.)

COPY of the above forwarded to the Government of India.

(Signed) E. A. FOORD, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. C. Howarth.
Spare Copies

1715+16
13

GENERAL.
ESTABLISHMENT.

Govt. of {1878} Madras.

PUBLIC WORKS.

To

The SECRETARY to the
GOVERNMENT of INDIA.

Dated November 23rd.

Rec'd.

Read. Encl.

G. O. 22nd November 1878, No. 4,465 W.

NOVEMBER.

Nos. 259-261.

TRAINING of Native Apprentices for Foremen Mechanics.

17858
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GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

7th March 1879, No. 703 W.

General.
Establishment.

Read the following paper :—

No. 120. Despatch from the Right Honorable the Secretary of State for India.

Public Works.
No. 4.

INDIA OFFICE, LONDON,
6th February 1879.

MY LORD DUKE,—With reference to the circular resolutions by the Government of India in the Public Works Department, No. 35 P.W., dated 29th June 1870, and Nos. 1,598—1,615 E.G., dated 27th November 1876, I shall be glad to be informed whether it has been found practicable by your Government to take any steps in furtherance of the objects indicated by these resolutions, viz., the establishment of schools for the training of Natives as Foremen Mechanics in the Public Works Department of your Presidency.

I have, &c.,
(Signed) CRANBROOK.

His Excellency the Most Noble
The Governor in Council, Fort St. George.

No. 121. ORDER THEREON, 7th March 1879, No. 703 W.

COPIES of the undermentioned Proceedings will be forwarded to the Secretary of State :—

22nd May 1877, No. 113 W.
13th April 1878, „ 352 R.
23rd Nov. „ „ 4,465 W.

(True Extract.)

(Signed) J. H. M. SHAW-STEWART, Colonel, R.E.,
Ag. Secy. to Govt., P.W.D.

Exd. T. D. Ryan.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of (1879) Madras.

PUBLIC WORKS.

To

Dated March 7th.

Issued

Rcd. Encl.

G. O., 7th March 1879, No. 703 W.

MARCH.

Nos. 120-121.

Training of Natives as Foremen Mechanics.—The Secretary of State furnished with copies of Proceedings on the subject of the establishment of schools for —.

171846
5

PUBLIC WORKS DEPARTMENT.

No. 11.

TO THE RIGHT HONORABLE THE SECRETARY OF STATE FOR INDIA.

My Lord,—In reply to your Public Works Despatch, No. 4, of the 6th February 1879, we have the honor to forward copies of our Proceedings noted in the margin on the subject of the establishment of schools for training Natives of this country as Foremen Mechanics.

22nd May 1877, No. 113 W.
13th April 1878, „ 352 R.
23rd Nov. „ „ 4,465 W.

We have the honor to be,
My Lord,
Your Lordship's most obedient, humble servants,

Fort St. George,
18th March 1879.

Exd T. D. Ryan.

FORT ST. GEORGE.

PUBLIC WORKS DEPARTMENT.

Letter to the Right Honorable the Secretary of State for India.

Dated 18*th March.*

No. 11 *of* 1879.

FORWARDS copies of Proceedings on the subject of the establishment of schools for training of Natives as Foremen Mechanics.

(7158/18
17

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

27th June 1879, No. 1,707 W.

General.
Establishment.

Read the following :—

No. 129. Despatch from the Right Honorable the Secretary of State for India.

Public Works, No. 12.

INDIA OFFICE, LONDON, 29th May 1879.

MY LORD DUKE,—Your Grace's letter, No. 11, dated 18th March last, informs me of the proceedings taken by your Government to provide for the more satisfactory training of natives for the position of Foremen mechanics in the Public Works Department.

2. The action which, after consultation with the officers of your Public Works Department, you have thought it advisable to take in this matter is described in G.O., dated 23rd November 1878, No. 4,464 W., and appears to me appropriate.

3. I shall be glad to be kept informed from time to time of the progress made in the training of natives under the operation of the scheme thus instituted by your Government.

I have, &c.,
CRANBROOK.

His Excellency the Most Noble
The Governor in Council, Fort St. George.

No. 130. ORDER THEREON, 27th June 1879, No. 1,707 W.

COMMUNICATED to the officers concerned, who will submit a report on the working of the arrangements ordered to be introduced in Government Proceedings, No. 4,464 W., of the 23rd November 1878, half-yearly; the first report to be sent in on the 1st November next.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, First Circle.
„ General Superintendent, Public Works Workshops.
„ Consulting Engineer for Railways, with copy of G.O., No. 703 W., of 7th March 1879.

Exd. C. Howarth.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of (1879) Madras.

PUBLIC WORKS.

To

THE SUPERINTENDING ENGINEER,
FIRST CIRCLE.

Dated [illegible]

Letter No. [illegible]

Dated 27th June 1879.

Received [illegible]

G. O. 27th June 1879, No. 1,707 W.

JUNE.
Nos. 1,332-1,333.

1715 & 16
1-8

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

7th June 1880, No. 1,332 W.

General.
Establishment.

Read the following papers:—

No. 9. From G. T. WALCH, Esq., Superintendent of Works, Godávari District, to the Chief Engineer, Public Works Department, dated Chettipett, 11th May 1880, No. 415.

With reference to G.O., No. 1,707 W., of 27th June 1879, I have the honor to forward, herewith, statement of Native Apprentices entertained in the Government Workshops, Dowlaishweram, for the half-year ending 30th April 1880, and to state that during the last six months the Deputy Superintendent of the Workshops has retired and no one has been appointed in his place, and that there have been changes in the officers in charge of the workshops and range which have interfered with the arrangements as regards the employment of another Apprentice, but the officer in charge of the workshops will now take steps to engage him.

Statement regarding the Native Apprentice entertained in Machine Shop of the Government Workshop, Dowlaishweram, on the 30th April 1880.

Name.	Knowledge of Work.	Work employed upon.	Conduct.	Remarks.
Mandapati Narsiah ..	Slotting, planing, and turning.	Sluice gearing box, locks, &c.	Very good ..	Reading Telugu and English, writing Telugu and a little English; Arithmetic as far as Practice; age 14 years; pay Rs. 2-8-0 per mensem.

(Signed) J. C. LARMINIE, Executive Engineer,
In charge, Government Workshop.

Dowlaishweram,
11th May 1880.

(Signed) G. T. WALCH,
Supt. of Works, Godávari District.

No. 9-A. From G. T. WALCH, Esq., Superintendent of Works, Godávari District, to the Chief Engineer, Public Works Department, dated Narsápur, 18th May 1880, No. 480.

In continuation of my letter, No. 415, of the 11th instant, I have the honor to report that the officer in charge of Government Workshops, Dowlaishweram, informs me that a boy of 14 years of age, named Dharanalacota Chinniah, inhabitant of Dowlaishweram and whose family are carpenters, has been taken on as second Apprentice from the 5th May 1880.

2. He can read and write Telugu and knows something of arithmetic with English figures.

3. He will receive for the present Rs. 2-8-0 a month.

4. The regular indenture will be executed shortly.

No. 9-B. From Lieutenant W. L. C. BADDELEY, R.E., General Superintendent, Public Works Workshops, to the Chief Engineer, Public Works Department, dated Madras, 20th May 1880, No. 472 W.

With reference to G.O., No. 1,707 W., dated 27th June 1879, I have the honor to forward the half-yearly report on the Native Apprentices of the Public Works Workshops.

2. The Carpenter boys have all made steady progress in work; they are very regular in attendance, evidently like the trade, and are sure to become eventually as good workmen as any in the shop.

3. In paragraph 4 of my last report on this subject, No. 3,567 W., dated 3rd December 1879, I stated that the next batch of Apprentices would be taken on in the Smith's Shop; but having made some alterations in the system of working the Foundry, I thought it would be better to begin at once with Apprentices in this branch of work, and accordingly the four boys noted in the accompanying statement were entertained on the 1st April 1880.

HALF-YEARLY Report of the four Native Apprentices entertained in the Carpenters' Shop of the Presidency Public Works Workshops on the 1st April 1879 for the half-year ending 31st March 1880.

Name.	Knowledge of Work.	Work employed upon.	Conduct.	Remarks.
Jegganathen	Planing, morticing, tennoning, dove-tailing.	Fitting scales in the boxes, stands repaired, patterns for stamping machine, wooden buckets repaired, planing planks for cabins of boats, hand cart repaired, pattern railing, pattern pipe, pattern for fire bars, wood-work for sluice shutters, chairs repaired, and seats for garden chairs.	Very good ..	Reading Tamil and little English, writing Tamil, simple Arithmetic as far as Division; age 15; pay 5 annas a day.
Nagaruthnam	Do. do. ..	Do. do. ..	Do. ..	Do. do. age 14; pay 5 annas a day.
K. Soobroyen	Do. do. ..	Do. do. ..	Do. ..	Reading Tamil and little English, writing Tamil, simple Arithmetic; age 15; pay 5 annas a day.
Lutchumanen	Do. do. ..	Handles for hammers, &c., planing planks for cabins of boats and chiefly assisting pattern makers.	Do. ..	Reading Telugu and little English, writing Telugu, simple Arithmetic as far as Division; age 13; pay 5 annas a day.

STATEMENT regarding the Native Apprentices entertained in the Foundry of the Presidency Public Works Workshops on the 1st April 1880.

Name.	Work employed upon.	Remarks.
P. Moorooogasen ...	Learning moulding work.	Reading Tamil and little English, writing Tamil; Arithmetic, Simple Addition; age 14; pay 4 annas a day; relative of Turner Maistry, was employed in the Workshops previous to entertainment as Apprentice.
C. Lazar	Do. do. ...	Do. do. son of list cooly.
Cooppen	Do. do. ...	Do. do. son of Foundry Maistry.
Narasimmooloo ...	Do. do. ...	Do. do. son of list cooly.

All work in the foundry being by the piece, the Workshop only directly pays these boys 2 annas, the remaining 2 annas being paid by the men under whom they are employed.

MADRAS,
20th May 1880.

(Signed) W. L. C. BADDELEY, Lieut., R.E.,
General Superintendent, Public Works Workshops.

No. 10. ORDER THEREON, 7th June 1880, No. 1,332 W.

ORDERED to be recorded.

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the General Superintendent, Public Works Workshops.
" Superintendent of Works, Godávari.
" Educational Department.

Exd. E. C. Shunker.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1880} Madras.

PUBLIC WORKS.

To

THE GENERAL SUPERINTENDENT,
OF PUBLIC WORKS WORKSHOPS,
&c., &c., &c.

Dated June, 7th.

Issued

Encl.

Recd.

G. O., 7th June 1880, No. 1,332 W.

JUNE.

Nos. 9-10.

Native Apprentices.—The half-yearly report on the — entertained in the Public Works Workshops, Madras and Dowlaishweram, recorded.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

12th January 1881, No. 68 W.

General Establishment.

Read the following paper:—

No. 74. From A. B. SAMPSON, Esq., Under Secretary to the Government of India, Public Works Department (General,) to the Secretary to the Government of Madras, Public Works Department, dated Fort William, 22nd December 1880, No. 2,210 G.

THE Secretary of State has inquired what progress has been made in Madras in respect of the training of natives for employment as Foremen Mechanics. I am directed accordingly to inquire what action has been taken on Public Works Department Circular No. 71, dated 17th December 1877.

No. 75. ORDER THEREON, 12th January 1881, No. 68 W.

ORDERED that the following letter be sent:—

(Here enter No. 69 W., dated 12th January 1881.)

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

Exd. S. T. Austin.
Spare Copies

GENERAL.
ESTABLISHMENT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

Dated January, 12th.

Issued

Recd. Encl.

G. O., 12th January 1881, No. 68 W.

JANUARY.

Nos. 74-75.

Training of Natives for employment as Foremen Mechanics.—Ordered that the Government of India be addressed on the subject thereof.

27

PUBLIC WORKS DEPARTMENT.

General.
Establishment.

No. 76. No. 69 W.

FROM

THE SECRETARY TO THE GOVERNMENT OF MADRAS,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department.

SIR,—I am directed to acknowledge the receipt of your letter No. 2,210 G., dated 22nd December 1880, inquiring what action has been taken on Public Works Department Circular No. 71, dated 17th December 1877, in respect of the training of natives for employment as Foremen Mechanics.

2. In reply I am to invite your attention to the orders issued by this Government, copies of which were furnished to the Government of India under cover of docket No. 4,465 W., dated 23rd November 1878. These Proceedings were also communicated to the Secretary of State, who, in his letter No. 12, Public Works, dated 29th May 1879, considered the action taken to be "appropriate."

3. The system introduced is now in operation, but sufficient time has not yet elapsed to admit of any definite report being made as to results. Half-yearly reports on the progress made by the apprentices are received by this Government, and the reports for the next half-year will, in due course, be forwarded for the information of the Government of India and of the Secretary of State.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.

FORT ST. GEORGE,
12th January 1881.

Exd. S. T. Austin.
Spare Copies

GENERAL
ESTABLISHMENT.

Govt. of {1881} Madras.

PUBLIC WORKS.

To

THE SECRETARY TO THE
GOVERNMENT OF INDIA.

Dated January, 12th.

Issued

Encl. *Encl.*

G. O., 12th January 1881, No. 69 W.

JANUARY.
No. 76.

ON the subject of the training of natives for employment as Foreman Mechanics.

Godavari District

Statement regarding the Native Apprentices entertained in Machine and Carpenter Shops of Government Workshops Dowlaishwaram for the half year ending 30th April 1881

Name	Knowledge of Work	Work employed upon.	Conduct	Remarks
Mandapati Narasiah	Slotting, planing & turning	Screw gearing box Locks making	Good	Reads English pretty fairly. Reads and Writes Telugu. Arithmetic as far as Fractions. Age 16 years 6 months. Pay Rs 2-8-0
Darnalacotta Lakinniah	Planing Mortising and Tenoning	Boxes. Benches Valves Shutters &c	Good	Reads and Writes Telugu and English. Arithmetic as far as Compound Rules. Age 14 years 6 months. Pay Rs 2-8-0.

Superintendent of Works Office Godavari
Dowlaishwaram 14th May 1881

Dept 16

To
The Chief Engineer
P.W. Dept.

(Signed) J. C. Larminie
Executive Engineer

A.E. Superintendent of Works

P. W. C. No. 3102

From
The Superintendent
of Works G

To The Chief Engineer
P. W. D
Madras

Date 14th
Desp. 16
Receipt 28 } Mayeda

Statement regarding
the Native Apprentices
entertained in Blacksmiths
and Carpenters Shops
of Government Workshops
Dindoigul
for the half Year
ending 30th April 81

Compiled
G

Presidency Public Works Workshops,
Madras, 21st June 1881.

No. 676 W.

From

The General Superintendent,
Public Works Workshops.

To

The Chief Engineer P.W.D.
Madras.

Enclosures.

Sir,

I have the honor to forward the progress report of the native apprentices of the P.W. Workshop for the half year ending 31st March 1881.

2 All the boys have worked satisfactorily throughout the half year, and without doubt all who remain to complete their five years apprenticeship, will become good workmen, and it may fairly be expected that some of them will eventually be fit for the position of a Foreman in their own trade.

3 Foremen may I think be divided into two classes, first the responsible man who has a good knowledge of several trades with sufficient ability and education to manage a large shop, and secondly the man who has thorough practical knowledge of one trade, with enough education to enable him to look

after

after rough accounts and the necessary tact required to manage the workmen under him.

4 It Cannot be expected that any of the native apprentices will reach the Standard of the first class, but the best of them should in time be fit for the Second Class of Foremen, and should this prove to be the case, I think the intentions of Government, as expressed in G. O. No 4464 of 23d November 1878, will have been carried out.

5 For many years it has been the practice here to take on boys of any race on Small pay, or even at first without pay, to enable them to learn Firing and Engine Driving, as well as other trades, and in many cases, boys trained here have done well as Firemen on Railways and in some few instances as Drivers on Railways and Assistant Engineers in Steam Ships. I may also add that a number of the workmen employed here, and in other Workshops, first learnt their trade under the System to which I have alluded.

I have the honor to be
Sir
Your Most Obedient Servant

Mc Budden Lt Col
Genl. Supte P. W. Workshops

25

P. Fr. S. Nr 39

Presidency P. W. Workshops.

From

THE GENERAL SUPERINTENDENT,
P. W. WORKSHOPS,
Madras.

To

The Chief Engineer
P. W. D.
Madras

No. 676 W.

Dated 21st
Despd. 21st June 1881.
Recd. 22nd

No. OF ENCLOSURES. 1

Subject.

Forwarding progress report on the native Apprentices of the P. W. Workshops for half year ending 31st March 81. called for.

(25)

E. C. No 16 W. dt 4/1/78
" " 4465 W dt 23/11/78
" " 703 W dt 7/3/79
" " 1707 W dt 27/6/79
" " 1332 W dt 7/6/80
" " 2915 W. 20/12/80 Original
" " 1134 1143 W. dt 22/5/77
" " 352 R dt 13/4/78
P. W. Despt. No 11 dt 15/2/79
Nos 684 69 W. dt 12/1/81

Confirmed
6-22-6-81 Ref 28/6 Ans 24/6

5

Report of the Native Apprentices of the Presidency P. W. Workshops for the half year ending 31st March 1881.

Names	Daily Rate	Works employed upon	Conduct	Remarks.
		Carpenter shop		
Jeggannathen	" 5 "	Making Levelling Staves, Boxes for instruments, Stands for —Do—, Boxes for Scales, Boxes for Rulers, Fitting instruments into Boxes &c.	Very good	Entertained on 1st April 1879
Nagaruthnam	" 5 "	Making, Archimedian Screws, Shutters for Sluices, Almirahs &c.	Do	
K. Soobrayen	" 5 "	—Do—	—Do—	Do
Veluhyan	" 5 "	—Do—	—Do—	Do
		Foundry		
Morroogasen	" 4 "	Moulding and assisting in the General work of the Foundry.	Do	Entertained on 1st April 1880
C. Cazar	" 4 "	—Do—	—Do—	Do
Coopen	" 4 "	—Do—	—Do—	Do
Naraainmoolloo	" 4 "	—Do—	—Do—	Do

P. W. Workshops
Madras 21st June 1881

Gerd. Supt P. W. Workshops

From Executive Engr. Kistna, No — 3 dated 3rd Mar '81.
——— to ——— Godavari, " — 14 " —
——— Genl. Supdt., P.W. Stores, " 67 & W, dated 21st June "

28

FOR ORDERS.

Whether these reports shall be sent to the Secretary of State — with reference to the remarks of the H. Mr. on the returns for the previous half-year.

R. H. Lambert Col. R.E.
Secy. to Govt. P.W.D.

Cl

Cl

Ex 22/6

Enclosure in letter from the Executive Engineer, Kistna Dist., No. 3, dated 3rd March 1881.

Return of the Operations during the half year ending 31st December 1880.

FOR ORDERS.

1715 W
1716 W

No. 1715 W PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 11th July 1881

Read the following :—

From,

The Supt. of Work, Kistna - (No. dated 13th May 1881)

" Godavari (" " 14th " ")

" Genl. Supt. W. Workshops Madras } (" No. 656 W dy 21st June 1881)

29

Ordered that the purport of the Report be communicated to the Secretary of State and the Govt. of India.

2. The number of Apprentices now undergoing practical training is as follows :—

Presidency Workshops 8

Vuzianagram — do — . . 2

Bezwada . . . do — 2

RS.

Ord. 28/6. Agt. 24/6 Recd 9/7.
Sent during 1-7-81 to 22.6.81

3. In para 6 of G.O. No. 4165 W dy 23d November 1878, it was directed that four Apprentices should be taken on annually at the Presidency Workshops, and two at each of the shops at Dowlaishweram and Bezwada. There should, therefore, now have been the following numbers under training:—

Presidency Workshops	----	12
Dowlaishweram	-do-	6
Bezwada	-do-	6

4. These numbers will now be worked up to, and the sanctioned strength maintained for the future.

(R.E. No. 1716 W dy 11th July 1881)

To,

The Secy: to the Govt. of India, W.D.

Genl Supdt. N. Workshops
Supdt. of Works, Godavari
-do- Kistna

Dc, cd
4-7-81

Sir,

Adverting to my letter No. 69 W dy 12th January 1881, I am directed to forward herewith copy of a Despatch to the Secretary of State No. dy 1881 reporting the progress made in the training of Native Apprentices as Mechanics in Government Workshops.

30

7/7/82

Dc, cd
8-8-81

W. Dept

No. 46 dy 8th Augt 1879

878

To,

The Right Honble the
Secretary of State for India.

31

My Lord Marquis.

In Lord Cranbrook's
Despatch of the 29th May 1879
No. 12. Public Works a
periodical report of the progress
made in the training of natives
for the positions of Foreman
Mechanics was called for.
We have now the honor to
state the results thus far
of the scheme which has
been approved for the Madras
Presidency.

R.S.

2. Your Lordship will have learnt from the papers which accompanied our Despatch No. 11 dated 18th March 1879 the precise character of the arrangements which have been adopted in the Govt Workshops. These arrangements have now been in operation for over two years. There are at present eight Apprentices in the N.W. Workshops at Madras, and two in each of the shops at Jaulaisheveram & Bezwada, or twelve in all. These numbers have now been ordered to be increased immediately to twelve at Madras and six in each of the other shops, and to be added to thereafter at the rate sanctioned in para

6 of our Proceedings of the 23d November 1878 No 4465 W.

3. Of the eight lads at Madras, four are in the Carpenters' Shops and four in the Foundry; those in the Carpenters Shops being employed on such work as making Levelling Staves, Ropes and Stands for instrument, Ropes for scales, Archimedian screws, Shutters for Sluices &c; while those in the Foundry have been learning Moulding, and been employed generally in the work of the Foundry. The four lads at Bezwada and Jaulaisheveram have been employed in the Machine and Carpenters' Shops, and are being instructed in the rudiments of their trades.

4. The report as to work

and progress are favorable, and there is reason to hope that the Apprentices will eventually be fitted to fill the positions of foreman Mechanics in their own particular branch. Numbers have already, under what may be called the irregular system previously in force, acquired at the Government Workshops a [illegible] knowledge of their trades sufficient to make them useful workmen and to enable them to rise in some cases to the position of Engine Tenders on Railways and Assistant Engineers in steam ships.

7/7/81

Circ: 7/7/81 RD 9/7

Hon. the Secretary

deasp 6/8/81
with E.D. 44.65 W
23-11-78

(33)

3102
3078
X.

Govt. of [1881] Madras.

PUBLIC WORKS.

To

Dated 17

Issued

Recd. Encl.

G. O., No. July 1881, No. 1715 1716 W.

Nos. 1 2 4

Training 4 Native Apprentices as Mechanics in Govt Workshops Orders on papers reporting the progress made in the —

Progress made in the training 4 Native Apprentices as Mechanics in Govt Work-shops.

5 D 5'

5.96.

Ditto