M.R.O. 14—13,000—27-9-24.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1054.	Press ~~Mis.~~
2660.241	
Dated 18-6-~~19~~-1864	

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 18*th June* 1864.

No. 240. Read the following letter from H. E. JACOMB, Esq., Officiating Under Secretary to the Government of Bombay, Revenue Department, to the Secretary to the Government of Fort Saint George, Madras, dated Bombay Castle, 16th May 1864, No. 1,904 :—

SIR,

I am directed by the Honorable the Governor in Council to forward, for the information of the Government of Madras, copy of a letter from Dr. G. F. Forbes, Cotton Commissioner, dated the 18th April last, reporting the result of his trial of the "Emery Patent Cotton Gins."

From Dr. G. F. FORBES, Cotton Commissioner, to J. B. RICHEY, Esq., Under Secretary to Government, Bombay, dated Dharwar, 18th April 1864.

SIR,

1. I have the honor to acknowledge receipt of your Memorandum No. 617 of 1864, dated 20th February last, forwarding for my report extract of a letter from General Frederick Cotton, recommending the introduction into this country of the "Emery Patent Cotton Gins," along with copy of a Despatch from Her Majesty's Secretary of State for India forwarding the patentee's prospectus, and intimating that in event of such a measure being deemed advantageous one of the machines would be sent out for exhibition or experiment.

2. Being at the same time in receipt of a communication from Dr. Forbes Watson, Reporter on the Products of India, stating that one of the above machines has been forwarded to me, and might be shortly expected, I have deferred writing pending its arrival at Dharwar, which took place a few days ago.

3. I have now had an opportunity of examining the machine, and of testing it in work, and I beg to submit the following remarks with regard to it : one of its peculiarities, namely, a loose roller working in the hopper-box, has been in use in the Dharwar Factory for more than twelve months back, and is not affected by any patent.

4. This individual machine is constructed for hand labour, and, consequently, is intended for distribution amongst Cotton cultivators. Keeping this in view, one very prominent objection to it at once attracted my attention, namely, that cogwheels are made use of as the motive power instead of bands and pulleys.

5. It has been found from experience that all Cotton-cleaning machines intended for distribution amongst the Ryots and Native dealers of this country must be not only simple and durable in construction, but also of a nature that will admit of ready repair in case of injury, to which they are much exposed whilst being carried about from one village to another on country carts over bad roads.

6. For the above reason cogwheels have been entirely discarded from the Gins now in use in Dharwar, as they are articles not only easily broken, but which cannot be re-placed of our manufacture, and, consequently, a machine provided with them might from a trifling accident become quite useless to its owner at the time it was most required.

7. The makers of the Emery Gin could readily supplant the cogwheel arrangement by bands and pulleys if desirous of adapting it for this country, but it would also require to be improved as regards the quantity of its out-turn of work, which, as it stands at present, is not nearly equal to that of the Gins now in use here.

8. The comparative results of performance as the trials to which I have subjected it are as follows : the Gin I may mention contains thirteen saws, and was tried against a Dharwar Factory

Gin of only ten saws, the same labour employed to each, namely, two men driving and one feeding the machine :—

The Emery Gin cleaned forty-four pounds of seed Cotton per hour, equal to... ... ... 14⅔ pounds clean Cotton ;
The Dharwar Gin sixty-five pounds of seed Cotton per hours, equal to... ... ... 21⅔ pounds clean Cotton ;
per day's work of ten hours, this gives—
From the Dharwar ten-saw Gin... ... ... 216⅔lb.
Form Emery thirteen-saw Gin... ... ... 146⅔lb.

Difference per day in favour of the ten-saw Gin... ... ... 70 lb.

9. Economy in labour and celerity of performance are the two points chiefly prized by the Ryots and dealers, their great object being to get away as much as possible of their Cotton before the setting in of the monsoon, and during that short but busy season coolie labour (owing to the competition for it,) often rises to treble the usual rates, and sometimes even to more than that ; and, with such a difference of out-turn as above shown, the Emery Gin would not be resorted to even if it were given to them as a gift.

10. How much of this comparative slowness of performance is attributable to the condensing apparatus attached to the machine is a point upon which I am not prepared to give an opinion, but I have no doubt that it is partly attributable to the description of saws made use of, which are not suitable for the New Orleans Cotton of the Dharwar Districts, and which, I may add, is the only Cotton in India that admits of being cleaned by any Saw Gin, the fibre of the indigenous varieties being too weak to stand the action of the saw.

11. If the English patentees of the Emery Gin are desirous of making it suitable for introduction to this country, I would recommend their trying it with the Dharwar Factory ten-inch saw which may be obtained from Messrs. Spear and Jackson, Ætna Works, Sheffield, who are in possession of the pattern, and if this should have the effect of increasing the performance without adding to the amount of labour required in working it I think the machine might in other respects find favour, the cogwheels, as before stated, to be re-placed by bands and pulleys.

12. I take this opportunity of mentioning that I have recently noticed the announcement of an improvement in the Macarthy Gin by a Mr. Wanklyn, of Bury, Lancashire, which, if it is found to answer, will apparently remove one of the chief objections to the use of that description of machine in this country ; I allude to the introduction of an iron roller with spiral grooves cut in the metal in lieu of a wooden roller covered with leather, which was formerly in use. If one of Mr. Wanklyn's twenty-four inch Macarthy Gins can be sent out to the Dharwar Factory, I shall be very glad to have an opportunity of testing the merits claimed for this improvement as regards the climate of India.

No. 211. ORDER THEREON, 18th June 1864, No. 1,054.

Miscellaneous.

1. Communicated to the Board of Revenue.

G. O. 11th March 1864, No. 427, paragraph 3
To England 11th March 1864, No 17, paragraphs 5 and 6.

2. Under the circumstances stated in this report the Secretary of State will be requested to send only two of the Gins in question to this Presidency for trial, instead of eight as recently applied for.

(True Extract.)

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

To the Board of Revenue.

Exd. S. T. Augustin.

No. 1904. of 1864.
Revenue Department.
Bombay Castle, 16th May 1864.

To
The Secretary to the Government
of Fort Saint George
Madras.

Sir,

I am directed by the Honble the Governor in Council to forward, for the information of the Government of Madras, copy of a letter from Dr. G. F. Forbes, Cotton Commissioner, dated the 18 April last, reporting the result of his trial of the "Emery Patent Cotton Gins."

I have the honor to be
Sir,
Your most Obedient Servt

H. E. Sacrey
Offg Under Secy to Govt

Revenue 1864. Oct.
Pro: of Govt for June.
No. 1372.

From Offg. Under Secty. to the Govt of Bombay

Dated 16th May.
Received 25th " 1864.

No. 1904.

Forwarding copy of a letter from Dr J. H. Forbes, Cotton Commissioner, reporting the result of his trial of Mr Emery's Patent Cotton Gins.

No 1057. 18 June

W. H. Crosthwaite

letter dated June 1st reporting the result of his trial of Mr Emery's Patent Cotton Gins.

No 1057.

Communicated to the Board of Revenue.

Under the circumstances stated in this report the Secretary of State will be requested to send only two of the Gins in question to this Presidency for trial, instead of eight as recently applied for.

Govt Ft St George
18th June 1864.

14 Copies to the Bd of Revl Sent 20 June

Copy in a letter to Govt 8/18 June No 11 of 1864 - Mds

No 240 & 241

31 May/64 Rec'd June

+ G.O. 11th March 1864 No 427 para 3.
To England No 2 dr
No 17 paras 5 to 6.