

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 292

Press

~~Mis.~~

52.53

Dated

3 - 2 - 18 66.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
3rd February 1866.*

No. 52. Read the following Proceedings of the Board of Revenue, dated 17th January 1866, No. 401.

Read the following letter from J. SHORTT, Esq., M. D., General Superintendent of Vaccination, Madras, to the Secretary to the Board of Revenue, dated 9th January 1866, No. 1 :—

1. Having observed in the local papers, a Report on the Cotton Saw-gins, and having had some experience in the matter, I beg herewith to submit a few remarks on the subject, believing that they would prove acceptable.

2. When at Chingleput, I obtained from Doctor Hunter, the Secretary to the Agri-Horticultural Society, the loan of a Cotton Saw-gin, the same as that depicted in Doctor Royle's Cotton Book, opposite page 540, Fig. D 1 and 2 : with this instrument, most of my cotton was cleaned.

3. On several occasions I examined the wool freed from the seed, under the microscope, but could not detect any injury to the fibre itself; nevertheless, it is a fact overlooked, I fear, by most observers that, the staple itself suffers in its length by the use of this machine, and there is much waste of fibre occasioned by it, amounting, according to my experiments, at times from fifteen to twenty per cent.

4. It is usual among mercantile men in examining cotton-wool, to take a tuft of wool between the forefinger and thumb, and holding it thus, to draw out the fibre at either end, and lay them on again, till what is believed a uniform length is observed, and which length is generally taken as the test or standard of the length of the staple. Now, I submit that, although this simple test answers practically, yet, it is somewhat fallacious for scientific purposes. Owing to the fineness of the fibres, it is not possible to lay the whole of the fibre held by the forefinger and thumb down uniformly, so that a better and more accurate way of testing the length of the fibres would be, to examine the wool as found adherent to the seed, by simply opening out the fibre, and thus ascertaining its length, similar to that depicted in Royle's Book of Cotton Culture, Plate III., Fig. 3A.

5. With the use of the Cottage Saw-gin, as well as I believe most Saw-gins, the fibre is cut at unequal lengths from the seed : this is more particularly the case with the Oopum varieties of cotton, where the fibres adhere rather tenaciously to the seed. This can be better demonstrated, not by examining the wool, but the seed, as it is removed from the gin, when the inequality with which the fibre is cut will become more readily apparent.

6. That cotton cleaned by the Saw-gin does not deteriorate in value, will be seen by the following report of the "Manchester Cotton Supply Association's Executive Committee," on a bale of cotton forwarded by me, and which was cleaned by the Cotton Saw-gin :— "Very bright, bloomy color, very clean, excellent staple, value 14d. per lb.," at which rate the bale was readily disposed of. Here is the Spinners' report of the same :— "Clean, free from sand, seed, or leaf, color rather brown; staple fine, somewhat *irregular*; average length about, or nearly equal to, middling Orleans. Works well into warp twist of medium numbers being mixed with American cotton. This cotton is of a very useful class, and would meet with ready sale at all times in large quantities. It would be used as a substitute for American, and especially to mix with that description of cotton. Its money

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"value we consider would be invariably, supposing the quality was not deteriorated, that of ordinary American cotton, or thereabouts."

7. I have underlined the word irregular, to prove what I have advanced above, and I think that the fact of the cotton having been saw-ginned, and the Reports of the Executive Committee of the Cotton Supply Association, and that of the Spinners, are of sufficient interest, and will be my apology for troubling you with this letter.

8. There is no machine that is so simple and effective, in freeing the Oopum cotton seed of its fibre completely, as the common *Chirka*; but the simplest kind of instrument I have yet seen brought into play for the purpose was the other day at Adoni, and consists of an iron rod about a foot long and half an inch thick, and a small flat stone. With this, I have seen the women extract the wool from the seed with great ease and rapidity, and the quantity of wool was equal to that cleaned by the common *Chirka*. The seeds were so perfectly freed of wool that, no other instrument I am aware of, can do it so effectually. I procured one of these instruments, the iron rod and stone, which I shall have much pleasure to submit for the inspection of the Board of Revenue, on its arrival.

1. The Board are much obliged to Doctor Shortt for the above letter, which will be communicated to the gentlemen who lately favored the Board with their opinions on the working of the different patterns of Gins received by Government.

2. The Board will be glad of the opportunity to inspect the implements described by Doctor Shortt for separating the wool from the seed in Adoni.

No. 53. ORDER THEREON, 3rd February 1866, No. 292.

Miscellaneous.

Ordered to be recorded.

(True Extract.)

(Signed) J. GROSE,

Acting Under Secretary to Government.

To the Board of Revenue.
the Editor's Table.

Ed. S. T. Augustin.

No. 401.

PROCEEDINGS OF THE BOARD OF REVENUE, dated 17th January 1866.

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(A true Copy and Extract.)

Adonit

Secretary.

To J. D. Sim, Esq., Secretary to Government, R. D.

Exp. Y. Wright.

No 52 453

*14 Feb 1866
The Board of Revenue
Adonit*

Dated 17th January 1866.

*20-1-66
22-2-66*

RECORDED.

3 Feb 66
No 401

PROCEEDINGS OF THE BOARD OF REVENUE.

No. 235

*Rev. Secy to Govt
Adonit*

Passing orders on letter from Doctor Shortt submitting remarks on the working of the Cotton Gins.

W.D.N.