

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	1352	Press Mis.
285-280		
Dated	19-6-	1862

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
19th June 1862.*

No. 289. Read the following letter from Captain J. MITCHELL, to J. W. BREEKS, Esq.,
Private Secretary to His Excellency the Governor, dated Kilpauk, 10th June 1862 :—

MY DEAR SIR,

1. I have the pleasure to send you the report on the Native Cottons.
2. I have *examined all*, but I have only measured three, as the others were evidently duplicates. I have extended the measurements to 24 to get a better average.
3. A and B are very much alike and only want length; F is remarkable for the general flatness of the fibres.

N. B.—The last number on the former report was 18. I thought it best to carry on, and have therefore entered the first of this 19.

Proceedings of the Madras Government, Revenue Department,
19th June 1862.

Result of the Measurement, &c., of three samples of Native Cotton.

No.	Description of Cotton.	Length in Inches.		Readings of Micrometer head.																								Sum of Micrometer readings.	Mean of all the readings.	Mean diameter of an inch.
		1st Tuft.	2nd Tuft.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
				F.	R.	R.	R.	R.	R.	R.	R.	R.	R.	R.	F.	R.	R.	R.	R.	R.	R.	R.	R.	F.	F.	R.	F.			
19	A. Datchapully, red.	1.05	1.15	87	109	91	124	103	94	110	85	134	100	94	97	67	85	105	87	88	140	137	84	141	85	95	170	2,512	104½	117½
20	B. Tumragode, red.	1.1	1.2	83	131	137	105	94	94	89	F ^{thin} 149	92	96	80	138	97	137	94	112	143	85	120	98	174	87	105	101	2,664	111	120½
21	F. Masulipatam, white	1.17	1.2	118	127	113	104	72	99	145	F ^{thin} 125	116	95	118	132	125	95	103	85	F ^{thin} 156	105	112	139	121	145	104	119	2,772	115½	113½

Form and character of the fibres.

No. 19. Fibres chiefly round and roundish, very few flat and thin ones.

No. 20. Very much like the preceding but a little stouter.

No. 21. In this the prevailing character is a moderate degree of flatness, with much twist.

N. B.—The following abbreviations have been used in the columns of measurement:—

R. for Round.

r. for roundish.

F. for Flat.

f. for flatish.

Madras, 10th June 1862.

(Signed) J. MITCHELL, Captain.

Proceedings of the Madras Government, Revenue Department,
19th June 1862.

No. 290.

ORDER THEREON, 19th June 1862, No. 1,352.

Ordered to be printed in continuation of Captain Mitchell's Report of 29th April last, and communicated to the Board of Revenue, with reference to Government Order, 10th instant, No. 1,276.

(Signed) J. D. SIM,

Secretary to Government.

16th June 3
My dear Mr. Simon

See I must
be a little more
careful, which I
write. My letter of the
16th, that has been
honored with type,
was only a hurried
note, and I did not
dream of it appear-
ing in print.

I have taken
the liberty of scoring

but Para 4. as it
has nothing to do
with the subject.
and I should ^{be} allow
para: 2. if it is not
giving too much trouble
in next page.

Yours
very truly
Wm. B. Smith

J. D. Lee

Secy Revenue Board

Para 2. I have examined all, but I have
only measured 1 tree, as the others
were evidently duplicated. I have
extended the measurements -
to 24. to get a better average.

The white lines on this paper are intended to show, without having recourse to a scale, the average length of fibre in the several samples of Cotton sent by the Cotton Supply Association, being those in the greatest demand in the English market.

The plan of measurement adopted was to tease out repeatedly a small quantity of Cotton until a tuft was obtained with both extremities of the fibres as nearly as possible in line. It was then tied round the middle with a thread, and applied to a one-inch diagonal scale.

But as, notwithstanding, every care, there will remain a few fibres which project beyond the others, it is proper to note that the lines represent the length of the *principal body* of the tuft, and not that of these few extreme fibres.

There is a perceptible difference both to *sight* and *touch* in different Cottons, some are very soft and *silky*-looking, others feel somewhat crisp and look less brilliant. But it is probable that considerable experience is requisite before Cotton can be judged of in this way; therefore no attempt has been made to lay down rules on that subject here. It must, however, be observed that in cotton of Indian growth the Microscope shews a greater proportion of thin flat fibres than is found in the American grown cottons, and it is probable that much of the beautiful glossy appearance of the better class of Long cloths and Cambrics depends upon the comparative absence of these thin flat fibres from the cotton of which they are made; and it may be a question for scientific Agriculturists whether by alteration of the time of sowing or by some other means of which they will be the best judges, more time cannot be obtained for the accumulation of secondary deposits in the hairs of cotton seeds. Its absence, and perhaps the shortness of the fibre also, may be due to the too rapid ripening of the pods, or, is it owing to the poverty of the soil?

Some cottons present a considerable number of "specks" or "knots"; these are found to consist of fibres in which the secondary deposit is absent, that is, of the thin flat fibres, consisting of the cell-wall only.

The points to which the cotton spinner attaches the greatest importance is "LENGTH OF FIBRE" and "ABSENCE OF FOREIGN MATTERS" or in plain words "DIRT"; *uniformity* of length also, is of course assumed; a reference to the prices will show that they are in proportion to the *length of staple*. Thus on the 18th December 1861, Sea Island cotton which measured about one inch and two-thirds was worth 21d. say 14 Annas per lb. while saw-ginned Surat which measured one inch and one-fifth, say half an inch less, brought only 7½d. or a trifle more than one-third of the price of the former.

The point therefore to which the attention of the grower should be directed is, by improved cultivation to increase the length of staple, for we see that when the staple was one-half longer, the price was three times greater or increased from a trifle under five Annas, to fourteen Annas lb. It is true the *fibre* was also *better in other ways*, but it is likely that more careful cultivation would improve the cotton in *every way*.

The Cotton (No. 1) placed at the head of the list is that in greatest demand, and it will be seen that its length does not much exceed that of the Broach cotton. Knowing what careful agriculture has effected in Europe, Europeans have a right to expect that the same cause should produce the same effect in India, and an addition of one-half or 50 per cent. to the price should be an inducement sufficient to the Cotton grower to endeavour to effect such an improvement as would give India that command of the cotton market which is now held by America.

ORDER THEREON, 10th June 1862, No. 1,276.

1. The Government are much obliged to Captain Mitchell for the Table, &c., submitted with this letter.

2. As the Table cannot but be of much use, the Government direct that copies of it and of the Memorandum annexed, as also of the papers recorded in the Order of 5th May 1862, No. 977, be furnished to the Board of Revenue for distribution to the several Collectors of this Presidency, and to such other persons as are interested in Cotton cultivation.

(True Extract.)

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

To Captain J. Mitchell.
To the Board of Revenue.

Exd. S. T. Augustin.

REVENUE DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following letter from Captain J. MITCHELL, Officer in charge of the Government Central Museum, to J. W. BREEKS, Esq., Private Secretary to His Excellency the Governor, dated Madras, 29th April 1862:—

MY DEAR SIR,

With reference to the 16th paragraph of my letter of the 21st April 1862 to your address, I have now the honor to forward a table exhibiting the prices of the various samples of Cotton sent out by the Cotton Supply Association, opposite to which are ~~black~~ ^{white} lines to show the average length of Staple, which lengths are also given in inches and decimal parts. To this I have added a short memorandum to show why the table has been prepared, and containing a few remarks having reference to some points to which it appears desirable to attract attention.

Will you do me the favor to ascertain whether this paper will meet the wishes of his Excellency the Governor, as conveyed to me in paragraph 7 of your letter of the 3rd April 1862.

Length and Price on the 18th December

Number.	Description.					
1	American Medium Cotton	...	...	...	...	...
10	Sea Island Cotton	...	...	...	...	...
11	Sea Island Cotton, stained	...	...	...	...	...
12	Egyptian Cotton	...	...	...	...	...
13	Pernambuco Cotton	...	...	...	...	...
14	Fair Orleans Cotton	...	...	...	...	...
15	Middling Orleans Cotton	...	...	...	...	...
16	Broach Surat	...	...	...	...	...
17	Saw-ginned Surat	...	...	...	...	...

* On the 20th November

1861, of the following Samples of Cotton.

	Price per lb.	Length, Inches.
... * 12d. or 8 Annas.....		1.4 to 1.25
... 21d. „ 14 „		1.65
... 12d. „ 8 „		1.7 to 1.6
... 12d. „ 8 „		1.6 to 1.55
... 11½d. „ 7 „ 8 Pic.		1.45 to 1.4
... 11½d. „ 7 „ 8 „		1.35 to 1.23
... 10½d. „ 7 „ 2 „		1.33 to 1.25
... 8d. „ 5 „ 4 „		1.25 to 1.15
... 7½d. „ 4 „ 10 „		1.2 to 1.1

or 1861 for this sample only.

H. B. The last number on the former report was 18. I thought it best to carry on and time therefore entered the price of this 19.

[Faint handwritten notes and stamps]

Ordered to be printed in Conto:
 -ination of Captain Mitchell's Report
 of 29th April last and communicated
 to the Board of Revenue with reference
 to G. O. 10th Instant N^o 1276.

Not yet sent
 19th June 1862

L. D. J.

Rev=1862 Report
 Pro: of Govt for June 1864.

From
 Capt. J. Mitchell

Dated 10th 3 June 1862.
 Received 13th 3

E-1- H

Submitting his
 report on the value
 of Cottons. —

N^o 1352. 19 June
 With an order

Forwarded to Revenue
 Secy Gen^l - to be printed
 in continuation of Capt
 Mitchell's Report of 21st ap.
 1862 By order

12 June 1862 W. S. S.