M. R. O. 1—33-000—16-12-40

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 2036 Press Mis.

304-7
Dated 15-12-1870 19

Not to be folded or roughly handled

No. 306. Read the following Proceedings of the Board of Revenue, dated 27th September 1870, No. 5,880 :—

Read again :—

Government Order, dated 15th August 1870, No. 1,256, recorded in Board's Proceedings, dated 3rd September 1870, No. 5,585.

Board's Proceedings, dated 23rd July 1870, No. 5,013, paragraph 35.

Read also the following letters :—

From the Officiating Collector of the Kistna District, to the Acting Secretary to the Board of Revenue, dated Masulipatam, 6th August 1870, No. 3,636.

I HAVE the honour to forward, herewith, an estimate sent by the Superintending Engineer, amounting to Rupees 575, for re-constructing a shed over the Rice-hulling Machine set up at Nidumole, as the former shed was blown down by the heavy gale of the 28th June last, the palmyra posts having decayed. It is now proposed to provide Teakwood trusses in restoring the shed. The cost should, I presume, be met from Petty Construction and Repairs, but there are no funds available.

2. I would raise the question whether or not it is worth going to the expense of carrying out the work at all. In my letter, dated 16th November 1869, No. 335, recorded in the Board's Proceedings, dated 17th January 1870, No. 320, I reported that the machine was set up in a thatched shed with mat walls very much out of repair ; that the machine itself was becoming rusty for want of use ; that it was leased out for a few months in 1868, but had not been since used. I added that I had advertised it in the District Gazette, and spoken of it to many merchants and agriculturists, but that all objected that Nidumole, eight miles from Masulipatam, was an out-of-the-way place, and it would not pay to take the paddy so far to be husked. The Board then resolved to await a report from the Superintending Engineer before issuing orders on the subject of my letter.

3. I submitted a further report on the subject, 14th January 1870, No. 178, recorded in Board's Proceedings, dated 31st January 1870, No. 673, but the Board still awaited the Superintending Engineer's report.

4. I am afraid that this valuable machine is likely to be severely injured from neglect, exposure, and want of use. I would propose that it should be taken down and sent to the Experimental Farm at Madras, if a sufficient fall of water can be secured there.

Enclosure No. 1.—Estimate.

From the same officer, dated Masulipatam, 31st August 1870, No. 3,975.

WITH reference to your official memorandum, No. 801, dated 17th August 1870, I have the honour to forward, herewith, a copy of Government Order, dated 3rd May 1870, No. 1,107, Public Works Department, which I have just received from the Superintending Engineer. It contains a copy of the report regarding the Rice-hulling Machine called for by the Government of India.

2. Where it is, the machine is no use whatever ; and I beg that early orders may be issued with regard to its disposal, as I have already reported that the shed

which covered it has been blown down, and the machinery would necessarily be deteriorating from exposure, though it has been covered over temporarily with palmyra leaves.

Enclosure No. 1.—Copy of Government Order, dated 3rd May 1870, No. 1,167.

Having been informed that Captain C. J. Smith, R.E., was well versed in the subject of Rice-hulling Machines, both from his having been engaged in the setting up of that at Nidumole in the Kistna District and also from observation of their working in Italy, the Board requested him to examine that at the Government Farm, and he has now kindly furnished the accompanying practical memorandum which the Board resolve to submit to Government, and also to communicate for the information of the Farm Committee, with reference to the Order of Government and Proceedings of the Board quoted at the head of these Proceedings.

The Board are quite satisfied that, besides the great cost of setting it up, there are serious practical difficulties in the way of carrying out the experiment.

3. Skilled labour of a kind that is unknown in this country would evidently be required to trim the stones from time to time; and the Board concur with Captain Smith in thinking that any experiments that it may be considered desirable to make would be made under much more favourable circumstances with the machine already in working order at Nidumole than with its counterpart in Madras.

4. In fact, the report called for from the Superintending Engineer in Government Order, No. 3,800, of the 8th December last, would apparently furnish all the information the Government could possibly require as to the advisability of proceeding further with attempts to introduce the machine in its present form. It is no doubt true, as Captain Smith says, that the experiments made up to that time were not sufficient to prove conclusively whether it was likely to be practically useful or not; but the evidence, so far as it goes, is certainly not such as to afford a reasonable hope of success with a machine at the farm, and the Board would, therefore, deprecate any expenditure at present in putting it into working order.

P.S.—Since the above remarks were written, the Board have received from the Collector of the Kistna District a copy of Government Order, No. 40, of the 3rd of May last, in the Public Works Department, forwarding a copy of the report called for by the Government of India, from which it would appear that the mill at Nidumole might be worked at a profit. It does not, however, appear from that report whether the rice as hulled is fit for the Indian market; and it is clear from paragraph 9 that where there is water-power available, if it is difficult to get paddy on account of the want of godown accommodation, and where there is godown accommodation, as at the various ports, there is no sufficient water-power to work the mill.

With reference to this point, the Board desire to call attention to the Collector's letter, No. 2,975, of the 31st August, giving cover to the report in question, and request that final orders may be issued at an early date as to the disposal of the machine.

In the meantime the Collector will be requested to make temporary arrangements for securing it from further injury.

It seems probable that it will shortly be superseded by Mr. McKinlay's patent, described in the papers forwarded with Government Order, No. 23, of the 7th of September last.

Memorandum on the subject of the Rice-hulling Machines.

My very limited experience in the subject is confined to the setting up and preliminary expenses connected with the machine at Nidumole (Kistna) and to the inspection of two others in Northern Italy.

2. I have visited the Government Farm at Madras, and seen the Hulling machine there, and I have perused the papers collected by the Board of Revenue on the subject.

3. I believe the machine at the Farm is almost a duplicate of that at Nidumole, and, in my opinion, it will not suffice, with the aid of the "Winnow" and "Sizing Machine," to prepare the rice for the Indian market. The experiments in the Kistna District clearly showed, that if the stones were set sufficiently close to deprive the grain of an inner skin, much of the rice was split longitudinally, and, if subsequently subjected to the usual pounding process, broke up small, causing great waste; if the stones were sufficiently wide-set to avoid this, the inner coat of the grain was left on, while the least play in the pivot, allowing the upper stone to run otherwise than truly horizontal, caused harsh work.

4. That cork-facing has been frequently introduced elsewhere shows, I think, that this difficulty has been before experienced, and there is no doubt that, in the absence of any skilled labour to re-face the stones, and to secure and restore the even working of the pivots, this drawback would be much enhanced in this country. The Kistna machine can, I believe, be worked to take off the outer husk completely without injuring the grain; but I think it will be found difficult, if not impossible, to so work the stones that they will be close enough to take off the inner skin, and, at the same time, even enough in face and travel, not to split or injure the grain; this latter process will, I think, have to be carried out by "Stumpers" as in Italy.

5. The experiments at the Kistna, however, were certainly not sufficiently extensive to determine the question, and I should have thought that it would be far more economical to continue them there, where ample water-power is available and costs nothing than to incur the expense of erecting a similar machine in Madras to be worked by steam, where fuel is most costly, where the shafting must be moved and attached by brackets to masonry buttresses, to save the already cracked walls from the great vibration to which the machine will subject them, and where the available space will, I think, be found quite insufficient for the "Mill," "Winnow," and "Sizing Machine."

6. There will, I feel sure, be found at the Kistna ample water-power without raising the wheel as proposed, much less locating it elsewhere.

We never made use of the full power available, but we never drove the millstones at a greater speed than 110 revolutions per minute, when the vibration was very great.

7. The process most common in Italy, but, apparently of late years, in course of being re-placed by one owing its existence to the introduction of iron-work, and advanced skill in manufactures, is one feasible in any district in the Presidency where the very moderate water-power required is available; and if it could once be clearly shown that the husked rice after leaving the mill-stones can be prepared for the market by the ordinary native process of pounding, the erection of a stamping machine and of the required sieves, and the further simplification of the entire process, so as to adapt it to the skill of a "Country Carpenter" would perhaps best be superintended at the Presidency Town.

8. With reference to the proposals having for their object the increasing of the power of the Nidumole mill, and the want of "head" referred to in the correspondence, I would remark that this want of power arose partly from a desire to locate the mill as near the coast as possible, where, the area of irrigation being small, the required discharge for the wheel could with difficulty be utilized for cultivation, and partly from the design of the wheel which is better adapted for a small discharge with a large head than a large discharge with a small head, the latter being the conditions most often available in the eastern deltas.

MADRAS, 9th September. (Signed) C. J. SMITH, Captain, R.E.

No. 907. Consultation, 15th December 1870, No. 2,016.

Miscellaneous.

THE Officiating Collector of the Kistna District reports that the Rice-hulling machine at Nidumole is of no use in its present situation, where it is likely to undergo injury from exposure, and proposes that it should be transferred to the Government Farm at Madras. As, however, there is already one machine at the Farm, the counterpart of that at Nidumole, the Government do not deem it worthwhile to incur the requisite expense of carriage and setting up the machine in a fresh place.

2. The Collector should, therefore, advertise the machine for sale and dispose of it for what it will fetch.

(True Extract.)

(Signed) W. HUDLESTON,
Secretary to Government.

To the Acting Collector of the Kistna District.
" the Board of Revenue.
" the Government Farm.

By Order of Government.

Revenue Department

Memo for Orders
on M 3142 range

Question what is to be done with the rice hulling machine set up at Nidumolu on the Kistna District

This machine was set up at the Nidumolu lock on the Bezwada and Masulipatam canal (eight miles from Masulipatam) in 1866. It cost Rupees 2500 and its erection cost Rupees 1270.

2 A report on its properties is embodied with G.O. dated 3rd May 1870 No 1161 Mr. McAlpine estimates that where there is sufficient grain to keep the machine fully employed, it is capable of returning

I would advertise the machine for sale. Neither the Collr. nor the Executive Engineer has the means of proving it a paying trial. Secy MD

1.8.5

By

I am glad it is not being replaced there. There is no use for it & the sooner nothing is done with it there.

Govt. of India Public Works.

REVENUE.

To

THE ACTING COLLECTOR

OF THE KISTNA DISTRICT.

&c., &c., &c.,

Dated December 14th, 1870.

Rect.

G. O., 15th December 1870, No. 21036.

DECEMBER,
Nos. 306-307.

Rice-hulling Machine at Nidumolu on Kistna District.—Collector authorized to advertise it for sale, and to dispose of it for what it will fetch.

returning nearly 11 per cent on the original outlay.

3 At present however there is no work for it in its present situation, as no one will take grain eight miles to be hulled; and the Collector, while submitting an estimate amounting to Rs. 575 for protecting it with a shed, raises the question whether it is worthwhile to undergo any further expense on the machine. He reports that it was

There is already a sufficient quantity of useless machinery at the Farm that as soon as a shed, which Mr. Hunter Weir thinks highly necessary, is built, Mr. Weir thinks his Paddy husker would be quite sufficient. If it can't be used in the ~~Gorkha~~ Kistna Delta where can it be used?

I presume that the machine would be used at Rembatla then 8 miles off but could the water power be applied there. There must be a fall.

I see nothing for it but to offer the machine for sale — It can't sell — then what to do I cannot.

leased out for a few months in 1868, but has never since been used.

4. This machine will probably soon be superseded by McKinlay's patent, which only costs £30, but it is submitted that it should still be preserved in good order. Rs. 575 appears too large a sum to expend for this purpose.

5. If Mr. McAlpine's rough estimate of the economical results obtainable from the mill be correct, it might be a good plan for the P. W. to undertake, as an experimental measure, the hulling of

of paraday at so much a
per garee. By this means,
the merits of the machine,
if such exist, will be:
come known.

6. In their Proceedings
dated 11th October 1870
No 6,063, the Board
suggest that the Bengal
Govt may be asked to
communicate the result
of their experiments
with Mr. Kirkaye's
machine. —

WH.

Engd

Revenue Department

Ft-2036.

Proceedings of the Madras Government

Under date the 15th December 1870.

Read the following

Proceedings of the Board

of Revenue.

Subject with Recommendation that no Expenditure be incurred at present in fitting Rice Hulling machine at Govt Farm at ~~Kidamole~~ Nidamole & Despatching Machine to Madras for sale

(Ft 27th Sept 1870

Read

Read also Proceedings of Govt Farms at Madras Ft 2036

a fresh place.

2. The Collector should therefore advertise the machine for sale & dispose of it for what it will fetch.

&c

Order

The Offg. Collector of the Nellore district reports that the ricehulling machine at Nidamole is of no use in its present situation where it is likely to undergo injury from exposure & proposes that it should be transferred to the Govt Farm at Madras. As however there is already one machine at the Farm, the counterpart of that at Nidamole the Govt do not deem it worthwhile to incur the requisite expense of carriage & setting up the machine in

The Officiating Collector of the Nellore district reports that the ricehulling machine at Nidamole is of no use in its present situation, where it is likely to undergo

undergo injury from
exposure, and proposes
that it should be trans-
ferred to the Government
Farm at Chadras. As
however there is already
one machine at the Farm
the counterpart of that
at Chelamale, the Govern-
ment do not deem it worth
while to incur the requisite
expense of carriage and
re-erecting the machine
in a fresh place.

2. The Collector
should therefore ad-
vertise the machine
for sale and dispose

of it for what it
will fetch.

Dft.

E.A.

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