

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No.	300	Press
612-613		Mis.
Dated	30-11-1872.	

Not to be folded or roughly handled

12

*Proceedings of the Madras Government, Public Works Department,
30th January 1873.*

No. 612. Read the following letter from the District Engineer, Neilgherry District, to the Secretary to Government, Public Works Department, dated Ootacamund, 7th December 1872, No. 226 :—

WITH a view to obtain a harder description of broken stone for the main communications of this district, I procured an illustrated and descriptive catalogue of Blake's Patent Stone Breaker manufactured by H. R. Marsden of Leeds.

2. The information it contains leads me to submit an indent on England, in triplicate, for one of the smaller of his machines.

3. I beg to be allowed to state my reasons (which, I trust, you will deem satisfactory) for soliciting the favour of this indent being at once forwarded to England for early compliance.

4. I find that the stone which is being broken for the Coonoor Ghaut (for example) is of an inferior description. It is chiefly the outside semi-decomposed part of the rocks, it crushes rather easily under the wheels and does not last long. Its only recommendation is that it can be procured very cheap (at 7 pie per cubic foot). I have ordered a harder stone to be broken, but it costs a great deal more (which prevents its being more largely used), and it is not easy to induce the coolies to break it up at all, much less to the required size. I find the cost of hard quarried stone on the Coonoor Ghaut is 2 annas and 6 pie per cubic foot as per Estimate A. attached. The cost of the same stone broken by two of the Stone Breaker machines is 1 anna 6 pie and 1 anna 8 pie respectively per cubic foot.

5. Thus, the machines will break up the stone 50 per cent. cheaper. They will also break it up of uniform hardness and of a uniform size.

It is impossible to be sure of obtaining these two requisites entirely when the stone is broken by hand.

6. I beg to submit an indent for a machine which admits stones 6" by 4" in section, and of almost any length to be worked by bullock power (it requires 2 horse-power to work it full.) It will cost I anticipate, delivered in this district, something like 1,500 Rupees.

7. Should this machine answer, it would be well to obtain others, particularly the larger machine which breaks stone 20" by 9" to be worked by steam. This machine with its engine (6 horse-power) and all complete would cost, delivered in this district, Rupees 10,000. But it would break up a great deal more metal than the other, that is 48 cubic yards per diem in the place of 12, and at a slightly cheaper rate.

8. All the machines travel on wheels and so can be readily conveyed from one part of a road to another.

9. I have noticed several places on the new Coonoor Ghaut where there is abundance of stone, and also plenty of room for the machine to work in, and for the broken stone to be collected upon.

10. It is very desirable that the machine be at once ordered so as to enable us to put it in use in March next.

P. S.—Kindly favour me by returning the catalogue.

*Proceedings of the Madras Government, Public Works Department,
30th January 1873.*

No. 613. ORDER THEREON, 30th January 1873, No. 300.

ACCOUNT, No. 61.

His Excellency the Governor in Council approves of two of the smaller sized Stone-breaking Machines being indented for, one to be used on the new Coonoor Ghaut, the other for supply of metal at Ootacamund and the adjacent roads.

*2. The machines will be included in the general indent to be submitted to the Home Government with the Budget for 1873-74.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

7c

Estimated Cost of 1296 Cubic feet of

Indent for the following articles required from England for the use of the Nilgherry District 3c

<i>Articles.</i>	<i>In store or on hand</i>	<i>Date of last issue</i>	<i>how or requires</i>	<i>for the use of the for what Nilgherry District purpose</i>	<i>Amount</i>	<i>Value</i>	<i>Remarks.</i>
<i>Blakes Patent Stone Breaker</i>					<i>1</i>		

*Ootacamund District Engineer's Office
7th December 1872
J. K. Morant. Capt R.E.
District Engineer*

*7th December 1872
District Engineer*

Proceedings of the Madras Government, Public Works Department,
30th January 1873.

No. 613.

ORDER THEREON, 30th January 1873, No. 300.

His Excellency the Governor in
two of the smaller

S. M. 6107/72

7c

Estimated Cost of 1296 Cubic feet of

Indent for the following articles required from
England for the use of the Nilgherry District

5c

Articles.	No. now on hand	Date of last order	No. now required	For the use of the Nilgherry District.	Remarks	Value	Remarks.
Blakes Patent Stone Breaker			1				

Attest and
Brett Eng's Office
7th December 1872 } General Account. Captain R.E.
District Engineer

Office
December 1872. District Engineer

Proceedings of the Madras Government, Public Works Department,
30th January 1873.

No. 613.

ORDER THEREON, 30th January 1873, No. 300.

ACCOUNT No. 61.

His Excellency the Governor in
Council approves of two of the smaller

8. 11. 1872

7c

Estimated Cost of 1296 Cubic feet of
hard Quarried Stone on the Concor Ghaut

Indent for the following articles required
from England for the use of the Neilgherry District-

articles	no now in hand	quantity wanted	value	how long required	for what purpose	admitted	Value	Remarks.
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Blakes Patent
Stone Breaker 3 . . . 1

For the use of the
Neilgherry District.

Obtained from
District-Engineer
7th December 1872. District-Engineer

Proceedings of the Madras Government, Public Works Department,
30th January 1873.

No. 613.

ORDER THEREON, 30th January 1873, No. 300.

ACCOUNT No. 61.

His Excellency the Governor in
Council approves of two of the smaller

2/11/72

72
Estimated Cost of 1296 Cubic feet of
hard Quarried Stone on the Corner Ghaut

48 Cubic yards @ 2 Rs per Cy d. — 96. 0. 0.
36 Coolies for Collecting the
Stone from the Quarry — 9. 0. 0.
1296 Cubic feet at 1 anna + 2 1/2 pie per } 97. 8. 0.
cft broken up by carting

Cost of 1296 cft. Rs 202. 8. 0.

Therefore 1 Cubic foot Costs 2 annas + 6 pie.

Sotacannad
Distt Engineer
7 December 1872.

J. H. Munn. Capt R.
District Engineer.

C.

The 6" by 18" Machine worked by a power
equal to 2 Horse Power runs out
1 1/2 Cubic yards per hour = 12 cybs per diem
= 32 1/4 Cubic feet.

-
- 12 Cubic yards blasted rock @ 2 pr cys — 24 o. o.
 - 6 Cookies to collect stones from Quarry — 1. 8. o.
 - 9 — Do — to break stones small enough to —
 - Enter Machine ————— 2. 4. o.
 - 11 — Do — to fill Machine ————— 1 o. o.
 - 2 — Do — to Clear away broken stone — 0. 8. o.
 - 14 pairs of Bullocks ————— 14. 0. o.

32 1/4 Cubic feet cost Rs 33. 4. 0.

Therefore,

1 Cubic foot cost 1 anna + 8 pie

Attest
District Eng'g Office } J. K. Morant,
7th December 1872 } Captain R.E.
District Engineer

22/10/72

No. 226.

Actacammund 152
District Engineer's Office
7th December 1872.

From The District Engineer
Nilgerry District
Actacammund

To The Secretary to Government
Fort St George
Madras.

Sir
With a view to obtaining a
harder description of broken Stone
for the main Communications of
this District I procured an illustrated
and descriptive Catalogue of Blakes
Patent Stone Breaker manufactured
by J. R. Marsden of Leeds.

2. The information it contains
leads me to submit an Indent on
England in triplicate for one of the
smaller of his machines.

3. They to be allowed to state
my reasons (which I trust you
will deem satisfactory) for soliciting
the favor of this Indent being at
once forwarded to England for
early compliance.

4. I find that the Stone which is

8. 6107/72

30 Jan 1873 No 18000

being broken for the Coroor Ghaut (for example) is of an inferior description. It is chiefly the outside semi decomposed part of the rocks, it crushes rather easily under the wheels and does not last long. Its only recommendation is that it can be procured very cheap (at 7 pie per cubic foot). I have ordered a harder stone to be broken but it costs a great deal more (which prevents its being more largely used) and it is not easy to induce the coolies to break it up at all much less to the required size. I find the cost of hard quarried stone on the Coroor Ghaut is 2 annas & 6 pie per cubic foot as per Estimate A. attached. The cost of the same stone broken by two of the Stone Breaker Machines is 1 anna 6 pie & 1 anna 8 pie respectively per cubic foot.

5 Thus the Machines will break up the stone 50 per cent cheaper. They will also break it up of uniform hardness and of a uniform size.

It is impossible to be sure of obtaining these two requisites entirely

when the stone is broken by hand. 172

6. I beg to submit an indent for a Machine which admits stone 6" by 18" in section, and of almost any length to be worked by Bullock power (it requires 2 Horse power to work it full) it will cost I anticipate delivered in this district some thing like 1500 Rupees.

7. Should this Machine answer it would be well to obtain others, particularly the larger Machine which breaks stone 20" by 9" to be worked by steam. This Machine with its Engine (6 Horse Power) and all complete would cost delivered in this district Rs 10,000. But it would break up a great deal more metal than the other that is 48 cubic yards per diem in the place of 12, and at a slightly cheaper rate.

8. All the Machines travel on wheels and so can be readily conveyed from one part of a road to another.

9. I have noticed several places on the new Coroor Ghaut where there is abundance of stone and also plenty of room for the Machine to work in, and for the broken stone to be collected upon.

226612

At 300-30" length 8.

[Handwritten signature]

Proceedings of the Machias Government
Read the following
From the Draft Infr.
Kutcherries ——— (W. E. No. 226 of 77th
Decr/92

His Excellency the Governor in Council approves of two of the smaller sized stone-breaking machines being indentured for - one to be used on the new Coonoor Chaut, the other for supply of Metal at Sotacamund and the adjacent roads. 2. ~~The~~ ~~attached~~ ~~machines~~ will be included in the General Indent to be submitted

submit to the Home
Government with the
Budget for 1873/74.

Amu

[illegible]

2
D. Bright Engine Works
" do Agency
" do J. W. Capron & Co
" do J. W. Capron & Co
" do J. W. Capron & Co

69 Jan 1/79

21c

Ck 6107

Govt. of 1873 Madras.

PUBLIC WORKS.

To the District Engineer

Sulphur

Dated

Recd.

Encl. 6

G. O. 30. 1873, No. 300.

No. 612 & 613

Stone breaking machines.

Approving of two
small sized stone break-
ing machines being
indented for use at
Vinnor & Calaca-
munda.