M.R.O. 1—10,006—28-2-50.

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MADRAS RECORD OFFICE

Government of Madras

Public works. DEPARTMENT

G.O. No.	1954	Press
~~B.P. No.~~		~~Mis.~~
445-46		
Dated	21-.7-1844	~~195~~ .

Not to be folded or roughly handled

2-15

Proceedings of the Madras Government, Public Works Department,
21st July 1874.

No. 445. Read the following letter from W. H. WELLS, Esq., Officiating Executive Engineer, Public Works Department, Hooghly and Howrah Districts, to the Assistant to the Chief Engineer, Public Works Department, Madras, dated Chinsurah, Bengal, 13th June 1874 :—

I BEG to enclose some particulars of a soorkee and lime crushing machine invented by me and in use in Bengal Public Works, and likely to be extensively employed. I think I should like to introduce the machine in the Madras Presidency, but as I am unacquainted with that Presidency, I shall be extremely obliged if you will favor me with information on the following points :—

1. If soorkee and kunker lime is extensively employed on masonry works, as in Bengal.
2. The present mode of manufacturing soorkee away from the neighbourhood of steam mills.
3. The name of any good ironwork firm with whom I might communicate in Madras regarding the introduction of the machine in that Presidency.
4. Where I can obtain any classified or distribution list of Public Works Officers in the Madras Presidency, to enable me to circulate particulars of the machine for their information.

2. I hope you will be good enough to give me what information you are able on the subject, as I do not know any one in my department in Madras with whom I can communicate on the subject.

PARTICULARS OF PATENT PORTABLE CRUSHING MACHINE.

THE machine consists of a cast iron crusher of peculiar shape (viz., circular at the bottom, but becoming more and more oval or eccentric in shape towards the top), working horizontally in a cast iron pan of the shape shown in the drawing.

1. The machine is worked like a pugmill, by yoking bullocks to a 15 feet pole fixed to the crusher spindle.

2. One or two bullocks, according to the hardness of the bricks or other substance to be crushed, work the machine, the soorkee or other material being crushed out through the holes, and slits in the pan and crusher which are made to suit the purpose that the machine is required for.

3. The whole iron in the machine will only weigh about 5 cwt., and with the timber necessary to make it complete for working only about 7 cwt., so that it can easily go on an ordinary country bullock cart, or can be placed on wheels of its own.

4. The machine is made in parts, so that any one portion can be renewed in case of accidents at a small cost. The machine is easily adaptable to steam, by making it larger and stronger, and it promises to be much cheaper and more efficient than the present steam mills.

5. The outturn of the small portable mill is about 50 cubic feet per day of six to eight hours with the following labor employed :—

SOORKEE.

2 Bullocks and driver.
2½ coolies for breaking bricks 1½ cube khoa, filling machine, changing soorkee baskets, etc.

GRINDING OVERBURNT KUNKER LIME TO POWDER.

Outturn about 60 cubic feet.

2 Bullocks and driver.
1½ coolies for filling, changing lime baskets, etc.

Other materials in proportion according to their hardness.

6. The advantages of the machine are—

1. Its portability.
2. Simple construction and mode of working.
3. Its saving in both time and cost compared with other means in use.

Arrangements have at present been made only with Messrs. Burn & Co., Calcutta, who are making the machines at a cost of Rupees 250 each, including royalty.

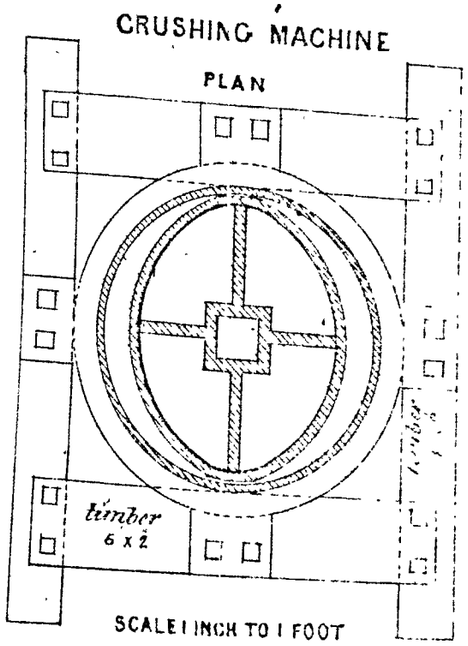
The patentee is prepared to enter into arrangements for the machines to be made at other iron works, where the distance from Calcutta adds too much to the cost of the machines.

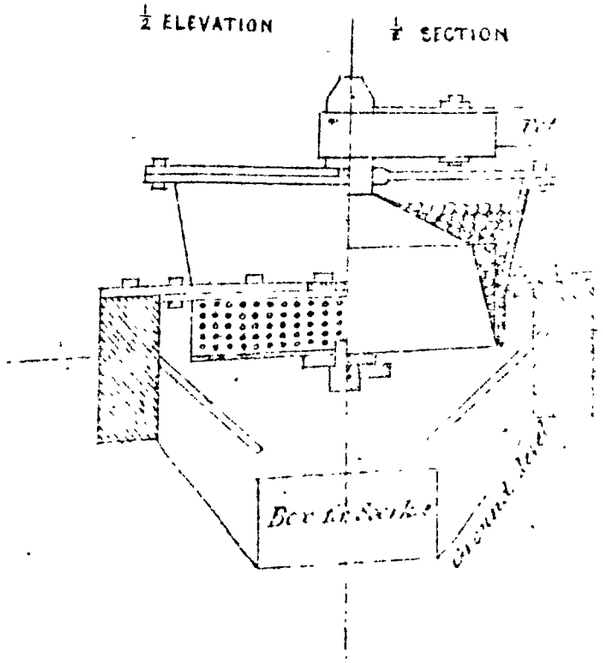
In ordering the machines it should be stated for what purpose they are required. The cost of the machines to be worked by steam will depend on the size required. Further particulars will be given if required.

CHINSURAH,
Bengal.

(Signed) W. H. WELLS, Patentee,
P. W. D.

The machine is also admirably adapted for convict labor in jails, five to six prisoners doing the work alluded to above when the machine is worked by bullocks.





No. 446. ORDER THEREON, 21st July 1874, No. 1,954.

IRRIGATION, No. 37.

Account.

MR. Well's letter and its accompaniment will be communicated to the several District Engineers, who can address that officer should the Soorkee Mill designed by him be required on works in their districts. Any further information they may require should be obtained directly from Mr. Wells.

2. Were working drawings furnished, the mills could be made up at the Public Works Workshops at Madras, and at Dowlaishweram in the Godavery District, and, with the exception of the cast iron work, in many other district workshops.

(True Extract.)

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

To Mr. W. H. Wells, Officiating Executive Engineer, Public Works Department, Hooghly and Howrah Districts.

To District Engineers.
To the Chief Engineer for Irrigation.
" Judicial Department.

Fxd. S. T. Austin.

Spare Copies

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5. The outturn of the small portable mill is about 50Cft. per day of 7 to 8 hours with the following labor employed.

SOORKEE.

2 Bullocks and driver
2½ coolies for breaking bricks 1½ cube khoa, filling machine, changing Soorkee baskets &c.

GRINDING OVERBURNT KUNKER LIME TO POWDER

Outurn about 60 Cft.
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Other materials in proportion according to their hardness.

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CHINSURAH
Bengal,

W. H. Wells, Patentee,
P. W. D.

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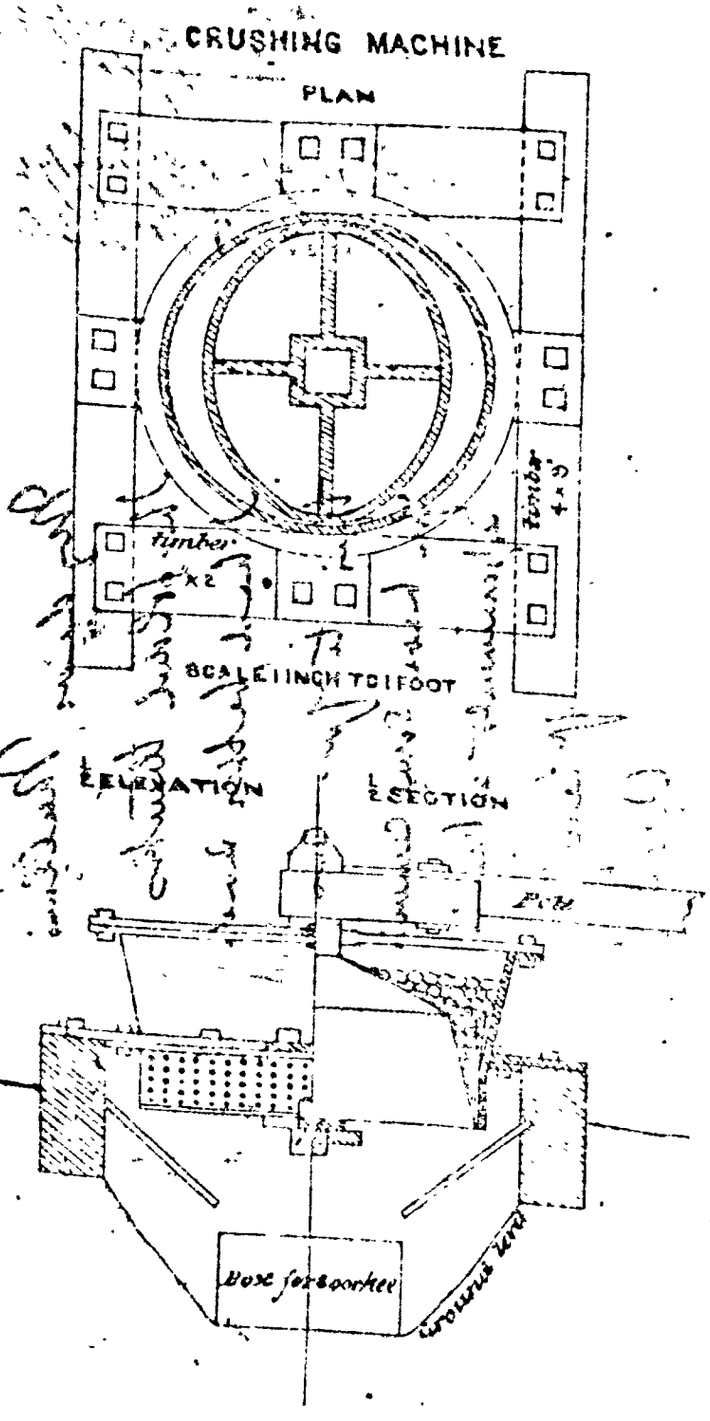

P. W. 3957/74

P.C. 21st July/74
L. S. No. 445.

Rec'd from Madras
Mr Ward transmits
I think letter and
this to you as
you have some remark
to offer upon it.
J. Lindsay
Dep. Sec.

To
The Assistant Chief Engineer
Madras.

Sir

I beg to enclose some particulars of a surface & tunnel crushing machine invented by me & in use on Bengal Public Works & which I have extensively employed I think I should like to introduce the machine in the Madras Presidency, but as I am unacquainted with that Presidency. I shall be obliged if you will favour me with information

Public Works Department

Proceedings of the Madras Government
1954 - Read the following

From Mr F H Wells Ft St Geo - 13 June 1874

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Chemmuk
Bengal
June 15 1874

Mr Wells
Mr Reid Engr
Mr Hall
Engr & Asstt
Executive

Madras Ft St Geo Jail Dep.

at Medras, and at
Dowlaishwaram in the
Godavery District, I
with the exception
of the castiron
work, in many other
District workshops.

[illegible] 20/6/74

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445-446.

Enc 23/6/74 Rec'd 26/6/74

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24

To

Lt. W. H. Wells. Offg
Ex. Engr. Pr. & Hooghly
& Howrah Districts

District Engineer,
Rangpur, B.C. & Balighatta Districts

The Chief Engr. for Irrign.

" Judicial Secretary

& Copies despd. 30/7/74.

3957

Bobt. of 1874 Madras.

PUBLIC WORKS.

Mr. W. H. Wells

Dated

Recd.

Encl.

Govt. Juni. Secretariat

G. O. 21 July 1874, No. 1564

Nos. 445-446

Cotton Mill

Letter from Mr. Wells, Executive Engr. Public Works Dept. Hooghly forwarding particulars of a patent portable Crushing Machine & requesting information relative to its introduction to the Madras Presidency and to several Protd. Indians with a view