

*Proceedings of the Madras Government, Revenue Department,
20th April 1871.*

No. 215. Read the following letter from the Conservator of Forests, to the Secretary to Government, Revenue Department, Fort Saint George, dated Ootacamund, 13th April 1871, No. 61:—

In forwarding the accompanying letter* and pamphlet from Lieutenant-Colonel Morgan, the forest officer in charge of the Bhowani Range, I have the honour to request that, if possible, 2 cwt. of Dynamite may be obtained from England for the blasting operations about to commence in the Cauvery river.

ENCLOSURE No. 1.

From Lieutenant-Colonel H. R. MORGAN, Deputy-Conservator of Forests, to the Conservator of Forests, dated Ootacamund, 10th April 1871, No. 535.

With reference to G. O., No. 721, dated 10th March 1871, I have the honour to inform you that I learn from Mr. Nordmann that the cut round the Narinjapett anicut is nearly finished; boats and rafts will be able to pass through in freshes.

2. To blast reefs and single boulders my establishment will be sufficient, only consulting the Engineer when advisable.

3. As a good deal of the blasting must be in shallow water, I have the honour to request you will apply to Government to obtain for me a supply of Dynamite with caps, cartridges, tubes, etc. I wrote for a private supply, but was informed that it being a preparation of Nitroglycerine could not be put on boardship without a Pass from the Secretary of State, though Dynamite is reckoned to be perfectly harmless.

4. Dynamite effects saving of more than 50 per cent. over gunpowder, especially where blasting in water is necessary.

5. Mr. Nobel's pamphlet, which accompanies this letter, explains the use of Dynamite. As we are likely to expend some 5,000 Rs. at least in blasting, I would strongly recommend that we should obtain for trial, say, 2 cwt., or some 250 Rs.

No. 216. ORDER THEREON, 20th April 1871, No. 709.

Forests, No. 9.

ORDERED accordingly that the necessary application be made to the Secretary of State.

(True Extract.)

(Signed) W. HUDLESTON,
Acting Chief Secretary.

To the Conservator of Forests.

Ed. F. R. Bantleman.

*13 Folio Suppl. Rev. Survey Dept 20
H. R. Morgan*

*Received 13/4/71
From H. R. Morgan
The Superintendent
Conservator
The Secretary to Govt
Ootacamund
Dated 10/4/71
Recd 13/4/71
No. 855
27.
Duly recd
Conservator accepting
the resignation of Mr
H. R. Morgan 23
and Superintendent
Conservator with reference
to G. O. No. 638 of the 15th
April 1871
Approved
H. R. Morgan*

Colonel Morgan

DYNAMITE:

OR,

NOBEL'S

PATENT SAFETY BLASTING POWDER.

LONDON:

PRINTED BY J. E. RICHARD, ST. MARTIN'S LANE.

1869.

3
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DYNAMITE,

OR

NOBEL'S

PATENT SAFETY BLASTING POWDER.

THIS powder is the most powerful blasting compound in general use, and yet surpasses all known explosives in point of safety.

A keg of Dynamite may be thrown from any height, or sustain any amount of shock, and if placed on a fire, or otherwise set light to, will burn harmlessly away without exploding. Owing to these properties it requires a special mode of ignition, and is only exploded by a strong percussion cap.

A few ounces of this powder, properly exploded, will shatter the heaviest blocks of wrought iron or steel, on which a tenfold quantity of gunpowder would have no effect whatever.

The properties of Dynamite.

1. When set fire to it burns without exploding, leaving considerable residue but no smoke.
2. Its explosion leaves no noxious gas, and no residue.
3. Dampness has no effect upon it.
4. It is somewhat poisonous.
5. A smart blow from a hammer, on a very thin layer of Dynamite, spread over an anvil, will explode that part only which is under the hammer. The heaviest weight falling from a height on a keg of Dynamite may break the keg to pieces, but will not explode the powder.

The chief advantages of Dynamite.

1. A great economy in labour for boring. Smaller bores, and fewer holes, being required than for gunpowder.

The grandest result is usually obtained in hard, and brittle rock, such as quartz, granite, &c. ; next in gray wack, whinstone, freestone, limestone, &c.

For under-ground work, such as driving drifts, or headings, the usual mode of operating with Dynamite is to drill a horizontal hole in the central part of the face of the rock, when the blast clears a cone. The diameter of the borehole should be at least 1½ inch, and its depth in hard rock about one-third the width of the tunnel, and in mild rock somewhat more.

In unusually tough rock only, this mode of central blasting cannot be so advantageously applied. In some instances it may be necessary to recharge the hole, in order to clear the cone, and in such case, sufficient time should be allowed for the powder chamber, which is very much heated by the first explosion, to cool.

To operate on the surrounding sides of the central blast requires no special instructions.

There can be no positive rules for blasting with Dynamite applicable to all cases, any more than with gunpowder. Something must always be left to the skill of the practical miner.

A fair trial never fails to prove a complete success. The first blasts are conclusive, as to the great superiority of Dynamite over gunpowder, but its full economical value, can only appear when the workmen have gained experience enough not to waste its power by overcharging, or attempting impossibilities.

WEBB & Co.

Sole Consignees from the Patentee and Manufacturer.

Carnarvon, April, 1869.

ORDERS TO BE ADDRESSED TO—

Messrs. WEBB & CO.

Carnarvon ;

OR THEIR AGENTS,

Mr. C. F. CUSEL,

49, Leadenhall Street,

London.

Mr. H. M. MORRISON,

3, Lombard Street,

Newcastle-upon-Tyne.

Capt. S. BENNETTS,

Caradon Consols Mine,

Liskeard, Cornwall.

Capt. WM. RICH,

Great North Downs Mines,

Scorrier, Cornwall.

Mr. T. E. MINSHALL,

Queen Street Chambers,

Wrexham.

Mr. EDMUND A. KNOWLES,

Gorton Lodge,

Richmond, Yorkshire.

S

PRICE CURRENT

OF

Dynamite:

OR

NOBEL'S

PATENT SAFETY BLASTING POWDER,

And the Articles desirable for its use.

	£.	s.	d.
Cash price free at Carnarvon, prepared in cartridges			
from $\frac{3}{4}$, to 2 inches, diameter per lb.	0	1	10
— or in quantities of not less than 5 cwt. per cwt.	10	0	0
Special Caps per box of 100	0	2	6
Gutta-percha Fuse per coil of 24 feet	0	1	0
Single Tape Fuse " "	0	0	6

TERMS: Nett Cash, or Thirty Days' Acceptance, payable in London.

Orders of 1 cwt. and upwards, delivered free, within 20 miles of Carnarvon.

WEBB & CO., Carnarvon,

Sole Consignees from the Patentee and Manufacturer.

April, 1869.

11.
No 1214/71
Enclosure.

In a letter No 61 of 13th
April 1871 from the Conservator
to the Secy to Govt. R.D.
mm

No 20th April 71/ Secy to Govt.
No 216

No. 61.

From

Office of Conservator of Forests,

Camp, Ootacamund,

13th April 1871.

To

Major R. H. Beddome
Conservator of Forests.

SIR,

W. Studdleston Esqre
Secretary to Government
R. D.

No 535 of the
10th instant -
(with one enclosure)

In forwarding the accompanying letter, and pamphlet, from
Lieutenant Colonel Morgan, the
Forest Officer in charge of the
Bhowani range, I have the honor
to request that if possible 2 Cwt. of
Dynamite may be obtained from
England for the blasting opera-
tions about to commence in the
Cauvery river.

I have the honor to be,

Sir,

Your Most Obedt. Servt.

Atkinson Major
Conservator of forests.

M.R.O. 1-77,006-8-6-37.

(1) Number of pages

10.

Not to be folded or roughly handled

I have the honor to be,
Sir,
Your most Obedt. Servt.

Per = 1871.72. Oct.
Forest Department.
From H-1214
To The Conservator of Forests.

Dated 13th April 1871.
Despatched 1st April 1871.
No. 61
Enclosure. No. 2.
Subject:

Submits a letter & pamphlet
from Col. Morgan & requests
if possible 2 Cwt. of Dynamite
may be obtained from England
for the blasting operations
in the Cauvery river.
N. 709. 20 April 71
Nitt order

M.R.O. 1-77,006-8-6-37.

(1) Number of pages 10.
(2) Date of repair 10-6-38.
(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 710 Press
Mis.

Dated 20.4.1871.

Not to be folded or roughly handled