

**ROCK BLASTING. A PRACTICAL
TREATISE ON THE MEANS
EMPLOYED IN BLASTING ROCKS
FOR INDUSTRIAL PURPOSES**

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Rock blasting. A practical treatise on the means employed in blasting rocks for industrial purposes by Geo. G. André

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GEO. G. ANDRÉ

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PRACTICAL TREATISE

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FOR INDUSTRIAL PURPOSES.

BY

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P R E F A C E .

DURING the past decade, numerous and great changes have taken place in the system followed and the methods adopted for blasting rocks in industrial operations. The introduction of the machine drill led naturally to these important changes. The system which was suitable to the operations carried on by hand was inefficient under the requirements of machine labour, and the methods which had been adopted as the most appropriate in the former case were found to be more or less unsuitable in the latter. Moreover, the conditions involved in machine boring are such as render necessary stronger explosive agents than the common gunpowder hitherto in use, and a more expeditious and effective means of firing them than that afforded by the ordinary fuse. These stronger agents have been found in the nitro-cotton and the nitro-glycerine compounds, and in the ordinary black powder improved in con-

stitution and fired by detonation; and this more expeditious and effective means of firing has been discovered in the convenient application of electricity. Hence it is that the changes mentioned have been brought about, and hence, also, has arisen a need for a work like the present, in which the subjects are treated of in detail under the new aspects due to the altered conditions.

GEO. G. ANDRÉ.

LONDON, 17, KING WILLIAM STREET, STRAND,
January 1st, 1878.

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