

# Explosive Celebrations:

## The Rock Cannon of Gwynedd

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# Explosive Celebrations

The first explosives known to mankind originated in China with mixtures of saltpetre and honey, which when heated exploded!

This crude mixture was refined over time and became the Gunpowder we know today, consisting of:

- Potassium Nitrate
- Charcoal
- Sulphur



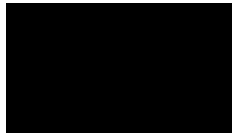
# Explosive Celebrations

We discovered that we could do more interesting things with explosives....

Mankind has used them to celebrate anything that is culturally appropriate.

With our ingenuity, we use whatever explosive materials are available.

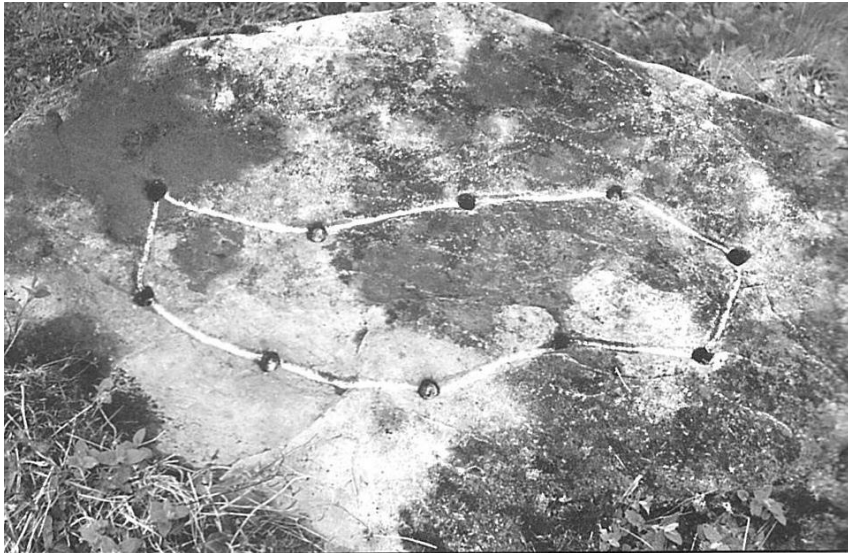
The miners of North Wales had access to Gunpowder, so regarding them using this material for celebrations, you could say ...



# The Rock Cannon of Gwynedd

What is a 'Rock Cannon'?

Holes bored into rock outcrops,  
Many with channels linking the holes:



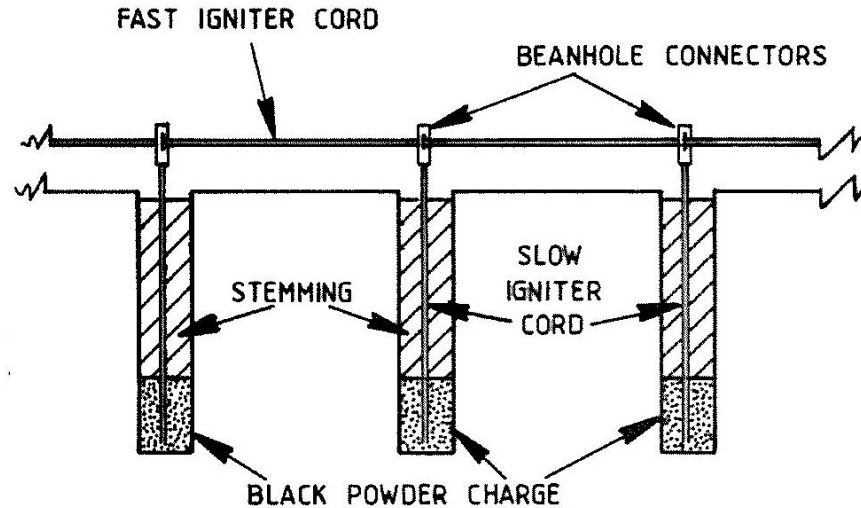
There are hundreds of Rock Cannon,  
Mostly in North Wales, near mines.



# The Rock Cannon of Gwynedd

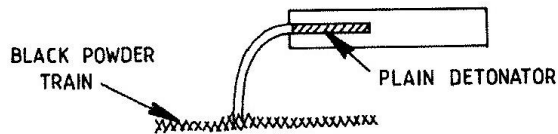
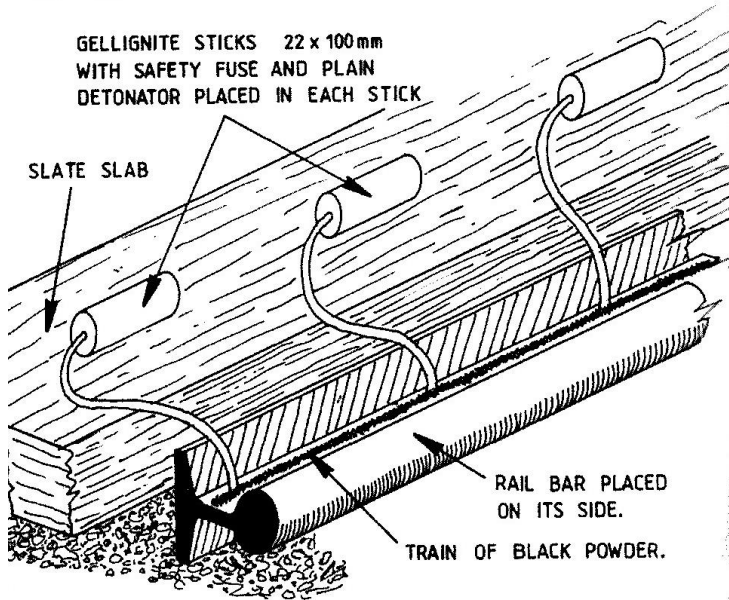
Rock Cannon are fired using Gunpowder and Fusing which evolved over time:

- Originally Goose Quill Fuse
- Then Safety Fuse
- And Finally Ignitor Cord



# The Rock Cannon of Gwynedd

As mining moved on from Gunpowder to Dynamite the tradition was kept alive:



# The Rock Cannon of Gwynedd

I had done a couple of well received videos with the YouTuber Tom Scott:



"High explosives" doesn't just mean "bigger boom"

2.1M views • 1 year ago



I didn't even realise that "low explosives" were a thing; let's talk about deflagration, detonation, and how high explosives can ...

CC



Why Hollywood explosions don't look like real explosions

4.1M views • 1 year ago



Explosions on film are made to look good: fireballs and flame. In reality, though, they're a bit disappointing. Here's how Hollywood ...

CC

He asked "Can you re-create a Rock Cannon?"



# The Rock Cannon of Gwynedd

A quick Google and consultation with Wikipedia:

WIKIPEDIA  
The Free Encyclopedia

Search Wikipedia

## Rock cannon

1 language

Article Talk

Read Edit View history

From Wikipedia, the free encyclopedia

A **rock cannon**, also known in *Welsh* as a **carreg kannan** (plural: **cerrig kannan**), **craig kannan**, or in the 19th century, **craig fagnel** (plural: **craig fagnelau**; Welsh: *magne/* - gun, cannon), is a rock or boulder which has been bored with holes which can be partly loaded with **black powder** (gunpowder) and ignited to make explosive sounds during traditional celebrations. They are largely found in the slate quarrying areas of *Gwynedd in North Wales* (235 sites found up to 2001). Each cannon has a number of holes which may range from 3 to 195 (at Y Parc, Sling, Tregarth).

The firing of rock cannon was a traditional part of social events and celebrations in north Wales from the late 18th century, accompanied by fireworks and bonfires. The cannon firing, as part of wider celebrations, often marked a national or local event, visits by royalty, or notable births and marriages.


On a national level, the marriage of *Albert Edward, Prince of Wales* to *Princess Alexandra of Denmark* in 1863 was widely celebrated, as was the Diamond Jubilee of *Queen Victoria* and subsequent coronations. It is recorded that the afore-mentioned marriage was celebrated at the 13 hole cannon at *Trefriw*, in Gwynedd, where local newspaper stated that "Rock and metal cannons were fired in such profusion that about 8cwt of gunpowder was consumed."<sup>[1]</sup>

The visit of the *Duchess of Kent* to *Blaenau Ffestiniog* saw a firing as late as 1951.


On a more local level cannon were fired to mark the laying of the first stone on the *Ffestiniog Railway* in 1832,<sup>[2]</sup> its opening in 1836,<sup>[3]</sup> and the opening of the *Moelwyn Tunnel* in 1842.<sup>[4]</sup>

In Gwynedd the *Penrhyn*, *Vaynol*, and *Tanybwch* quarrying estates had large numbers of cannon.

At *Betws-y-coed*, in Conwy the river-side cannon at Pont-y-pair comprises 3 separate cannons. The largest covers an area of 9.25 m x 3.22 m, and comprises 53 holes. Close to it lies a second cannon, comprising just 7 holes in a single train measuring 2.7 m long. A third cannon, comprising 24 holes, lies in an elevated position a little



Part of the 53-hole rock cannon at Betws-y-coed



And the answer was “Yes”.





# The Rock Cannon of Gwynedd

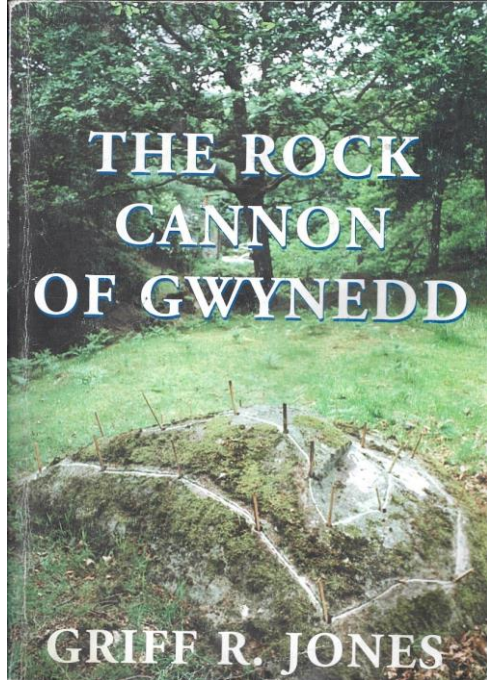
On the first day that Wales was 'open' post lockdown in 2021,  
I met Tom at Betws-y-coed to see a real Rock Cannon.

Spending the day taking measurements for my re-creation:



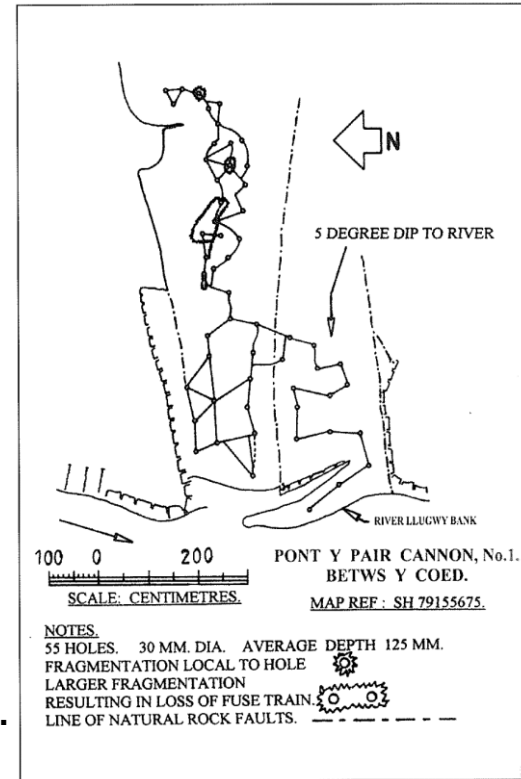
# The Rock Cannon of Gwynedd

Tom informed me that he'd tracked down a rare copy of a book all about these Rock Cannon:



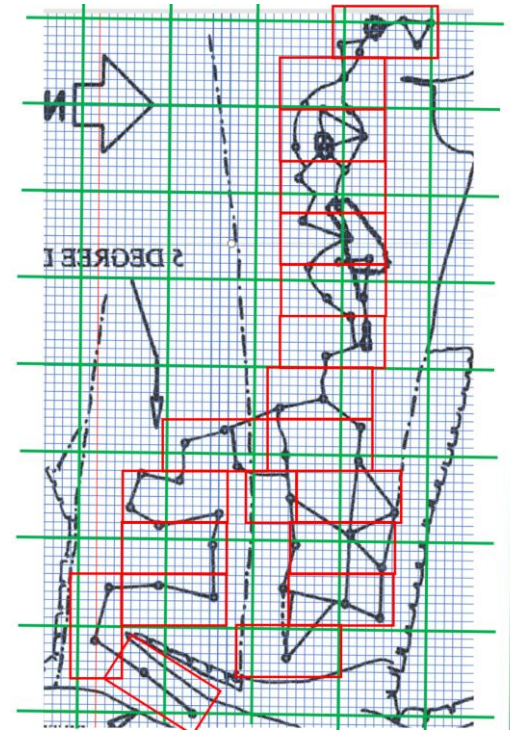
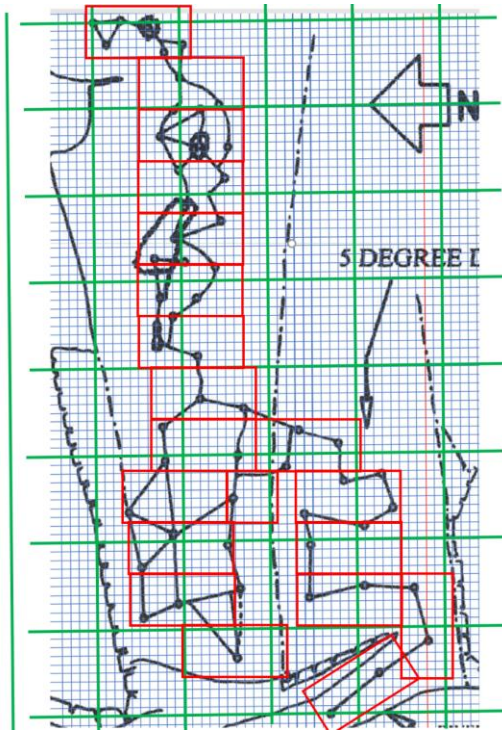
Which had a schematic of the Betws-y-coed cannon.

Rock Cannon:



# The Rock Cannon of Gwynedd

To re-create a Rock Cannon I needed to build a set of formers, which were created from the plans in the book:



# The Rock Cannon of Gwynedd

The pegs were waxed.

Pegs attached to the boards.

Concrete was poured.

Formers were placed.

And a new Rock Cannon was born.



# The Rock Cannon of Gwynedd

With the Rock Cannon re-created YouTube beckoned:



# Explosive Celebrations: The Rock Cannon of Gwynedd

## *Any Questions?*

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# *Live Action*

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# The Rock Cannon of Gwynedd

## References:

*Wikipedia* - [https://en.wikipedia.org/wiki/Rock\\_cannon](https://en.wikipedia.org/wiki/Rock_cannon)

*The Rock Cannon of Gwynedd*, Griff R. Jones, 2002, [ISBN 0-9533692-1-8](#)

*History forgot these old fireworks. We recreated them.*, Tom Scott, 2021, <https://youtu.be/J3F2odr2MsQ>

