## The Black Hole - A Possible Explanation

I have been thinking about Jim Hawkins' article on the 'Black Hole' in Newton's Pool in the June 2001 Touchpaper and have a possible explanation.

All process water from the nitroglycerine plant ended up in Newton's Pool for many years and, during the war, was in continuous operation. NG is slightly soluble in water and process water tends to be warm. When this enters the cold water of the pool it would separate out and fall to the bottom. Therefore, each Saturday morning a small charge (probably a loz guncotton primer made in the Factory) was detonated in the pool. This was performed for many weeks, months (? years) with no apparent result; the charge being set off in roughly the same place each time. Then, one Saturday, for some reason, it was dropped off in a different place and fired. There was a mighty roar and Newton's Pool spread itself over the landscape. The subsequent enquiry suggested that there could have been a depression in the bottom of the pool into which NG had been gravitating for some time and that this was now much deeper!

## **Better Guncotton ??**

During the war, chemists of all persuasions were drafted into the factory to operate as shift chemists. I was working at night in the guncotton laboratory when two examiners from the Patent Office were drafted in to run the Guncotton Factory. They provided some company during the long night shift and had an apparently inexhaustible supply of stories about curious inventions which were the subject of patent applications. One such concerned in invention of a sponge rubber cuff (left or right handed) for use while eating winkles! One night we were discussing guncotton and the fact that our product contained 13.2% Nitrogen. One of the pair had read that it was theoretically possible to nitrate up to 14.6% and he decided to try it! He reasoned that the best way was to take 'standard' guncotton and re-nitrate it. In vain did I try to tell him that it didn't work like that but he wouldn't listen. I was only a lowly lab, assistant and he was a CHEMIST! A supply of guncotton was arranged, a dipping pan filled and the experiment started. The resulting decomposition produced enough brown fumes to fill the dipping house and stop all work. The 'chemist' and I were in the laboratory when Ernie Monk (the principal foreman) arrived. I learned a lot of new swear words that morning.

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