

## The first three days in the history of surgical anaesthesia in England

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It is generally accepted that the first successful administration of ether anaesthesia in England was in London on 19 December 1846 when, at the direction of Dr Boott, Dr J. Robinson anaesthetized a Miss Lonsdale, who was Dr Boott's niece, and a molar tooth was extracted. Two days later Professor Liston performed an amputation and avulsion of the great toes under ether at University College Hospital.

Dr Boott received information about a new method of mitigating pain during surgery from his friend, Professor Bigelow of Boston. The letter dated 28 November 1846 was brought to Liverpool by the *Acadia*, one of the four wooden paddle steamers belonging to the Cunard Company, which sailed from New York on 1 December and reached Liverpool on 16 December 1846.

Many authors<sup>1–5</sup> have made extensive searches in an attempt to ascertain when Dr Boott received the letter from Dr Bigelow and when it was that Dr Boott communicated the news of the discovery of anaesthesia to Dr Robinson but, until the present time, the answers to these questions have remained unknown. The authors were, therefore, extremely interested to find an important reference to this problem in an article written by Dr Robinson in 1855 in the *American Journal of Dental Science (New Series)*.<sup>6</sup> The paper is entitled *Anaesthesia in Dental Surgery—Its history and introduction into Europe* and, so far as is known, no reference has been made to it in the various histories of anaesthesia.

The following is an extract from the article:

“While these investigations were proceeding at the Massachusetts Hospital at Boston, my esteemed friend, Dr F. Booth [*sic*] received a private communication from Dr Bigelow, dated Boston, November 28th, 1846, in which he informed him of ‘a new anodyne process lately introduced here, which promises to be one of the most important discoveries of the present age. . . . consisting of the inhalation of the vapor of ether to the point of intoxication, rendering the patient insensible to pain during surgical operations, and other causes of suffering.’

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The above extract from the private letter to Dr Booth with a newspaper report, constituted the whole of the intelligence on the effects of ether received in England on the 17th December, 1846. Dr Booth communicated this intelligence to myself and others on the 19th, at his house, and in the presence of his family, I etherized a young lady and extracted a molar tooth; this was the first operation, under the influence of ether, performed in England, which was subsequently reported to the medical journals; in a few days I introduced the agent at several of the metropolitan hospitals, and employed it for dental operations in my own practice.”

## Discussion

It would take 2 days for Dr Boott to prepare ether and an inhaler. Dr Robinson stated that the letter was ‘received in England on December 17th.’ This obviously means that Dr Boott received the letter on 17 December; it had actually arrived at Liverpool in the *Acadia* on the previous day.

Dr Boott having read Professor Bigelow’s letter and the extract from the article written by Dr H. J. Bigelow,<sup>7</sup> Professor Bigelow’s son, in the *Boston Medical and Surgical Journal*, which described many hundreds of teeth extractions, thought he should select dental surgery for the first trial, chose Miss Lonsdale, who was suffering toothache, for the patient and asked Dr Robinson, a dentist, to administer ether and perform the operation on 19 December.

### *The introduction of ether to Scotland*

It is very interesting that on the same day, 19 December, Dr William Scott used ether for surgical anaesthesia in Dumfries in Scotland.<sup>8</sup> He was informed of ether anaesthesia by his friend Dr William Fraser, who was the ship’s surgeon of the *Acadia*. Dr Fraser hurried to his home town of Dumfries to report the news of the recent discovery to Dr Scott as soon as he arrived in port. Fraser reached Dumfries on 17 or 18 December and Dr Scott stated that he carried out surgery under ether anaesthesia within 48 hr of receiving his report.<sup>9</sup> Dr Scott then wrote to Dr Buchanan of Glasgow and he and a dentist, also named Buchanan, carried out minor surgery under ether on Dr Buchanan’s son on 22 or 23 December.

## Summary

A recently discovered paper in the *American Journal of Dental Science* of 1855 throws new light on the chronology of the introduction of ether into England.

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