

HARVEY HILLIARD (1874-1956). C.B.E., M.R.C.S., L.R.C.P. (Eng.), M.D. (Zurich), D.P.H. (Eng.). - Pioneer of Anaesthesia.

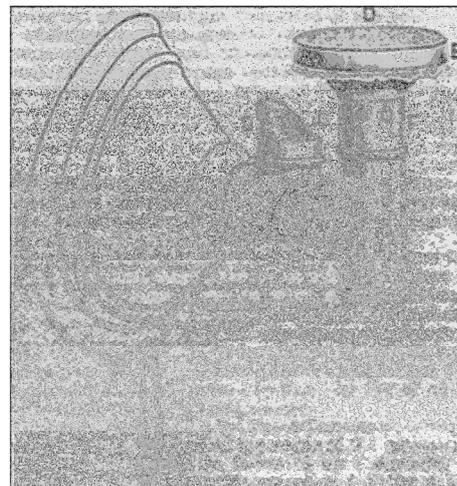
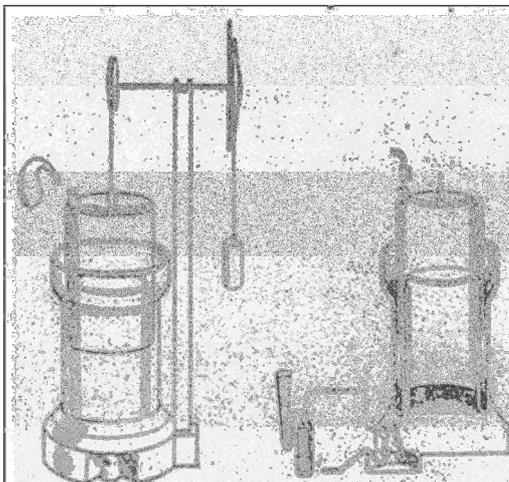
“Behold me waiting – waiting for the knife.

A little while, and at a leap I storm
The thick, sweet mystery of chloroform,
The drunken dark, the little death-in-life.”

W. E. Henley. *Hospital Verses*. (1849-1903)

Harvey Hilliard (1874-1956) [Epsom College 1888-1889] was the son of Dr Robert Harvey Hilliard, of Aylesbury, Buckinghamshire, brother of Robert Harvey Hilliard [Epsom College 1896-1902], and father of Dr Cedric Harvey Hilliard [Epsom College 1915-1918]. From Epsom College he went on to study medicine at Charing Cross Hospital where he won the Silver Medal in Physiology and other academic honours and was, for a time, assistant demonstrator in anatomy at the medical school. He qualified M.R.C.S., L.R.C.P. in 1896, took the D.P.H of the Royal Colleges in 1913, and the Zurich M.D. in 1922. In 1898 he went to Ceylon to help in the reorganisation of the Medical College of Colombo, holding the appointments of Principal Civil Medical Officer of Ceylon, Registrar and Lecturer in Hygiene and Anaesthetics at the Medical College, and Aural Surgeon to the Grenier Memorial Eye, Ear and Throat Hospital. After two years in Ceylon he returned to London and was appointed anaesthetist at the London Hospital, Royal Dental Hospital of London and Charing Cross Hospital. He continued to serve both the latter hospitals until 1929, when he was appointed Consultant Anaesthetist at the Royal Dental Hospital of London. He also held appointments at King George’s Military Hospital and the French Hospital.

It has been suggested that the first modern gas inhaler for anaesthesia was that constructed by James Watt, the renowned engineer, for Sir Humphrey Davy in 1799. This was a gasometer to which was attached an almost impermeable silken bag from which the patient inhaled nitrous oxide (‘laughing gas’). After this early experiment there followed almost a century of further trials and errors. That is ‘*trials*’ of new pieces of anaesthetic apparatus, and ‘*errors*’ of design and judgement in their use. Indeed, ‘*errors*’ in some cases that contributed to loss of life. During the 19th century the apparatus used almost invariably delivered the anaesthetic gas or liquid directly on or into a face mask through which the patient inhaled the agent. In no case was it possible to accurately deliver a calculated dose of the anaesthetic agent or, in many cases, to control the delivery. In April 1898, Harvey Hilliard introduced a method of passing a soft rubber tube through the nose into the nasopharynx, this tube being connected to the gas cylinder by rubber tubing. Interposed were two small rubber bags from which came a continuous and even flow of gas to the nasal tube. Distention



Humphrey Davy’s nitrous oxide gasometer (1799) Harvey Hilliard’s Open inhaler for anaesthesia (1906)

of the proximal bag attached to the nasal tube indicated the pressure of the gas. He was the first anaesthetist to suggest the use of nasal tubes, his plan consisting of introducing a catheter through the nostril so that its free end hung over the opening in the larynx. This apparatus was clearly the fore-runner of the more sophisticated anaesthetic apparatus in use today, and it seems clear that Harvey Hilliard was one of the more important pioneers of modern anaesthesia. In 1912, he published jointly with F. Coleman a book entitled *Anaesthetics in Dental Practice*, when nitrous oxide, ether and chloroform were the main anaesthetics in common use.

Hilliard quickly won recognition as a clinician and as a teacher was clear and concise, but perhaps a little dogmatic, but his generous attitude of give and take was very helpful to those who collaborated with him. He had a vast knowledge of many subjects and was sympathetic to the views and practices expressed by others, even if they did not accord with his own. In 1905, he wrote that he had used blue light, which he shone into the eyes of his patients, as an anaesthetic. He claimed that in 32 cases he had 20 'absolutely successful results,' and that his failures occurred only in patients who were highly nervous having been 'told by others that some new experiment was being tried, and that they did not carry out my instructions and keep their eyes fixed on the light.' In spite of his use of blue light he was not entirely convinced of its efficacy. In a letter to the *British Medical Journal* he recommended that a clinical trial be undertaken so that a definite judgement might be formed as to whether blue-light rays had any real power in producing true analgesia. Suffice it to say, blue light has never been widely accepted as an analgesic agent.

Harvey Hilliard was twice Chairman of the Westminster Division of the British Medical Association (1911-1912 and 1922-1923) and, in 1912, was elected Vice-President of the Metropolitan Counties Branch. He was a member of the Worshipful Company of Glass Sellers and of the Knights of the Round Table Club, and was one of the founders of the Empire hospital in Vincent's Square, Westminster. In 1922 he was appointed *C.B.E.* His son, Cedric Harvey Hilliard (born 1901) [Epsom College 1915-1918] received his medical training at Jesus College, Cambridge and St George's Hospital and held the appointment of Consultant Radiologist at the Lister Hospital, Hitchin.