

For Immediate Release

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CHRISTIE'S TO OFFER ENLIGHTENING EVIDENCE THAT SHAPED THE HISTORY OF INVENTION

Landmarks of Science

13 December 2006, Christie's King Street at 11am



London – Christie's is pleased to announce an auction dedicated to *Landmarks of Science and Technology* which will take place on 13 December 2006 at King Street. The sale is led by a groundbreaking rediscovery from the history of invention; the key piece of evidence that saw Thomas Alva Edison uphold the patent for the light bulb and be written in history as its inventor. Also on offer will be approximately 200 lots of books, manuscripts, instruments and artefacts, including Albert Einstein's first-ever Scientific essay as well as works by Galileo, Louis Pasteur, Sir Isaac Newton, Ivan Pavlov and Marie Curie. The sale is expected to realise in excess of £2 million.

The rediscovered collection of 22 light bulbs was used in the famous trial of 1890 which saw Edison defend his patent for the lightbulb, and includes a diode that pre-dates John Ambrose Fleming's patent by 21 years. The bulbs were documented at the time of the trial but are unrecorded since and were presumed lost until 2002, when they were discovered by chance in the attic of a private residence in America – still in their original wooden case and complete with the original key. The collection is to be offered as a single lot and is expected to realise £200,000-300,000.

The invention of the lightbulb is often credited to Thomas Alva Edison, who obtained U.S. Patent 223,898 on 27 January 1880. A number of incandescent devices pre-date those of the recognized inventor, including that of Sir Joseph Swan who received a British patent in 1878, and both Swan and Edison who went on to successfully market the device on either side of the Atlantic. Edison spent a large part of the following decade in court fighting over the legal right to the patent for this invention. The Edison Lamp Infringement Trial, which pitched the Edison Electric Light Company against the United States Electric Light Company, lasted many of these years and was eventually to be determined in 1890 by the evidence to be offered at Christie's in December.

In order to uphold a patent, it is necessary for a person 'schooled in the art' to make a working example of the invention according to its description. Frustrated by a lack of progress in the case, the opposition challenged a number of lamp makers to make a light bulb according to Edison's design and many, including Edison's own lamp makers, failed in their attempts. The opposition were preparing for victory when on 8 July 1890, John W. Howell, an engineer at the Edison Lamp Factory, was sworn in and began to give testimony at the trial. Pointing towards the wooden box which will be offered at Christie's in December, Howell declared triumphantly *'I hereby produce the*

lamps'. The court case was dismissed, and Edison's patent was upheld. Following the trial, two of America's most influential investors, J.P. Morgan and Henry Villard, oversaw the merger of Edison's holdings and the Thompson-Houston Company forming the industrial giant *General Electric*.

One of the most interesting bulbs to emerge from the wooden box is bulb number 20 which offers material proof that Edison unwittingly invented a working diode 21 years before John Ambrose Fleming. Known as The Edison Effect Lamp, it was used by the great inventor during his experiments of 1883 in which he attempted to attract soot deposits originating from the filament. The box of 22 bulbs also includes 7 tar-putty lamps made by Howell to Edison's design, two bulbs from the 1881 Paris Electrical Exhibition, one bulb and socket made by the British Electric Light Company, two bulbs, a socket and a glass stem made by Sir Joseph Swan and six bulbs and sockets made by Hiram Maxim.

A further highlight of the auction is Albert Einstein's first-ever Scientific essay, written when he was only sixteen years old and sent to his Uncle with a letter in which he apologised for his work being '*naïve and imperfect*'. The essay, titled *Über die Untersuchung des Aetherzustandes im magnetischen Felde*, explores the properties of ether in a magnetic field and is the earliest foreshadowing of Einstein's Special Theory of Relativity. The letter, which was sent with the essay to Einstein's Uncle Cäsar Koch, apologetically states that the essay is '*somewhat naïve and imperfect... as is to be expected from a young man such as myself*'. The essay and letter will be offered as one lot and are expected to realise £300,000-500,000.



Also included in the sale is a first edition copy of Charles Darwin's *On the Origin of Species by Means of Natural Selection*, offered in its original cloth cover and expected to realise £30,000-50,000, *A Key to Snyders*, an alchemical manuscript by Sir Isaac Newton (estimate: £25,000-35,000) and a first Latin edition copy of Galileo's exposition of Copernican theory which is expected to realise £8,000-12,000.

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Notes to editors:

- All items to be offered for sale at the *Landmarks of Science* auction will be on public view from 10 to 12 December at Christie's, 8 King Street, SW1Y 6QT

- The auction of *Scientific, Medical and Engineering Works of Art and Natural History* at South Kensington on 25 October 2006 will feature a superb selection of pocket globes, small sundials, telescopes and microscopes with estimates from £100. Highlights include an 18th-century Waywiser by Jonathon Sisson, who was mathematical instrument maker to royalty (estimate: £1,200-1,500) and a marvelous late 17th-century astronomical quadrant by Thomas Poole, Nottingham, 1689 (£12,000-15,000). Other slightly more gruesome highlights include two early 19th-century bone handled tooth keys, used for pulling teeth (estimates from £300) and an interesting chair invented by 18th-century doctor, Sir Astley Cooper (1768-1841) for straightening the backs of children with tuberculosis of the spine (estimate: £200-400).