George Poe's cure for death

One spring evening in 1908 three doctors stood before an expectant audience in the library of the Medical Society of the County of Kings in Brooklyn, New York. Before they began their demonstration, they needed one last thing. "Fetch a stray dog," they cried, tossing a quarter to an urchin outside. The boy returned with a yelping yellow mutt, which the doctors gently petted until it wagged its tail. Then they hog-tied and smothered it. The dog struggled for a few agonised minutes before giving a low moan and going limp. It was a scene worthy of Poe - not the great master of the macabre, Edgar Allan Poe, but his cousin George. For he had promised the audience a feat befitting his family name: this dog would be brought back from the dead.

GEORGE POE had little if any memory of cousin Edgar: he had been just 3 years old when his famous relative was found delirious and dying on the streets of Baltimore in 1849. He had, however, inherited the Poe fascination with science and intoxicants: after fighting in the civil war, George built the Poe Chemical Works in Trenton, New Jersey, where he designed America's first plant for mass-producing liquefied nitrous oxide. By 1883 Poe was supplying some 5000 dentists across the country with cylinders of laughing gas, including one suspiciously enthusiastic client in Cleveland who ordered 4000 gallons. But deep inside his chemical works, Poe was pondering a question worthy of old cousin Edgar: could the dead be restored to life?

The question was not a fanciful one. Poe himself had witnessed a relative who had been declared dead suddenly come gasping back to life. With a vast laboratory and a gas production line at his disposal, Poe began experimenting with tubing and cylinders of oxygen to see if he could restore breathing.

First, naturally, he needed some dead to revive. Poe suddenly took an unusually keen interest in the local rabbits. He would chloroform them to the point of death and then insert flexible tubes into their nostrils or down their throats: one tube supplied oxygen to the lungs from a carefully regulated tank, while another sucked air out. Inhalation and exhalation from the animals' limp forms was driven by a handle or a treadle working two brass pistons. With some tinkering, Poe fashioned an apparatus that worked; perhaps a little too well for one particularly unlucky rabbit that was suffocated and revived 11 times during its career at Poe's Chemical Works.

If it worked on a rabbit, would it also work on something bigger - say, man's best friend? Or, indeed, on a man?

Artificial respiration had itself needed reviving many times over the centuries. Italian peasants employed mouth-to-mouth resuscitation on newborn babies as early as the 1400s, and in 1555 anatomist Andreas Vesalius described how he revived animals with bellows via a tracheotomy. The following century in Britain, Robert Hooke performed similar experiments on dogs. Yet it was not until the 18th century that mouth-to-mouth and respirator devices gained currency. Acceptance had perhaps been slowed by fears that successful revivals might too easily lead to accusations of witchcraft.

The usefulness of such methods could scarcely be denied, however. In 1744, Scottish physician William Tossach wrote a case study describing how he had revived an asphyxiated coal miner called James Blair. By 1767 a Dutch society for reviving drowning victims had formed in Amsterdam. Then, in 1774, London followed suit with the Society for the Recovery of Persons Apparently Drowned, later known as the Royal Humane Society. In the early days, the RHS concentrated on establishing riverside emergency stations equipped with respiration kits. A typical kit in 1782 included a half-litre bellows and elastic tubing, as well as a thin leather tube for funnelling or blowing restorative medicines directly into the stomach. The society records that in its first 20 years its efforts saved 1835 lives.
Opinion remained divided as to the merits of mouth-to-mouth versus artificial respirators. By the 1830s bellows had fallen out of favour because of concerns about overinflating the lungs, although as early as 1838 there had appeared a crude "pneumatic cuirass" that surrounded the thorax with subatmospheric pressure to induce the chest itself to expand like a bellows - a prototype of the iron lung. In time both mouth-to-mouth and machines would prove their worth, though in the US full acceptance of mouth-to-mouth did not come until 1958. Some devices were abandoned, though: one rather alarming tool distributed by the RHS for stimulating victims was a rectal fumigator, a bellows that blew tobacco smoke up the anus.

Poe's contraption was gentle by comparison. In 1889, he went on a nationwide tour to show off his invention, amazing audiences by gassing rats and rabbits then reviving them and sending them scurrying off the stage. His device, he stressed, wasn't just good for reviving victims of drowning. In the era of the gas lamp there were all too many deaths from gassing - both accidental and deliberate. "The principal use of the machine," Poe explained, would be "in hotels where the gas is blown out, and in lodging houses".

His tour propelled the contraption into the headlines: "It Brings the Dead to Life" was typical. Still others envisioned less mortal uses. "A man in a drunken stupor," The Technical World Magazine reported rather hopefully, "may be quickly sobered by using the machine to quicken his respiration."

Then, just as mysteriously as he had appeared, Poe suddenly disappeared. "What has become of Poe’s great invention?" demanded the Decatur Daily Review, and others across the country took up the call. Poe issued no reply.

Instead, he returned to his old home state of Virginia, buying a house in South Norfolk and, locals whispered, continuing his experiments there. Townsfolk ascribed almost supernatural powers to him. One heartbreaking letter from an 8-year-old girl was typical: "Dear Professor Poe, My three-year-old brother died six months ago, and my mamma has been so sad ever since and cries for him. If we sent our little brother to you, do you think you could make him alive again? Mamma has $1.50 we made by picking berries and washing and you can have it."

"Townsfolk ascribed almost supernatural powers to Poe"

If anyone now needed reviving, though, it was Poe himself. By the turn of the century, illness had left him nearly blind and partially paralysed. Despite this he had one last mighty effort left in him: after almost two decades of silence he made a surprise announcement in 1907 that he would begin demonstrating his invention once again.
So it was that a hush fell over the crowd of Brooklynnites in their medical society's library. Doctors inserted the tubes into the stray dog's windpipe and pumped the respirator handle. The dog's chest rose and fell. Minutes passed. A leg twitched, then another, and then the dog began to kick. Ten minutes after "dying", reported *The New York Times*, the dog staggered to its feet.

Such demonstrations were so convincing that one Harriet Martin of Chicago publicly offered to be Poe's first human guinea pig. Poe politely declined. "Poe says he is grateful for the offer," reported one newspaper, "but to utilize the woman he would have to kill her and he is afraid to take the chance."

Even so, there was no lack of places where such chances might be taken. "Lifesaving stations and ambulances will eventually be equipped," Poe announced, "and I feel confident that the legislature of every state will compel every hotel to have one, the same as they require fire escapes now."

Just as Poe was regaining his fame, however, it slipped away once more. His health worsened, while other inventors developed their own artificial respirators, an endeavour that gained urgency with the onset of the first world war and the horrors of gas attacks. When Poe died in 1914, obituaries mentioned how once there had even been talk of a Nobel prize. But with that he vanished from the public's memory: scarcely another word has been written about him.

His invention was not entirely a failure, though. Among the local news from Norfolk in March 1909, when Poe had retired to his sickbed, is word of "the thrilling experience of Moses Goodman". Found nearly lifeless in his gas-filled home, Goodman was rushed to the local hospital. His case appeared hopeless until the supervising physician recalled that an old prototype Poe respirator had been left in the building. It still hadn't been tried on humans, but there was little left to lose. The discarded arrangement of tubes was attached and the old pumps engaged. To everyone's astonishment, the patient revived.

And so to Moses Goodman, perhaps, belongs this unique distinction: a Poe story with a happy ending.

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