

John Davis & Son Dwarf Deputy Marsaut Safety Lamp

by Dave Johnson

John Davis, and later John Davis & Son, were prolific manufacturers of miners' flame safety lamps, anemometers, other mining instruments and other mining items. Davis Derby manufactured many products which had been invented by prominent mining engineers and other inventors of the time, such as Biram's anemometers, John Hedley's Miner's dial and Hoffmans patented tripod head from the USA. The Company also had a close relationship with Mr A. H. Stokes, His Majesty's Inspector of Mines, and patented a miners lamp shut off device originally invented by Mr. Stokes. In 1890 Davis took on the UK agency for coal cutters manufactured by the Jeffrey Company of Columbus, Ohio.

John Davis died in 1873 at the age of 63, his brother Edward, his elder son Frederick and his second son Alfred were appointed executors to run the business. Frederick and Alfred were both trained as civil engineers and Edward was very much involved in running his own business in Leeds, consequently Henry Davis was soon appointed by his brothers to run the business. When Henry took over the business the workshop was fitted out with four large lathes and four small lathes, fourteen pairs of vices, a new vice bench and eight sets of working men's tools, suggesting that eight instrument makers were employed.

Under the leadership of Henry Davis the business continued to expand, moving to new premises in November 1875 at All Saints Works Amen Alley in Derby close to the Cathedral. The earliest surviving Davis Derby catalogue is dated in 1877 and shows that products included turret clocks, surveying instruments, a wide range of miners lamps, anemometers, electric bells for both mining and domestic use, pressure gauges, opera glasses, spectacles, medical devices and weather vanes. This catalogue also shows that the firm was actively involved in the generation of electricity for lighting.

It is interesting to note that in February 1893 the Federated Institution of Mining Engineers visited Davis Derby and reported the visit as 'An Hour At All Saints Works'. This report describes a pioneer installation for the generation and supply of electrical power for supplying neighboring hotels, shops and offices. At the time of the visit the company was reportedly capable of manufacturing 500 miners' lamps each week, and these were dispatched all round the world. It is worthy of mention that in 1886 the final report of the Royal Commission On Accidents in Mines was presented and under the heading 'Safety Lamps' three out of four of the lamps selected as the safest were made by Davis Derby. These were the Bonnetted Clanny, the Marsaut and the Bonnetted Muesler.

An interesting safety lamp produced by Davis, in what must have been very limited numbers judging by the few specimens still in existence, is the Dwarf Deputy Marsaut lamp. At 7 $\frac{3}{4}$ " tall, this lamp is just $\frac{3}{4}$ " taller than its more commonly seen competitors, the William Maurice Sheffield Baby Wolf from England and the Baby Wolf from the U.S. (see photos on following pages).



Davis dwarf next to a standard sized lamp.





Above and below: name stampings.



Spring-loaded column and air regulator ring.



Burner assembly

This lamp has a lead rivet hasp locking mechanism and a removable Marsaut bonnet secured in place by an extra spring-loaded pillar. What makes this lamp unique is its spring-loaded air intake regulator. This mechanism consists of a flat brass ring with holes under the bonnet. The air intake is through these holes which remain open until the ring is turned slightly, blocking the lower air intake. A faint click when turned indicates that the air intake is closed. It is opened again by pulling down on the spring-loaded pillar, the spring on the ring returning it to the open position. This is the first example of this lamp that I have seen and had the opportunity to purchase.



Left to right: William Maurice Sheffield Baby Wolf, Davis Dwarf, U.S. Baby Wolf.