Presentation of the Work of William Maurice

by Werner Horning

As a collector of miners' lamps I think it is very important to remember the great inventors of the past, and their inventive skills.In this article I want to introduce Mr. William Maurice and his work with electrical mine lighting.

Originally intending to become a chemist and metallurgist, Maurice gave up that line of study, and in 1890 he became an electrical engineering student with the firm of John Davis & Son (Derby) Ltd. He was an active participant in the installation of some of the earliest mining electrical plants in the country, and it was here that he got his first practical knowledge of lamp making.

In 1892 - 1893 he was in South Africa on behalf of the same firm. In 1894 he became an electrical engineer at Swanwick Collieries, Alfreton, and eventually became assistant manager under Mr. J.W. Eardly. He went on to qualify as colliery manager

In 1899 he was appointed Manager of the Babbington Coal Co.'s Tibshelf New Colliery, and in 1903 he became a General Mine Manager of Hucknall Collieries, near Nottingham.

In 1905 he installed the first exhaust steam' 'turbo-alternator 'in British Mines' and' in 1908 he added a booster motor generator with equalizing battery. Also Maurice was the first to develop the thin seams of the Leen Valley, and the first to use coalcutters in that area.

In 1909 he organized and founded the Association of Mining Electrical Engineers.

In 1911 he left Hucknall Torkard and entered into an agreement with the firm Friemann &

Wolf, of Saxony, for the purpose to re-establish the Wolf Safety Lamp Company, of Leeds, in Sheffield.

On July 1, 1916, Maurice purchased the entire English business and since then the Wolf Safety Co. (Wm. Maurice) Ltd. has been an exclusive property of the Maurice family.

In 1920, and the decade that followed, Maurice was also associated with the Concordia Co. (C.E.A.G.), of Dortmund.

During the years 1912-13 he developed the first "alkaline lamp". The first large installations of these lamps went to Grassvmoor Colliery in May, 1914. They were already of brighter than any other lamps available.

From there on with the Wolf Alkaline Lamp many important improvements were made. There are few established improvements in electric mine lamp design which were not introduced first into British mines by Maurice.

The Wolf lamp was:

- the first alkaline lamp to be made on two-part principle

- the first to use insulated cover-plates

- the first to use moulded-in contacts

- the first to use level indicating valve stoppers

- the first to use removeable number plates

- the first to use gas-filled bulbs

- the first to use filament bulbs for giving even light distribution

- the first to use prismatic ball glasses for intensifying all round horizontal il lumination

- the first to develop the cut-away top giving better roof lighting.

Wolf Alkaline Lamps with safety devices for protection against gas ignition in case of breakages of glass or bulb have been available since 1924. The first two-part high c.p. cap lamp was in use since early 1925. The first 4 c.p. alkaline lamp was produced by Maurice 1926. The first 4 volt (lead-acid) miners' hand lamp of modern design was approved in 1928. The first alkaline lamp with Edison tubular positives and concentric terminals was approved in 1930.

In 1932 Maurice formed a separate Company (The Wolf Safety Lamp (Leasing) Co. Ltd.) with extensive financial resources for the development of lamp leasing on the largest scale. It may have been one of the first leasing companies.

In 1933 Maurice purchased the large premises known as Saxon Road Works, Heeley, Sheffield, which he had reconstructed and equipped with entirely new electrically operated machinery for the more economical production of Wolf lamps and Wolf batteries.

The last information of Maurice I have is from 1938. It is a publication for the Association of Mining Electrical Engineers. It is a pity I can't give more information of this great inventor and tireless man who published a lot in this field.

Is there anybody who can help with further information?