Industry in Enfield - A Brief History

The classic industrial revolution, as featured in school textbooks, largely bypassed the London area, being mainly confined to the Midlands, South Wales and the North-East. The traditional heavy industries were sited close to the reserves of coal and iron ore.

Apart from Ponders End Mill (an almost unique survival from Enfield's rural past) little survives from the early industries. Tanning, using oak bark from the local coppice woods, was once very important, but was virtually extinct by the late 18th century. Brickmaking, using local clay and brick earth, lasted rather longer. Enfield's last brickfield (in Hoe Lane) survived into the late nineteen-seventies. The earliest factories in Enfield were set up in the early 19th century. Grout and Baylis' crape mill at Ponders End was established in 1809, followed by the Royal Small Arms Factory at Enfield Lock in 1815. Both factories were significantly sited close to the Lee Navigation. Gas works were opened at Angel Road, Edmonton in 1847 and at Ponders End in 1859. Other factories set up at this time included a jute mill at Ponders End and linoleum factories at Ponders End and Angel Road, Edmonton.

Enfield's own industrial revolution took place in the late 19th and early 20th centuries with the rise of the electrical industry. Ediswan took over the former jute mill at Ponders End in 1886 and adapted it for the manufacture of electric light bulbs and later radio valves. Belling started making electric fires in Enfield in 1912. A former Belling employee, Mr C L Arnold subsequently set up the Edmonton switchgear firm, M.K.Electric.

These companies were all dependent upon the availability of domestic electricity supplies. Brimsdown Power Station was opened in 1903 by the North Metropolitan Electric Power Supply Company. It was built primarily to supply power for electric tramways, but the Company soon began to sell surplus electricity for domestic use. Electricity was first supplied to the Enfield Town area in 1907, being rapidly extended to other districts. The first electric street lighting installation in the Enfield area (at Green Lanes, Winchmore Hill) was completed in 1913.

The industries of Enfield have stood up reasonably well to recession in the nineteen-thirties and again in the nineteen-eighties. Despite recent economic difficulties, Enfield continues to play a major role in electrical manufacturing and precision engineering.

**Individual Firms**
All the companies mentioned have either been in Enfield for a long time or have played a significant part in the industrial development of the area.

**Belling & Co Charles**
Reginald Belling was born at Bodmin, Cornwall in 1884. He served an apprenticeship in electrical engineering with Crompton & Co of Chelmsford. He subsequently joined the staff of Ediswan at Ponders End. In 1912 he started his own business in Lancaster Road, Enfield,
manufacturing electric heaters. In 1913 he acquired additional factory space at Derby Road, Edmonton. The range of products widened to include electric water heaters (1913) electric cookers (1919) and immersion heaters (1920). A new purpose-built factory was opened in Southbury Road in 1924. The premises have since been progressively enlarged. A second factory was opened at Burnley, Lancashire in 1956. Mr Belling died in 1965.

Belling-Lee Ltd
In 1922 C R Belling (see above) formed a partnership with Edgar M Lee to manufacture mains powered radio sets. (BBC radio broadcasting started in 1922). Maintenance problems caused the firm to temporarily abandon mains powered radio sets in 1924, production being switched to crystal sets. The original factory was at Queensway, Ponders End, moving to new premises on the Great Cambridge Road in 1932. The product range was widened to include fuses and fuse holders (1929) electrical gramophone pick-ups (1933) and radio aerials (1935). During World War II much of the production was switched to radar components and V.H.F. aerials for use on aircraft. The post war years saw a huge demand for television components. In 1961 an office block was built, followed by a big extension to the factory in 1964. Following the death of Mr Belling, the company became part of the Phillips group in 1966. Mr Lee died in 1972.

Ediswan
The electric filament lamp was invented simultaneously by Thomas Alva Edison in the USA and Joseph Swan in England. In 1881 Swan set up the Swan Electric Lamp Co in Newcastle. In 1883 Swan joined forces with Edison to form the Edison Swan United Electric Light Co. A factory was set up at Benwell, Newcastle. In 1886 the company took over the former jute mill at Duck Lees Lane, Ponders End and converted it for the manufacture of electric light bulbs. The light bulbs were originally made with carbon filaments. In 1907 the company pioneered the use of tungsten filaments. The bulbs were originally made of plain glass which resulted in a rather harsh light. To combat this problem the company introduced the opal lamp in 1921, followed by the pearl lamp in 1927.
Research carried out at the factory by Dr Ambrose Fleming in the eighteen-nineties led to the invention of the thermionic valve which was to be a vital component of early radio, television, radar and computers. Radio valves were manufactured in small quantities from 1906 and were mass produced from 1916. The search for a suitable material for making carbon filaments led to the discovery of artificial silk (rayon). The company became part of Associated Electrical Industries in 1928. The company became part of Thorn - AEI Valves and Tubes Ltd in 1961. The Ponders End factory was closed in 1969 and sold for demolition in 1970.

Grout and Baylis
A factory was built in 1809 at the junction of South Street and Scotland Green Road for the dyeing and finishing of black crape. The extravagant mourning customs of the time, combined with high death rates, ensured a big demand for black crape. By 1858 the factory was employing approximately 200 people. As with most textile mills, the workforce was predominantly female, the few men employed there working mainly in a managerial/supervisory capacity. The latter part of the century saw a decline in demand for
black crape. The factory closed in 1894. The buildings were subsequently acquired by United Flexible Metal Tubing (see below).

**Royal Small Arms Factory**

In 1804 a government-owned factory for making musket barrels was set up at Lewisham. In 1812 land was acquired at Enfield Lock for an enlarged factory. (The new site had the advantages of water power available to drive machinery and the Lee Navigation for the transportation of raw materials and the finished weapons). The new factory was completed too late to affect the outcome of the Napoleonic War. In 1816 the barrel branch moved from Lewisham to Enfield. By 1818 the reduction in demand for small arms meant that there were just thirty men employed at the Enfield factory. Later in 1818 the lock and finishing branches were transferred to Enfield, enabling the Lewisham site to be dispensed with. A sword making branch was set up in 1823. The factory narrowly fought off a threat of closure in 1831. The Crimean War of 1854/5 resulted in a big increase in demand for both small arms and ammunition. In 1857 the factory was completely reorganised on mass production lines. The factory continued in operation, with periods of great activity during the Boer War and the two World Wars. In 1987 the Royal Ordnance Factories (including Enfield Lock) were sold to British Aerospace. The Enfield Lock plant was closed almost immediately and small arms manufacture was moved to Nottingham.

**Tottenham & District Gas Co**

In 1845 Alexander Angus Croll acquired a concession from the Imperial Gas Light and Coke Co to supply coal gas to the parishes of Tottenham and Edmonton. He took over a small gasworks which had already been set up to the south of Angel Road. He formed the Tottenham and District Gas Co in 1847. Gas was in increasing demand for street lighting, domestic lighting and later for cooking. By 1861 gas mains had been laid as far away as Wood Green. The gasworks was reconstructed 1902/5. The company then began to expand. In 1913 the Enfield Gas Co was taken over, with its gasworks at Ponders End. The company took over the Waltham and Cheshunt Gas Co (1928), the Hertford Gas Co (1932), the Hoddesdon and Ware Gas Co (1932), the Hitchin Gas Co (1933), the Stevenage Gas Co (1933) and the Southgate Gas Co (1938). (the last mentioned company had a large gas works at New Southgate). The Tottenham and District Gas Co was nationalised together with the rest of the gas industry in 1949. The local gasworks ceased production in 1972 with the introduction of natural gas from the North Sea.

**United Flexible Metal Tubing Ltd**

The invention of flexible metal tubing took place in Paris in 1885. The inventor was Eugene Levasseur, a jeweller with long experience in making coiled gold necklaces. The UK rights to the invention were acquired in 1890 by Frederick Walton, the inventor of linoleum. He took over the former Grout and Baylis crape mill (see above) after its closure in 1894. Business grew rapidly as new uses were found for flexible metal tubing. Railways used it for brake and steam heating hoses. Another use was for the protection of electricity cables. The factory at Ponders End was damaged by a land mine in 1941 and was damaged again by a V1 in 1944. Additional factories were established at Finsbury Park and at Long Eaton, Derbyshire. The company became part of the T.I.Group in 1969. The Ponders End plant now trades under the name of T.I.Flexible Tubes Ltd.
The Ponders End Flour Mill is the oldest working industrial building in Enfield. The present buildings date from the late 18th century but there has been a mill on the site since at least the late 16th century and possibly since Domesday. George Reynolds Wright was born at Hitchin in 1842. At the age of twenty-five he came to work at the Ponders End Mill, eventually forming a partnership with the then miller, James Dilly Young. On Young's death in 1870, Wright assumed full control. In 1913 construction work on the George V Reservoir cut off the water supply which powered the millstones. The machinery was converted to electric power. The mill was re-modelled in 1950. There have since been further improvements. The business remains in the hands of the Wright family.