## Patent No.: 6666

In 1894, Rivers Mill became the Lister Electric Light and Power Manufacturing Company which was formed by the sons of William Lister

On 23rd January 1907, Mr. H. St. Hill Mawdsley came to Dursley and on that day took over the Rivers Mill and formed the company

Mr Mawdsley's 1902 Patent (No.6666) was a method of using one coil to take the place of 2 coils in a 2 pole DC motor. In a normal machine, a 2 pole motor would have 2 shunt coils, one wound round each pole to give the necessary North and South poles. In the patent, the coil was bent at 90° to lie in front (DE) of the North pole, the two coil sides passed between the poles of the motor and then bent at 90° to be in front of the South pole at the C.E. This gives the same magnetic effect as two coils.

The disadvantages are that there is quite a bit of leakage and had there been interpoles (as have more modern machines), the coil would have tended to interfere (magnetically) with the interpoles commutating ability. However, in 1902 when interpoles were not often used and when magnetic materials were not highly saturated, it would have been a simple method of producing 2 poles.

Courtesy – Mawdsley's Ltd, 2002