The “Glasgow” Gyro Drill

By Neil Searle

The ‘Glasgow’ is an uncommon type of reciprocating drill that uses a spring-loaded pull chain for the turning motion. The chain is pulled by an elegant rosewood handle and when allowed to recoil, the chain is picked up on a rosewood spindle. This one is labeled ‘The Glasgow’ with a British patent date and is made of sheet metal with a lid on the breastplate for bit storage. The manufacturer is McG.S. Ltd and sold under the name Gyro which is also stamped on the drill. There is an earlier company with the same name, McG.S. Ltd. registered 10 years prior, namely, McGregor Golf & Sports Ltd., which was a prominent manufacturer of golf equipment and sporting goods, originally founded in Liverpool, England, in 1897. There is no connection between the two companies based on historical information.

Fig.1.

On the frame of the drill is ‘Mc G.S. Ltd’ this stands for Alexander McGregor and his wife’s maiden name, Smith. Alexander traded as ‘The Glasgow Tool and Bit Company’ somewhere in the East end of Glasgow. With little financial backing not many were sold and the enterprise simply couldn’t get off the ground. Alex and Louisa lived in Osborn Street, later in Jail Square (now named Jocelyn Square). Alex died in 1929.

Fig. 2. Opposite side of my drill.

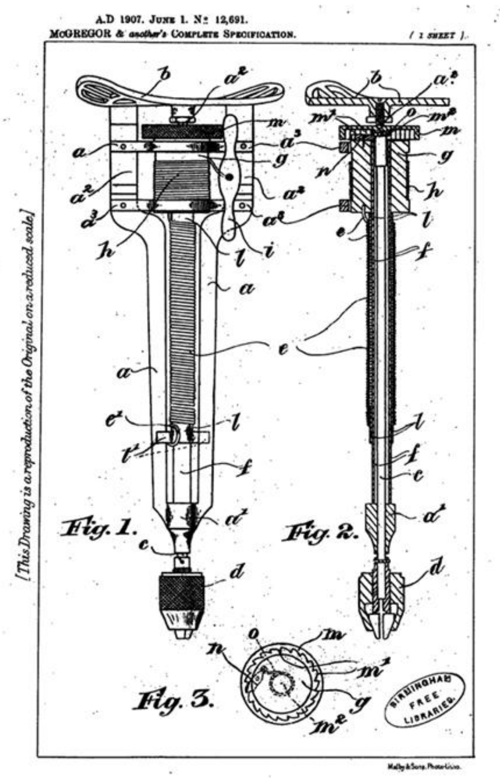

Fig. 3. From the Birmingham Library *'A.D. 1907. JUNE 1. No. 12,691 McGREGOR & another's COMPLETE SPECIFICATION'*

The patent application was lodged on 01/06/1907 by George Bradley and Alexander McGregor, patent for number GBD1907- 12691A an improved re-action spring drill or brace.

"12,691. McGregor, A., and Bradley, G. June 1. Hand drills.- The spindle c is enclosed in a sleeve f carrying a drum g for a driving-cord h and has a bearing at a<1> and on a center a'. An internal ratchet-wheel m on the spindle engages with a spring-controlled pawl on the drum to allow the free return of the latter by a spring e attached at its lower end to a slider on the sleeve f prevented from rotating by the framing a, which is stiffened by crossbars a<3> which also act as cord guards. The drum may be stepped to give different speeds."

(It is thought that George Bradley may have been his Solicitor at the time.)

Fig. 4. Bit storage.

Fig.5. Variations of the evolution of the Glasgow drill.

Part of a transcript form Gordon McGregor (Grandson of Alexander)

“The photos with this email show the three drills, the heavy one with the chain, the lighter one which used to have a blind cord – I’ll replace the light string with some decent cord – and the prototype, which was handmade in white metal and has a brass spindle.

Apart from the prototype, there were two sizes of this drill made with the flat frame and another with a cylindrical frame, this model rarely seen.

I have never tried to look up the patent(PAT 12691-07), but I presume the ‘07’ is the year it was filed, He also had a patent on a record turntable which was driven by a strange looking figure-of eight mechanism, for which I have the drawing somewhere, and apparently he did build one, but I only know of its existence from my Dad’s stories of long ago.”

The following images of what appears to be an even earlier example of the Gyro drill are in collections here in NZ and in the UK. These two drills have a cast iron frame and appear to be a cruder design than the later models.

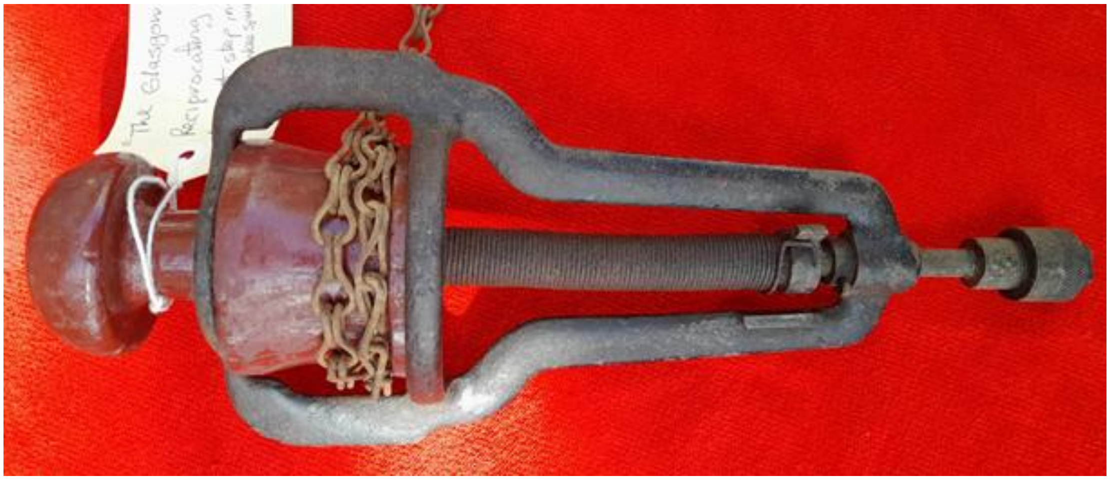

Fig.6. Club member Stirling Mayo has repaired the wooden parts of the drill that were still partly intact.........."*found rotting in deep loose dirt floor of a blacksmith/Wheelwright workshop owned by an elderly Auckland collector, some tools were beyond saving but this was worth the effort..*"

Fig.7. From the collection of Robert Smith, Leicester, United Kingdom

Approximately twelve years prior to the Glasgow drill and in the USA, another reciprocating drill was patented and manufactured by Best Tool Company, Boston MA. This tool was produced under a patent originally granted to Henrick Julius Hjorth of Boston, Massachusetts on June 11, 1895. The drill is stamped on the nickel-plated, spring loaded cylinder: 'AUTO HANDLE DRILL PATD JUN 11 95 BEST TOOL CO. MASS PAT APPLD FOR'.

Fig.8. The Ball pull is missing on this example and would have been a Beech turned ball shape, pull.

Fig.9. Manufactured by the Best Tool Company, Mass. USA.

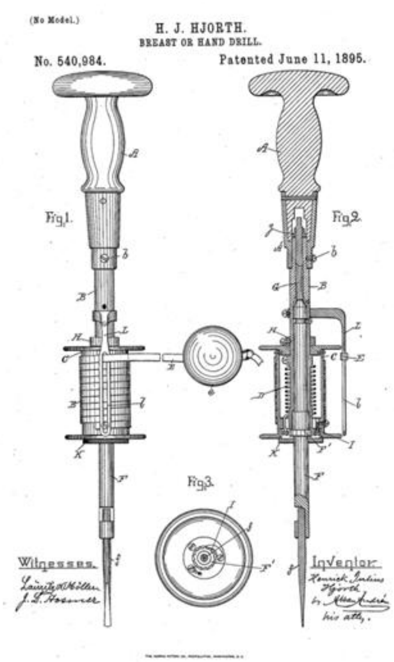

Fig. 10. *"Be it known that I, HENRICK JULIUS HJORTH, a citizen of Sweden, and a resident' of Boston, (Brighton,) in the county of Suffolk and State of Massachusetts, have invented new and .useful Improvements in Breast or Hand Drills, of which the following, taken in connection with the accompanying drawings, is a specification."*

Fig.11. The rare examples of the Henrick Hjorth Patent, reciprocating drill.

Ref. Espacenet Patent Search. The Old Tool Collector, UK. Grandson of Alexander Mcgregor.

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