



Brenda Conway with her dog 'Prince'.



Mary O'Dwyer, Mary Noone, Angela O'Dwyer sitting on wall by Grange Church c 1950.



Back row L-R: Mick O'Dwyer, Dan O'Donovan, Dan O'Donnell, Gussie Bourke, John O'Dwyer. Front row: Jim O'Donoghue, Tom O'Donoghue, Anthony Bourke.



Mai Ryan, her brother Pake Harty, husband Jimmy Ryan and their daughter Mary Ryan.



Bridie (Clancy) and Bill Madden.



Mary Clancy (Egan's daughter), Paddy 'Louis' Bourke and Mai Ryan (Harty).

## THE MADDEN FORGE

By Brendan Madden

**T**he mention of “the forge” immediately brings the blacksmith to mind. The “black” in “blacksmith” refers to the black fire scale, a layer of oxides that forms on the surface of the metal during heating. The origin of “smith” is debated, it may come from the old English word “smythe” meaning “to strike” or it may have originated from the Proto-German “smithaz” meaning “skilled worker”.

A blacksmith is a metalsmith who creates objects from wrought iron or steel by forging the metal, using tools to hammer, bend and cut. The skill and strength of the blacksmith have been bending metal to the desired shape for well over 4,000 years in Ireland. Using the heat of the fire in his forge to make the metal flexible, he then shapes it using a variety of tools, many of which he makes himself.

Colour is important for indicating the temperature and workability of the metal: as iron is heated to increasing temperatures, it first glows red, then orange, yellow, and finally white. The ideal heat for most forging is the bright yellow-orange colour appropriately known as “forging heat”. Because they must be able to see the glowing colour of the metal, some blacksmiths work in dim, low-light conditions. Most work in well-lit conditions. The key is to have consistent lighting that is not too bright. Direct sunlight obscures the colours.

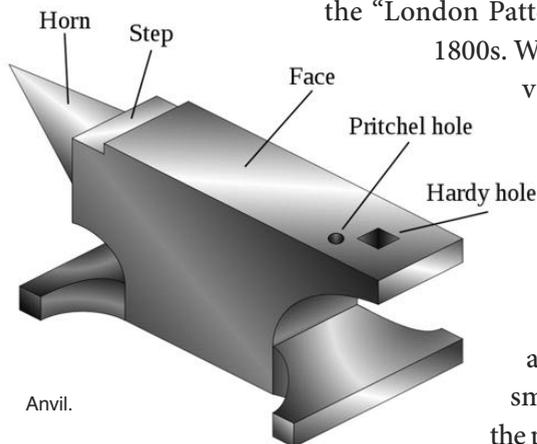
While there are many people who work with metal such as farriers, wheelwrights and armourers, the blacksmith has a general knowledge of how to make and repair many things, from the most complex of weapons and armour to simple things like nails or lengths of chain.

In Ireland, the blacksmith traditionally played an important role in the community. He not only shod horses, ponies and donkeys as a farrier but also repaired agricultural implements, shod wheels and often made gates and railings. He contributed to domestic life by making the crane that held the boiling pot over the open fire, the pot hook that connected the pot to the crane, the tongs that attended to the fire and, in the event of an accident, he could be called on to put a leg on the pot. It used to be that every town and village in Ireland had at least one forge and a blacksmith. The blacksmith provided a valuable service for those who had horses or for people who required his skills in metalwork.

### The Anvil

Anvil shape has evolved substantially since the earliest anvil-like objects. These primitive objects used for anvils were typically made of stone, often just a slab of rock. The first metal anvils were made of bronze, then wrought iron and, finally, steel, which is the material of choice today for anvils, though cast iron is also used in low-end anvils. Cast iron is quite brittle for this particular use and absorbs more of the hammer blow's energy than steel does, so it is not preferred.

Over the centuries, the typical shape of the anvil has evolved from a simple slab to the shape most of us associate with an anvil today, namely the "London Pattern", which became common in the



1800s. While the length and overall size of the various elements can vary from anvil to anvil, the key features of the "standard" design are typically a horn, a step, a face, a hardy hole and a pritchel hole. The primary use of these various elements is as follows.

The "horn" is the front end of the anvil that is curved. This allows the smith to hammer different curves into the piece they are working on, with the precise curve depending on how and what part

of the horn they hold the piece on while they hammer it. Some anvils also come with multiple horns, of differing shapes and sizes.

The "step" is the flat area next to the horn, just below the face. This is often used as the cutting area, using the edge of the step to cut a piece while hammering it. However, frequent use of the step for this purpose can also damage it, so the use of tools attached to the anvil for cutting is often preferred for non-hobbyists.

The "face" is the main large flat slab where most of the hammering takes place. It also contains the hardy hole and the pritchel hole. Unlike the step, it often features slightly rounded edges so that the edges don't cut into the metal being pounded on the face.

The "hardy hole" is a square hole through the anvil that allows you to secure various tools in the anvil. These tools can include chisels, various swages (used for shaping or marking the metal, generally a block of metal with a recess for forcing the metal into the shape of the recess), bickerns (smaller, specialised versions of the horn), etc. The hardy hole can also be used directly as an aid in bending or in hole-punching.

The "pritchel hole" is a round hole meant as an aid in punching holes through the metal you're working on, but obviously the hardy hole can be used for this as well as mentioned. The pritchel hole can also be used for holding tools. So, the pritchel hole is a round version of the hardy hole.

### The Forge at Lower Grange

John Madden bought the forge from the Croker family, who had it built in 1861. Prior to buying the forge, John owned The Hamlet Bar in Grange. The Madden family operated a vibrant business at the forge until the 1980s. Over the years, they shod horses, repaired machinery, made gates and many other farm and domestic tools and equipment. The nearby woodwork and coach assembly and maintenance business, operated by the Clancy family, brought business to the forge as wheels had to be shod and maintained.

Gates with “Madden” branding on them, made over a hundred years ago, would have cost about fifteen shillings sterling. In more recent years, David O’Keeffe of Upper Grange had a gate restored – the gate made at the forge carries the Madden brand. This gate remains *in situ*, at the entrance to a house in Upper Grange, adjacent to the Bruff-Limerick Road, which was occupied by David’s mother, prior to her death.



At the Madden Forge in 1912. Man on extreme left with horse is unknown. Stephen O’Brien, Jim Daly (of Kilballyowen, driver of mail car from Grange PO to Kilmallock PO), Mike Madden (shoeing horse), Jack Madden, Chris Madden, Jack Bourke and Jim Bourke.

Michael (Mike) Madden was trained by his father, John, and they worked together until Mike took over the business and trained members of his family. At one stage, four of the Madden family worked in the forge; a man by the name of John Hunt also worked there for a period.

In the days of vibrant business at the Madden Forge, there was plenty of work to be done, from early morning until evening-time, six days a week. Work included horseshoeing, wheel-banding, as well as repairing ploughs, grass harrows and mowing machines, not to mention miscellaneous other work. During wintertime, when seasonal farming activities were at their lowest, the forge was occupied with making and repairing over-the-fire cranes, which had an adjustable lever to raise or lower the pot or kettle, as well as many other activities, such as making gates and numerous other items of equipment.

*Jim Madden*

Jim Madden, son of Michael Madden, was the last blacksmith of his family to run a business at the Madden forge. The following is an extract from a conversation, published in *The Dawn* in 1991, between Mr Tom McNamara of Lough Gur and Jim Madden.

*Jim, tell me how you shoe a horse?*

“First, measure the horse’s hoof, and then get a bit of straight iron and cut it to the required shoe size; the iron is then placed on the fire to redden. When red enough it is put on the anvil and with a hammer is rounded and shaped to the size of the hoof. The shoe is re-heated, and then a groove is cut with a fuller and the nail holes are made with a punch. While the shoe is still hot, it is pressed against the horse’s hoof until it is the correct fit. The shoe is cooled in a tank of water and then nailed to the hoof. The nails are clinched, and the hoof is made even and round with a rasp. The water tank that I use came from the old Ballingoola Mills, which closed down in 1861.”

*Jim, banding wheels was a big job in those days?*

“It was, we used to band a lot of wheels, especially in fine weather, as the wheels were more likely to lose their bands at that time. We had to prepare the wheels for banding over a period of a week or ten days, the bands were cut to the required length, then turned, which was hard work as the iron was two and a half inches by three-quarters. When nice and round, the ends were reddened and welded together. You had to make sure that the band at this stage was a little smaller than the wheel, because on banding day, when the band was reddened, it expanded; then when put on the wheel and cooled off, it contracted with the result that it would not leave the wheel for many a day. Banding itself was a busy day, a big fire was lit outside, all the wheels and bands were lined up ready for the final job. All the bands were reddened, and one by one were sledged on to the wheel. We often banded twenty wheels in a day, but there are no wheels banded now.”

*Now Jim, were all the tools you have here made on the premises?*

“Yes, we made all the punches, chisels and tongs; there were tongs for flat iron and one for round iron, also a lot of other instruments. The present bellows is one I made myself, it is powered by electricity, but the one before that was a big bellows, it was there for years. It was operated by pressing a lever with your hand or arm and it ‘blew-up’ the fire with great gusto.”

*Big changes here today, Jim?*

“Yes, as you look around now, you see an electric welder, electric grinder, electric



Jim Madden Blacksmith and Mike O'Brien – outside the Madden Forge in Lower Grange.

drills, even the bellows; there is no need to redden the iron in the fire to weld it, or punch holes in it now. The work is not as laborious as before, but I often look back with nostalgia on those days when so many people came to have their horses shod, or machinery repaired.”

#### *Just a Memory Now*

The Madden Forge building remains in existence, but, alas, it is now locked up. If one is old enough to remember the days when the forge was open for business, perhaps it is possible to recall the buzz of activity when passing by or visiting – the clank of iron against iron from the anvil, the unique smell and smoke from hot metal against horse hoof, the fizzing sound from hot iron being immersed in water, the power of the bellows, the intensity of the fire and its sparks, the multi-colouring of the irons in the fire, the shuffling of horses outside as they waited patiently to be shod and, of course, the gathering of men in particular, awaiting a variety of essential forge services.

#### *End of an Era*

Writing about the Madden Forge in the edition of the *Vale Star*, published on 23rd September 1999, Nora Hourigan observed: “The Forge is a great loss to the people of Grange and the surrounding areas. Even the housewife or gardener cannot get a handle fitted to a brush, spade, fork or shovel. It is the end of an era. We all miss Jim, who was a master craftsman. Best wishes Jim from all your friends in Grange.”

*The Village Blacksmith (1840) – by Henry Wadsworth Longfellow*

It is appropriate to conclude this account of the Madden Forge, by recalling a couple of stanzas from the poem *The Village Blacksmith*. There are eight stanzas in all, of which two, being the first and fourth, follow:

*Under a spreading chestnut-tree  
The village smithy stands;  
The smith, a mighty man is he,  
With large and sinewy hands;  
And the muscles of his brawny arms  
Are strong as iron bands.*

*And children coming home from school  
Look in at the open door;  
They love to see the flaming forge,  
And hear the bellows roar,  
And catch the burning sparks that fly  
Like chaff from a threshing-floor.*

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References/Notes

- (1) <http://en.wikipedia.org/wiki/Blacksmith>
- (2) <http://www.askaboutireland.ie/reading-room/history-heritage/traditional-crafts/traditional-crafts-of-ire/metal/blacksmithing/>
- (3) <http://www.todayifoundout.com/index.php/2012/02/why-anvils-are-shaped-as-they-are-and-why-blacksmiths-often-tap-the-anvil-after-a-few-strikes-on-the-object-theyre-working-on/>