

The Iron Gate - Relic of a forgotten craft

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JUST as a garage is a present day necessity for the traveller in Ireland, the forge was a necessity for the traveller in bygone times. The countryside abounded in forges, situated at a junction or near a roadside stream, where the blacksmith would shoe a horse, bind a wheel with an iron band, or provide a 101 necessities for everyday life. Although comparatively few forges can be seen nowadays, countless thousand examples of the "smiths" greatest feat of craftsmanship can be seen beside the road — the Irish iron gate.

Many of the gates are stamped with the smith's trade-mark and it is not unusual to find ordinary gates bearing a date nearly 200 years old. That they have survived many years of opening, climbing over, and being pushed against is a tribute to the maker's skill and sense of practical design — a sense that slowly evolved down the years until the advent of modern welding equipment and the scarcity of suitable iron and coal, during and after the Second World War.

During the period of handcraftsmanship a number of features used in their construction are common to all gates.

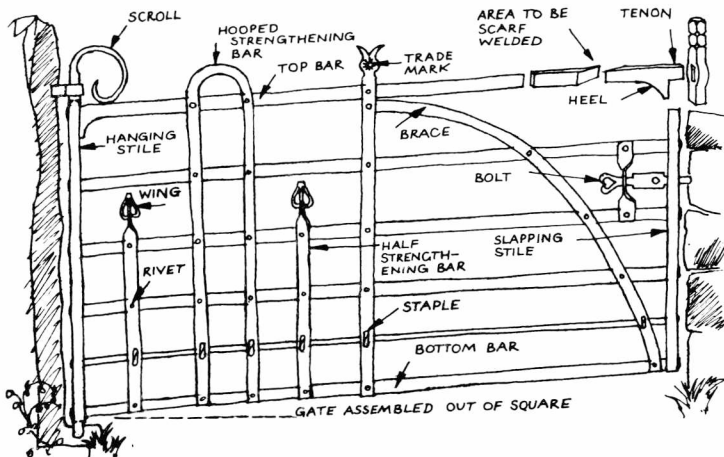


ILLUSTRATION I

Every horizontal member was connected to the vertical hanging or slapping stile, by means of a mortise and tenon joint. This joint was made by heating up the vertical stile, placing it on the anvil and sledgehammering a punch against it. The stile had to be heated in the fire a number of times until the mortise punch passed through the metal. During the assembly of the gate, the horizontal member was hammered through the mortise until it protruded from the far side. This protrusion was then rivetted over to prevent the joint parting.

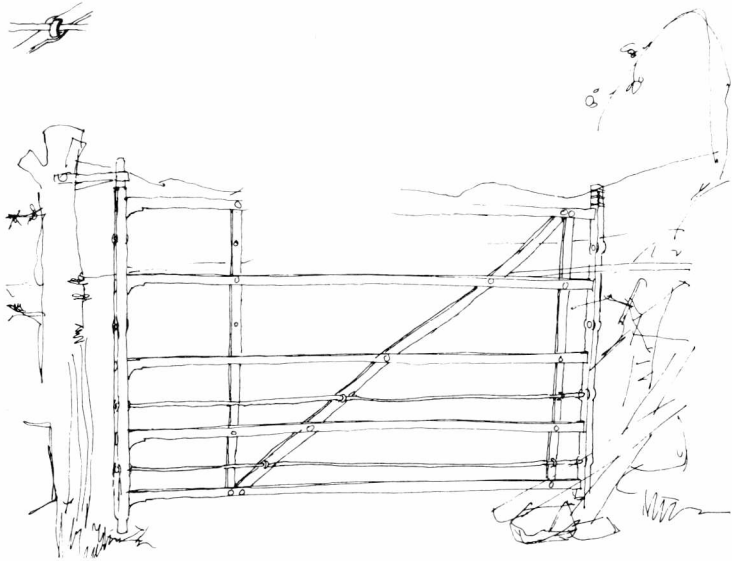


ILLUSTRATION 2: Unpainted gate 8 chains south of smithy on opposite side of road (immediately south of lane off road). — Birch's.

In order to make this joint stronger, nearly all gates had at least one heel which was scarf welded to the horizontal member. This welding was achieved by scarfing, or bevelling, the ends of the two pieces to be joined, then heating and hammering the bevelled surfaces together. This is often done so skillfully that it is difficult to detect a line indicating the join. (See illustration 1).

To keep the gate square, it was usually not enough to incorporate a number of heels and so most gates include a diagonal brace. The earliest gates like the one made around 1800 (illustration 2) have a plain, straight diagonal which was rivetted to the horizontal members. At a later

date the brace was shaped like a hoop, or part of a hoop, as shown by the gate in illustration 3 which is dated 1812. The hooped brace required much sledgehammering in its shaping and a hooped gate might take twice as long to make as one with a straight brace.

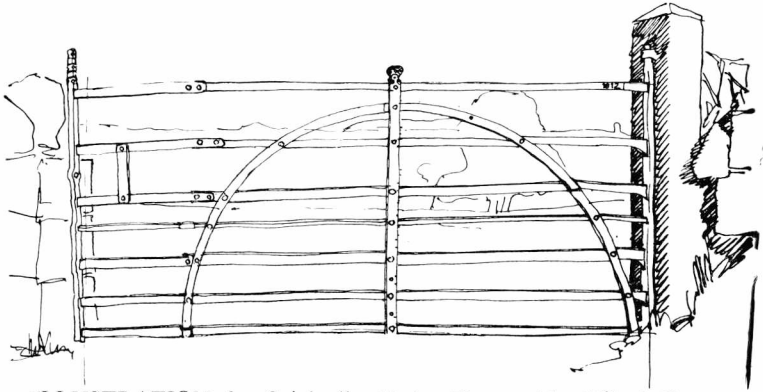


ILLUSTRATION 3: Originally Major Kavanagh's, Ullard House.
Entrance to the Well Field — Andy Doyle's Gate.

In ensuring that his gates did not sag out of square the blacksmith usually assembled the gate so that the "slapping" end was higher than the "hanging" end, so that should the gate sag it would settle into square rather than out of it (see illustration 1).

The hooped brace may well have been inspired by the shape of a horse shoe or the iron band of a wheel. Indeed, many gates are made in whole, or in part, from old wheel bands which have been re-worked. This can easily be detected because while the metal in section is flat on one side, it is curved on the other and it is this curved surface which was at one time in contact with the ground.

Unless made of a very heavy iron, the gates described above, all had a fault in common — they could be "sprung." If an animal pushed against the centre, the gate would bend, the bolt would slide out of the socket in the slapping post, and the animal would be free.

The smith had already overcome the problem of small animals getting through the horizontal bars by reducing the space between the bars the nearer they were to the ground (as can be seen in the accompanying illustrations). The resourceful smith solved the "springing" by placing the longer axis of the metal section of the top, and some-

times the bottom bar horizontally rather than vertically, and putting a twist at each end so that the heel and tenon remained vertical (illustration 4).

As labour costs rose, the time consuming hooped brace was replaced by two straight diagonal braces (illustration 5) and this type of gate became the standard design and the one most often seen along the roadside. Many of them were "mass produced" in urban forges in the early decades of this century and the work of some of these forges can be seen over a wide area.

Before the widespread use of modern welding methods, one of the biggest changes in the evolution of the field gate was one of size. Most of the earlier gates were unable to accommodate a tractor and the equipment which it pulled. The original design of some of them was so robust that the blacksmith was able to widen the gate by rivetting on extension pieces to the slapping end (illustration 3) or by cutting the gate in half and welding extension pieces in the centre (illustration 5).

Field gates were purely functional items and generally the only ornamentation was the smith's trademark and an incised design on top of the hanging and/or slapping stile. However, in the design and construction of the entrance gate to a farm or cottage, ornamentation and individuality was important and function often suffered as a consequence.

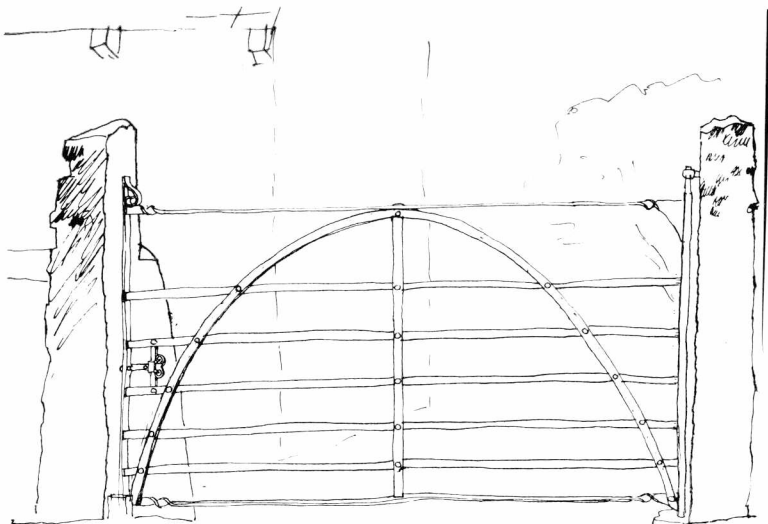


ILLUSTRATION 4: Gate c. 1890 — Mrs. Garner's Cottage.

The cheapest method of making a decorative gate was to add some scroll work to the top of the stiles and to the end of the bolt of an ordinary field gate. Usually these are the least attractive of all forged gates since

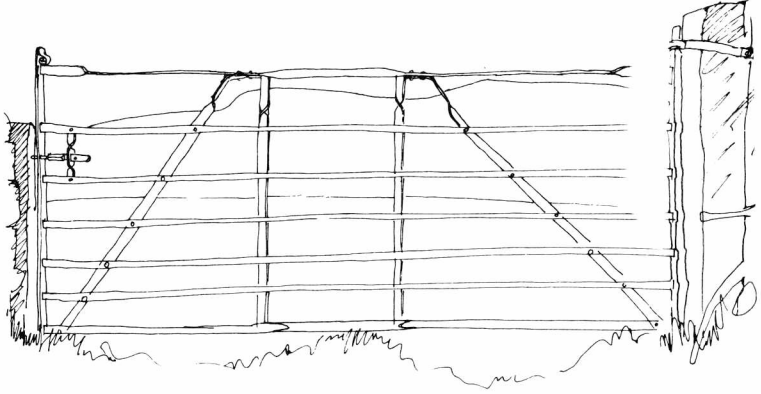


ILLUSTRATION 5: Unpainted gate 15 chains south of smithy. Rivets replaced by weld joints in places. — Paddy Malone.

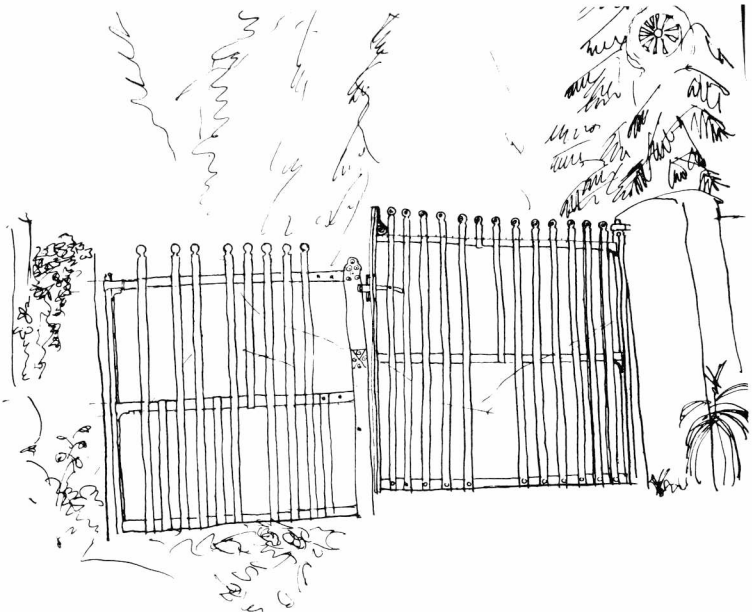


ILLUSTRATION 6

they lack the unity of design present in the plain field gate or the ornate entrance gate.

Typical of the simpler entrance gate, which were invariably double gates, is that shown in illustration 6. This gate, nearly 100 years old, originally bore forty makers' trademarks and, like most entrance gates, has no hooped or diagonal brace — relying merely on small heels to remain square.

Many gates are variations of this design. Despite all the hooped strengthening bars, half strengthening bars and twisted bars, these types are less sturdy than the field gate.

The most decorative of all gates made by the ordinary blacksmith have stood the test of time least of all. The example shown in illustration 7, made in the 1920's, is typical of many. All the smith's energies have gone into the gate's ornamentation and there is not a single heel to keep the gate square.

Ireland is fortunate in possessing so many forged iron gates. That so many remain is due in part to the care which went into their construction, but mainly to being spared the collection-of-scrap-iron mania which occurred in other European countries during the Second World War.

Since the skill to manufacture and repair these gates has nearly died out, it is important that the survivors are treated with respect by gate-climbing picnickers, the farmer, and the road widening bulldozer driver.

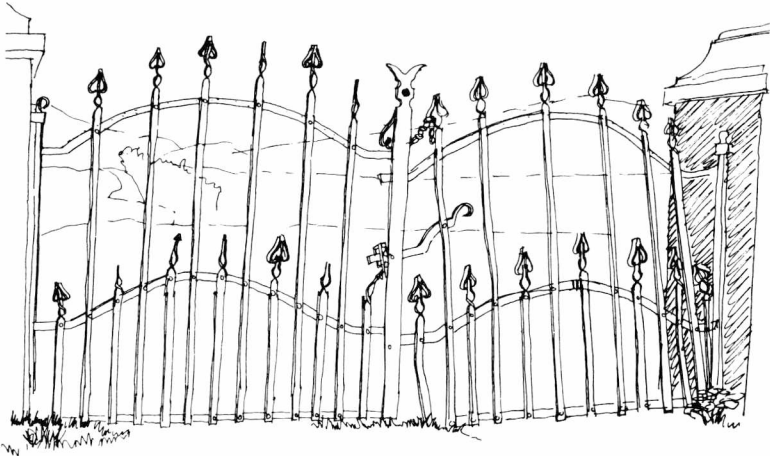


ILLUSTRATION 7

The gates illustrated were sketched in situ by the author. They were all made by the Duggan family, Ullard, Graiguenamanagh.