THE VERNACULAR FORGED WROUGHT IRON FIELD GATE.

MAKING A CASE FOR:

- OUR VERNACULAR HERITAGE.
- WROUGHT IRON A HERITAGE METAL.

ILLUSTRATING A CLATTER OF GATES FROM AROUND THE COUNTRY

AND SOME IDEAS ON

BEST PRACTICE IN CONSERVATION, AND OPTIONS FOR REUSING THE TRADITIONAL GATE IN A MODERN CONTEXT.


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VII
POST OFFICE
LAST COLLECTION
11.00am
CUSTOMER SERVICES
1850 57 58 59

VERNACULAR.

The built vernacular heritage occupies a central place in the affection and pride of all peoples. It has been accepted as a characteristic and attractive product of society. It appears informal, but nevertheless orderly. It is utilitarian and at the same time possesses interest and beauty. It is a focus of contemporary life and at the same time a record of the history of society. Although it is the work of man it is also the creation of time. It would be unworthy of the heritage of man if care were not taken to conserve these traditional harmonies which constitute the core of man's own existence.

CHARTER ON THE BUILT VERNACULAR HERITAGE (1999)
Ratified by the ICOMOS 12th General Assembly, in Mexico, October 1999.

The built vernacular heritage is important; it is the fundamental expression of the culture of a community, of its relationship with its territory and, at the same time, the expression of the world's cultural diversity. ‟

THE VERNACULAR FORGED WROUGHT IRON FIELD GATE.

THIS PROJECT IS AN ACTION OF THE KILKENNY HERITAGE PLAN.

The Councils of the City and County of Kilkenny

Kilkenny Heritage Forum

An Chomhairle Oidhreachta The Heritage Council

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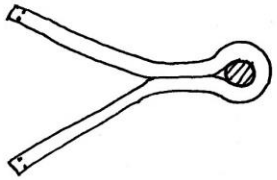
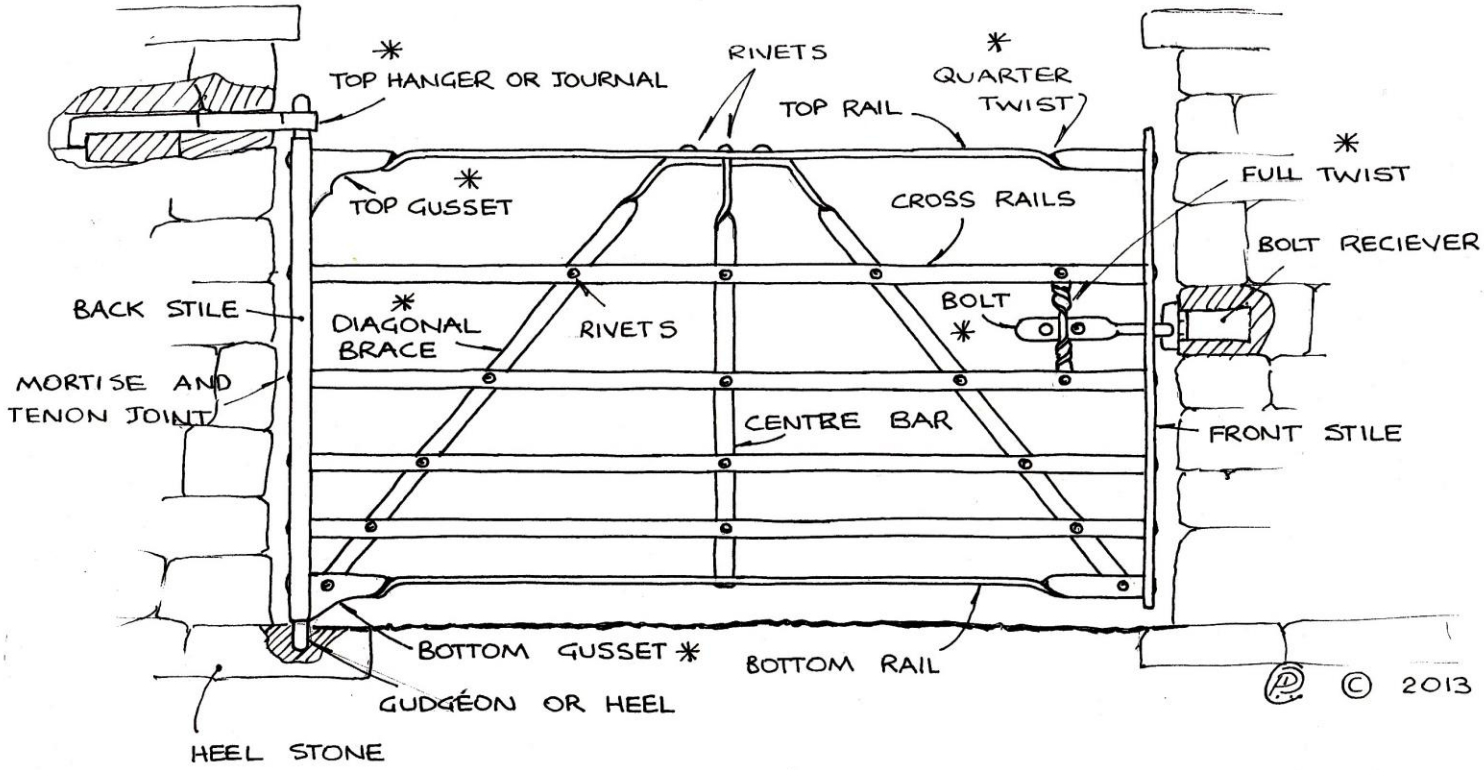
Irish Landscape Heritage • A Photographic Archive

OUR HISTORY…OUR HERITAGE…OUR RESPONSIBILITY.



IRISH TRADITIONAL WROUGHT IRON YARD GATE



TOP HANGER : ONE PIECE HANGER SHOWN WHICH CATCHES INTO OR BEHIND PIER STONES.

* GUSSETS : ARE USUALLY ON TOP AND BOTTOM RAILS TO SUPPORT CANTILEVER EFFECT. AND ARE MADE IN MANY DIFFERENT STYLES AND SHAPES.

BOLT : SOMETIMES A LATCH, ARE VERY FUNCTIONAL IN DESIGN, AND USUALLY COMPLEMENT GATE TECHNIQUES.

TWISTS : THE USE OF TWISTS ON THESE GATES ARE BOTH A PRACTICAL AND AESTHETIC FEATURE.

VERNACULAR FORGED WROUGHT IRON GATES, HISTORICAL CONTEXT.

Wrought iron is a ductile and malleable material; it contains very little carbon and is fibrous in composition due to the presence of long strands of slag. Puddling pig iron in a reverberatory furnace forms wrought iron. This furnace kept the fuel and iron separate; when the iron was molten it was stirred or rabbled exposing it to the air where carbon was burnt off as gas, thus creating a very pure iron. The iron went through a further process that saw it rolled hammered cut re-heated hammered and rolled again, the more often this process was repeated the better the grade of wrought iron.

Traditionally wrought iron was classified as “best”, “best best”, and “best best best” quality. The last puddling furnace for producing wrought iron in England closed in 1974 and since then no more wrought iron has been produced in Ireland, the UK or the rest of Europe.

Forged wrought iron field gates are particular to Ireland. This tradition of local design and construction, using forged wrought iron, is virtually unique to this country. There is strong evidence that this method of gate construction was the preferred method and was widespread throughout the country from the mid 1700s, if not earlier. This industry centered on the local forge and produced a wonderful array of inventive, practical, and beautiful objects.

In contrast to Ireland, audits of United Kingdom farm gates show that the main material used in farm gate construction is wood, with a preference for wrought iron evident in a few parts of Cornwall and Yorkshire.

The industry of smelting iron-ore in Ireland experienced a dramatic rise and decline over the course of the seventeenth- and eighteenth-centuries, finally coming to an end in the mid nineteenth-century. Due to the abundance of timber and charcoal in Ireland it was far cheaper to purchase these raw materials in Ireland than in Britain; encouraging the development of a widespread and prosperous charcoal-fuelled iron industry. This industry is thought to have peaked around the year 1696-7, when the export of iron from Ireland reached 1,692 tons.

The eighteenth-century saw a steady decline in the iron industry in Ireland. This was due to the widespread depletion of Irish forests, combined with a later shift from the use of timber-based fuel (charcoal) to coal-based fuel (coke) to fire the furnaces.

By the year 1740, Ireland was only exporting 14 tons of iron and was importing 4,191 tons. Competition from Britain, Sweden and other European countries with superior transport networks and native coal and iron ore reserves, further hastened this decline.

In 1858, the last commercial iron smelting furnace in Ireland, at Creevalea, County Leitrim, closed and no further attempts were made to smelt ore. In the second half of the nineteenth-century, all the iron used in Ireland was imported, either as pig iron for conversion in Irish foundries, wrought iron, or as finished iron products.

Extract from a short history of Iron Work in Ireland, Ali Davey, Dept. of Environment, Heritage and Local Government 2009.

The blacksmith and forge were central to the productivity of rural communities

The vernacular forged wrought iron field gates that remain in today's landscape are testimony to this and to the changing dynamics of Ireland's iron smelting, foundry and blacksmithing industry.

These gates remain as concrete evidence of the output from our rural industry for the period.

The **Irish Oak Renewal Foundation** have estimated that:

- 1 ton of oak was required to create 1cwt of charcoal.
- 1.7 tons of charcoal was required to produce I ton of wrought iron.

- To produce 2 tons of wrought iron per day required 600 mature oak trees per year. This is equivalent to 20 acres of mature oak forest per annum.

Timber became an expensive and difficult commodity to obtain. Local, and subsequently imported wrought iron became the material of choice for the manufacture of field gates.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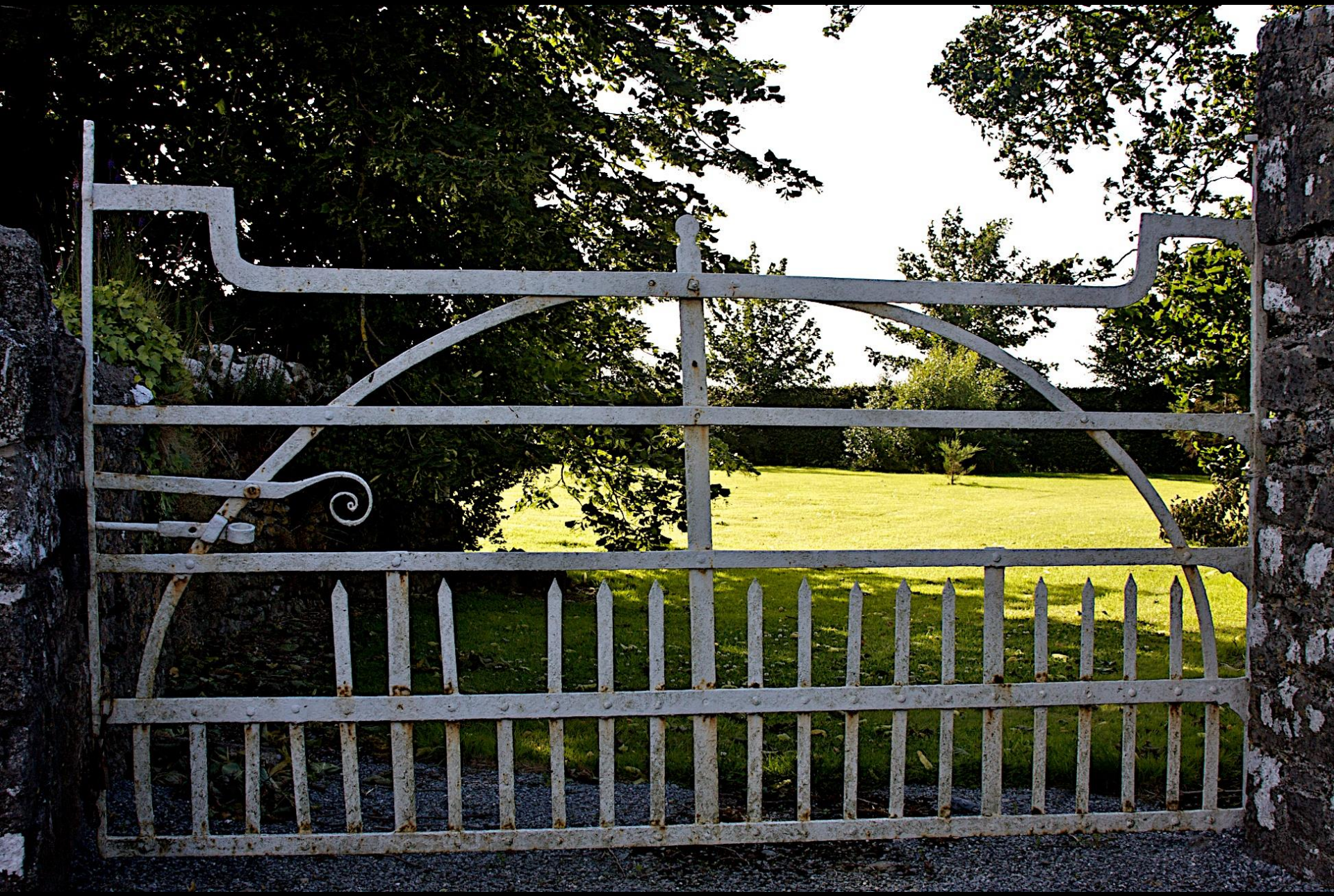

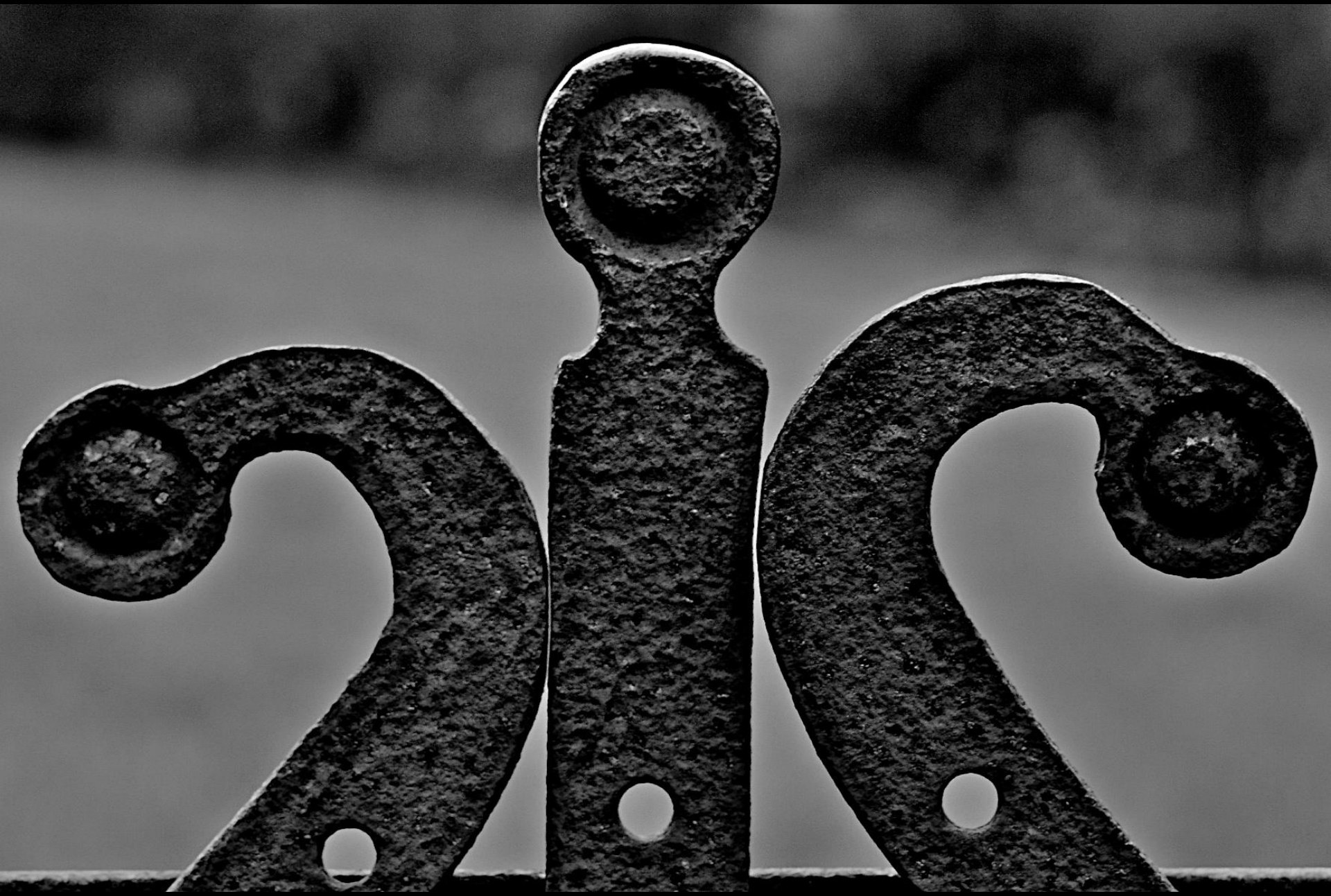

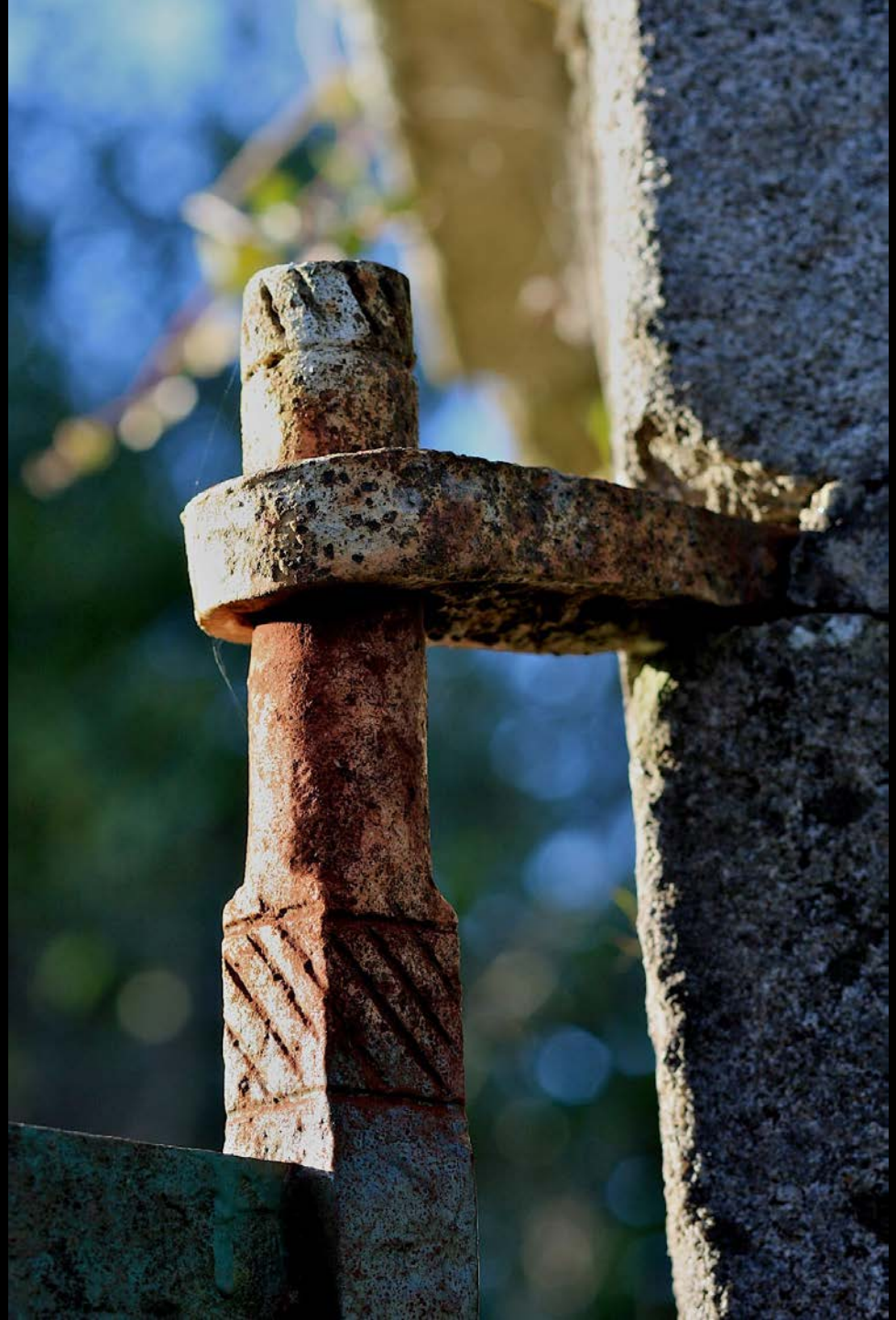

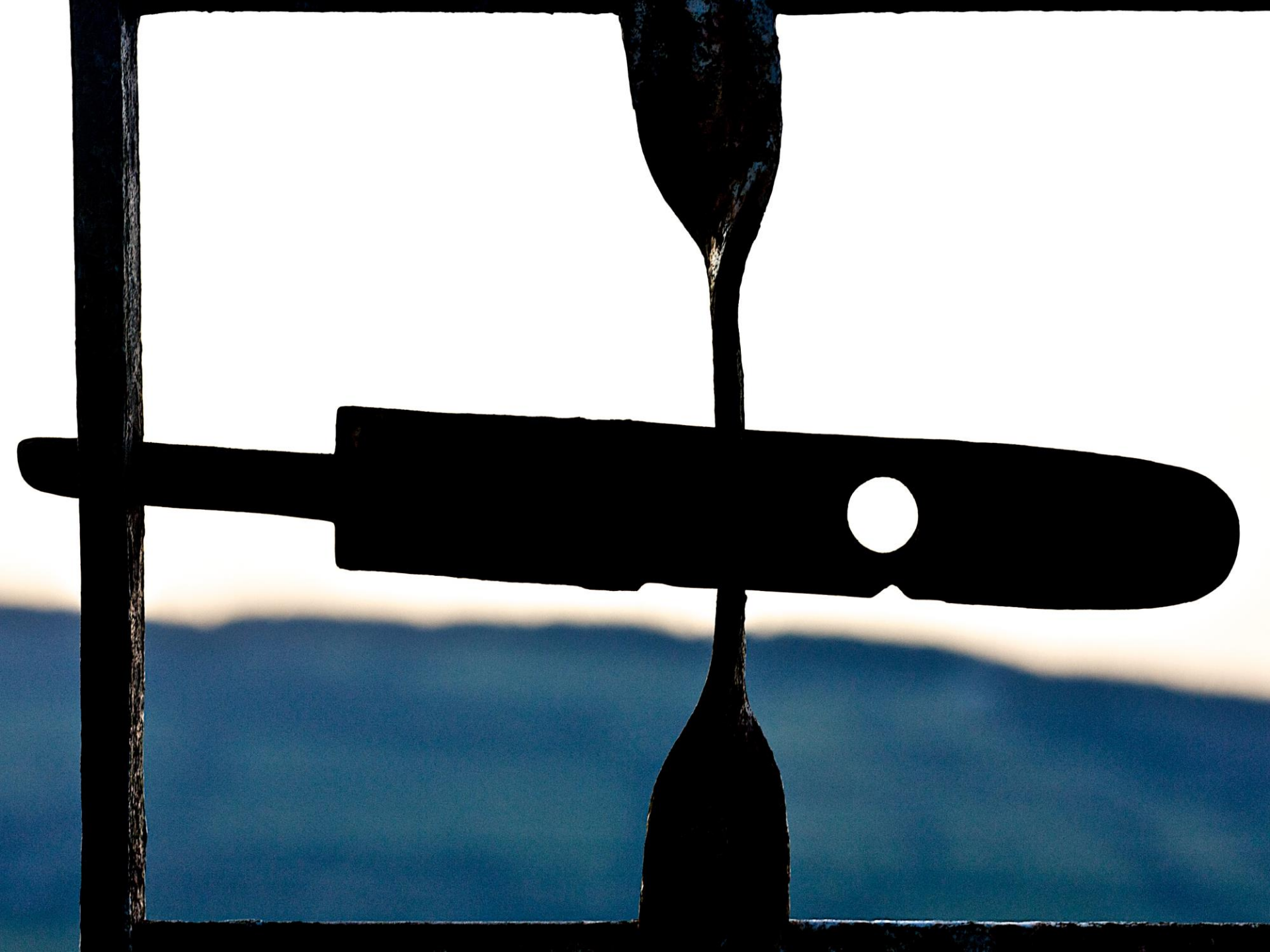

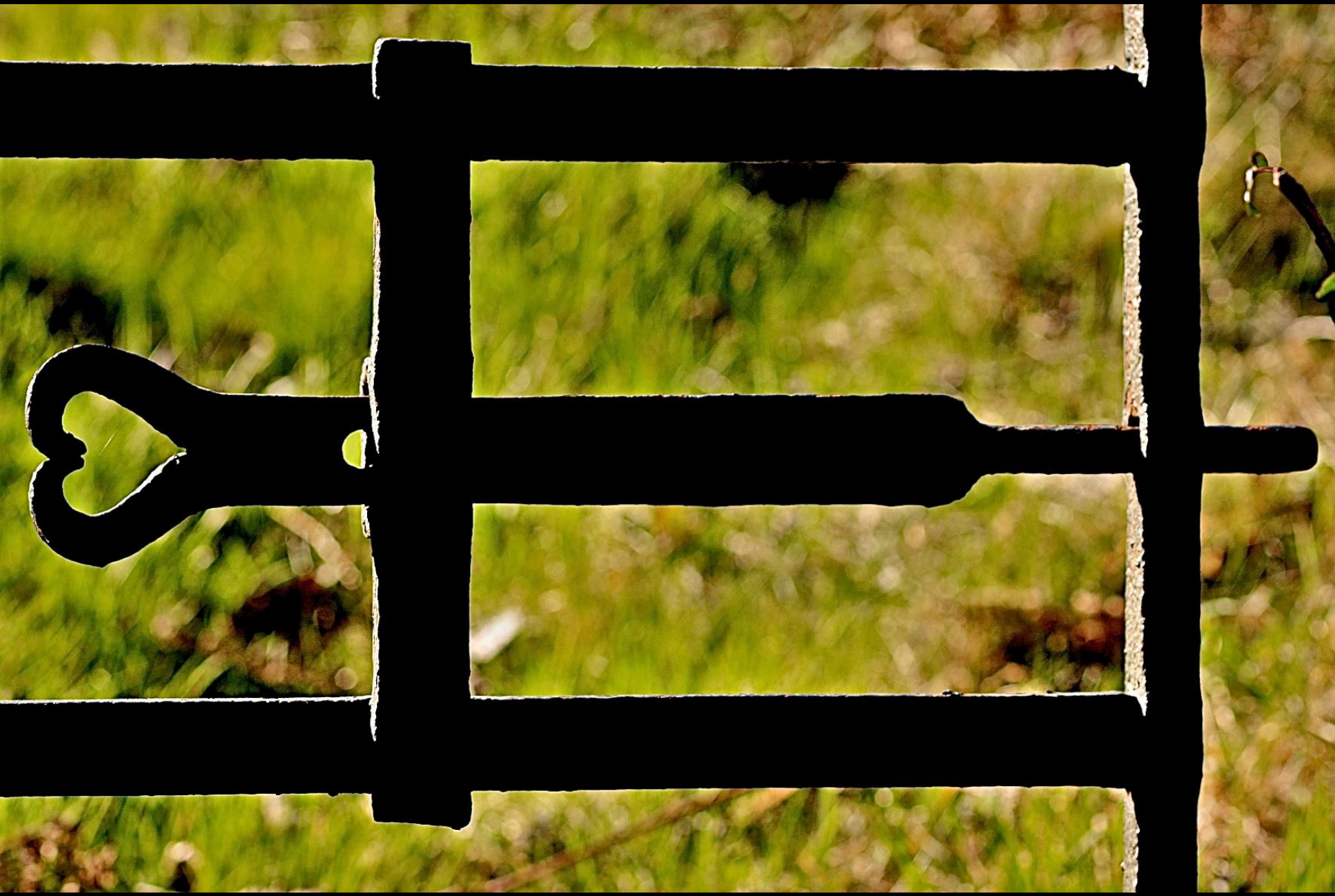

More often than not, the forged gate is cut and extend by welding on an extension piece in mild steel. In many cases the design, aesthetic, and structural integrity of the gate has become compromised. The welder and angle grinder have become a quick-fix solution to an immediate problem. While this practice is understandable, being born out of modern necessity and pragmatism, it is having a significant, negative, affect upon this asset.

Extended gate Kilcullen, in this case the gate extension has been achieved with great care and craft, and provides a practical solution to providing a gate for a necessary wider gate opening. This work illustrates an ongoing organic adaptation process. The extension piece of mild steel has been welded on and may over time create galvanic corrosion that may eventually see the erosion of the wrought iron at this point

Most probably from the forge of Dennis Lee with distinctive heart shape latch, Cappagh Inistiogue

Lee forge Hatchery Lane Inistiogue

Jack and Julia O Gorman Raheendenore forge, circa 1947.

5/5/47

Dear Sir

Our coal problem is a very serious one I was allowed a Blacksmiths permit to purchase one half ton of coal other than anthracite & instead of that I can get none at all owing to the sea coal not coming to Waterford & our supplier won't go to Dublin for it & there's plenty of Anthracite in Castle Comer, but I won't get it on the permit I [illegible] hold will you please let me have a pass for Anthracite by return

& Oblidg

John O'Gorman

[illegible]

Dear Sir
Owing to the present condition of coal I am idle for the past month now I am a blacksmith by trade and no other means of livelihood as our permits were cut off since early in Feb. Our present supplier wont let out any coal till I get a pass for same. Its hard to see farmer's taking away their horses + farm implements not done and a busy Spring in front of them + its harder still to see me unable to do this work in want of coal + its my only means of support So I hope you will take into condersideration our present plight + forward a pass for some quality of coal as I wrote

		£	s	d
1947		24 - 12 - 0		
		due		
	Mrs Syster	£	3	
19 Feb	4 new shoes		11	
1 Mar	4 new pony shoes young		7	0
	Kettle handled		2	0
	hanging irons		9	6
7 apl	2 removes		2	9
14 apl	young P 4 new shoes		7	
	3 Sole bolts		1	6
30 apl	4 new shoes		11	
14 may	2 pony removes		2	
	Paid	2	17	9

Gates are a very useful, if not a critical, part of farming infrastructure.
The widening of gate openings to accommodate larger machinery has seen some forged wrought iron gates find a new life through some creative solutions used in managing these newly made gate openings. However, the wrought iron gate looks uncomfortable in its new role, being at odds with the other elements used to close and secure the field opening.