

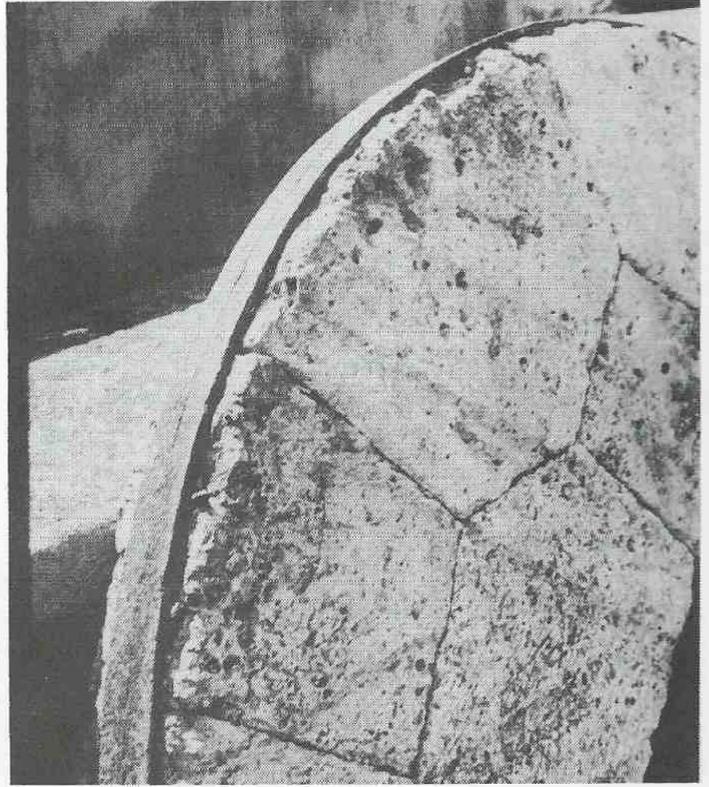
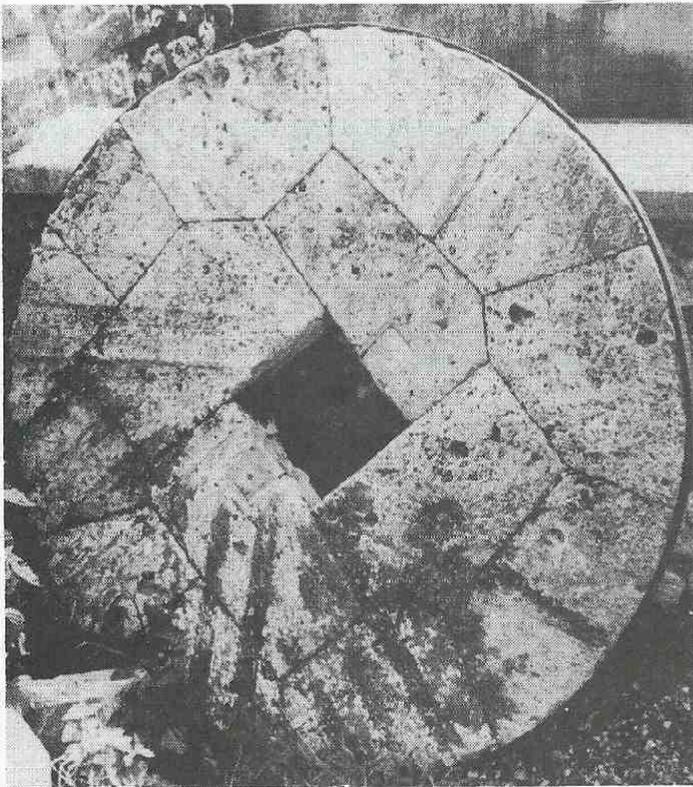
The slaughter of the French millstone-makers

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Introduction

Perhaps it is not so strange that the greatest mystery, or perhaps ignorance, shrouds the millstone, the most valuable and the most troublesome part of the corn mill. Nearly every description of a mill mentions the stones, but any attempt to add intimate detail seems to have been frustrated by a combination of trade secrecy, fashionable mystique and the acknowledged difficulty of explaining a knowledge and intuition earned from years, even generations of working with an infinitely variable raw material. This is especially the case of the French burr stone, which is the most eulogised of all, and which has enjoyed a privileged reputation for all of five hundred years.

The history of these artefacts is far from simple: millstones of this material have not always been made up from pieces - indeed monolithic stones still survive, a few in England. And the quality of the stone was, and is, quite variable, as was that of the design of the finished article. The business of building the stones has been described in several French publications, most of them by entrepreneurs who ran both quarries and works. However forthright in style - and some are very much so - they are therefore slightly susceptible to prejudice. More objective texts, written for teaching the techniques of milling in the first quarter of this century, make hardly more than passing references to the risks run by the men working in the yards and none of them reads like the French report of which this is a brief precis.



A French burr stone, photographed by George Parker at Kewards Mill, Wells showing the typical pattern of blocks.

The most important quality of this stone was - and is - its capacity to provide a sharp cutting edge, a characteristic it owes to its tough but flinty texture which makes it at once very difficult to work but very efficient in use, even if not too well maintained. The French burr stones which survive in mills nowadays are nearly all made from a pattern of blocks, more or less white in colour, bound by iron bands and backed usually with chips of the same stone set in a cement matrix. Thousands of such stones were built in the French yards, not far from the quarries, and tens of thousands of blocks were exported to be made up in most of the rest of the world.

Amongst the most insalubrious of labours we should include the one which assures our daily bread - the construction of our millstones.

The exercise of this profession is the equivalent of slow and subtle suicide where death is preceded by anguish and suffering . . .

The stone from which millstones are made is composed exclusively of crystals of quartz. Blocks weighing up to two tons are levered from the workings and falling stones or heavy equipment cause many broken arms and legs. Once

the slab of stone is extracted the rough-hewer crouches over it, his eyes poorly protected by the spectacles he has made for himself out of window-glass, and as he hammers it into an appropriate working size, sparks and scraps of quartz fly. Once the stone is reduced to a very rough working shape the rough-hewer gives way to the facer; he swings his steel millpick, pointed at both ends and weighing between 10 and 20 lbs, to chip away the rough surface; splinters fly for yards, and a haze of dust surrounds the facer, penetrates his clothes, and gets into his eyes behind their derisory protective lenses.

The muscular effort is very great because of the extreme resistance of the quartz. Within minutes the worker is sweating heavily - and in winter he is unfortunate who stops, exhausted, to rest; the cold wind across the quarry, open to all weathers, chills him - and there is one millstone-maker who will not die of silicosis, because pneumonia will have spared him from it . . .

At La Ferté-sous-Jouarre the men demonstrated the penetrating powers of the dust by a conclusive experiment. An empty bottle, solidly and securely corked, was stood beside one of the workers; after a working day of ten hours a fine layer of stone and metal dust which had penetrated the cork covered the bottom of the bottle. The steel of the millpick makes up 50% of this dust - the pick has to be taken to the forge for re-pointing every other day. 'The stone eats the tools' say the workers; but both stone and steel riddle the stomach, the thighs, the knees and the hands of the millstone-maker, thus tattooed with the stigmata of his profession.

It is not long before a man crumbles when he commits himself to such a way of life - silicosis takes fifteen years to destroy a strong, vigorous man. But, long before this his body wastes away, he is racked with spasms of coughing, he loses all appetite, his strength ebbs away until he is no longer able to raise his tools . . .

We visited the doyen of millstone makers at Epernon. He is 34. When he came to work at the quarries he was 14. All the millstone-makers of his generation who started with him, all, without exception, are dead.

They rest in the cemetery where we stood one morning at daybreak; on the other side of the wall is a millstone-makers yard - but when you go from the yard to the cemetery you are still amongst millstone-makers.

As the day dawned there began, just beside us, the ring of millpicks on quartz; it was as the tocsin announcing new denizens of the graveyard; a promise to the dead to come shortly to their side.

Further Information

The above is a precis of an article published in 1981, with original first-hand description from the turn of the century. A longer, but still cursory, history of French millstone quarrying and manufacture by the present writer is published in Vol 6 of the *Industrial Archaeology Review* together with an account of British millstone manufacture by Gordon Tucker and of German practice by J Kenneth

Major. Some of the sources of information were explored in a lecture by the present author reprinted in the *West Midlands Wind and Watermill Group Publication No 3* (1982) while the current number (No 5) carries a translation of one of these sources - a French milling textbook of 1903.

It would not be fair to leave the impression that no one at all was concerned about these condemned men.

Nauseating details of the fatal effects of this employment are found in medical literature, both in England and in France; but this does not appear until the latter part of the nineteenth century - in England in 1860, and in France not until the ineffectual legislation of the 1890s. And two of the most outspoken manufacturers in La Ferté were campaigning for improved conditions between the 1860s and the 1880s; but their interest perhaps lay more in the preservation of the skilled workers than in a humane concern for their individual well-being. But whatever efforts were being made on their behalf, it seems that it was only the expiration of the industry itself in 1940 that finally released the millstone maker from compulsive suicide.



Upper picture: A view, c1910, of a millstone maker's yard at la Ferté-sous-Jouarre. A block is propped up showing the eye and workers pose with their tools. To the left a stone appears to be complete. A number of processes can be divined. Picture from 'Les Pierres a Mou/ins et l'Industrie Meuliere de la Ferté-sous-Jouarre' in 'Les Moulins' no 7, 1982 by permission from Emile Erpelding. **Lower picture:** A millstone factory in la Ferté-sous-Jouarre area, c1905. Picture by permission of J Kenneth Major.

Editors note: la Ferté-sous-Jouarre is 67 kilometres east of Paris, just off Autoroute A4 (Paris-Reims) Michelin map 56