

GYP SUM



The 1870s provided the first source of employment in the Battle area that was not concerned with agriculture, its servicing and its products, or serving the comfortably-off, or practising a profession. In 1876 the gypsum mine opened at Mountfield and quickly became a major employer at a time when agriculture was beginning to enter a long depression

Census returns 1871 to 1901 for those employed at the gypsum/cement works

1871

<i>Battle parish</i>				<i>Mountfield parish</i>			
Born Battle	Born other Sussex	Born elsewhere	Total	Born Mountfield	Born other Sussex	Born elsewhere	Total
0	0	0	0	0	0	0	0

1881

<i>Battle parish</i>				<i>Mountfield parish</i>			
Born Battle	Born other Sussex	Born elsewhere	Total	Born Mountfield	Born other Sussex	Born elsewhere	Total
7	4	12	23	1	0	2	3

1891

<i>Battle parish</i>				<i>Mountfield parish</i>			
Born Battle	Born other Sussex	Born elsewhere	Total	Born Mountfield	Born other Sussex	Born elsewhere	Total
6	5	3	14	4	2	2	8

1901

<i>Battle parish</i>				<i>Mountfield parish</i>			
Born Battle	Born other Sussex	Born elsewhere	Total	Born Mountfield	Born other Sussex	Born elsewhere	Total
18	12	1	31	9	6	5	20

1911

<i>Battle parish</i>				<i>Mountfield parish</i>			
Born Battle	Born other Sussex	Born elsewhere	Total	Born Mountfield	Born other Sussex	Born elsewhere	Total
11	6	2	19	9	9	3	21

The 1921 census has not yet been published; that for 1931 was accidentally destroyed; there was none in 1941. It will be 2051 before mid-century data are available from that source. The 1939 Register, taken for war purposes a month after the declaration on 3 September, is

untrustworthy in a number of ways: many men had already been called up and there were a large number of omissions. It does not show birthplaces. The register shows 137 current gypsum mine employees in the two parishes: 69 at Battle and 58 at Mountfield. Closer examination shows that of the 69 no fewer than 38 were from Netherfield. The ecclesiastical parishes of Netherfield and Mountfield were both heavily reliant on the gypsum works; it would be hard to see what men would have been doing had the works closed. Figures are not available for later in the war, which would show how many went into military service, but one may suspect few: the mine was important to war work, particularly in its production of cement.

Gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) is a compound that modern life can hardly escape. It is used in plasterboards (mainly in the building trade) and in the making of cement and paper. It is plaster of Paris and can also be used as a soil conditioner. A close relation is alabaster. It is not found on the surface but has to be sought underground.

The principal driver of the discovery of gypsum in the south-east appears to have been an amateur geologist, the Surrey landowner R A Godwin-Austen, who in the mid-nineteenth century began to explore the similarities between the geological structure of the Weald and parts of Belgium and the Boulonnais area of northern France. He

concluded on the slender evidence then available that coal should lie in at least the eastern part of the Weald.¹

This and similar reports prompted Henry Willett to bore in the Weald of Sussex. He engaged Messrs Bosworth and Ison of Ashby de la Zouch, and set up a company, the Sub-Wealden Gypsum Company.

The argument whether the search for coal was the force behind the Mountfield discoveries has never been solved. One commentator wrote in 1873 that

we may rest assured that if no fond conceit had been entertained that coal might probably be found in Sussex, or thereabouts, we should never have seen a fund raised for the purpose of drilling through the strata of Netherfield.²

There have been further disclaimers since, none finally refuting the notion of a search for coal.

Boring began in 1872 on land belonging to the Egertons of Mountfield. Drilling then, as now, was by means of a hollow tube, properly armed on its exterior, which when raised contained hard-packed materials from each layer reached; the layers could then be examined by level to determine the composition of the soil. The contract for the original borer expired in November 1873, and the work was taken over by the Diamond Rock-boring Company, using a diamond-coated drill 3" (7.6cm) in diameter. By early March, 1874 they had reached 481' (about 187m), through soils proving the theory that they were identical with those of the Boulonnais area. It was reported that they smelt strongly of petroleum or mineral oil; the borers said that they did not expect to find coal.³ (The only place where sufficient natural gas was found in Sussex was by accident at Heathfield, where it was to power the lights at the local railway station from 1895 to 1934.)

Quite what levels they reached at various times have prompted contradictory reports, but it very soon became clear that two rich and fairly tall seams of gypsum had been reached, but it seems that the deepest level was 1030' (314m). Production began in 1876. By 1879 there were three steam engines of 200hp to drive the millstones of 5' (1.5m) diameter, the stone breakers and crushers. Another of 60hp raised waggons and gypsum from the mine, and a third of 10hp was used for pumping the mine dry.⁴ By then a branch off the South Eastern Railway had been built at a cost of £1400.

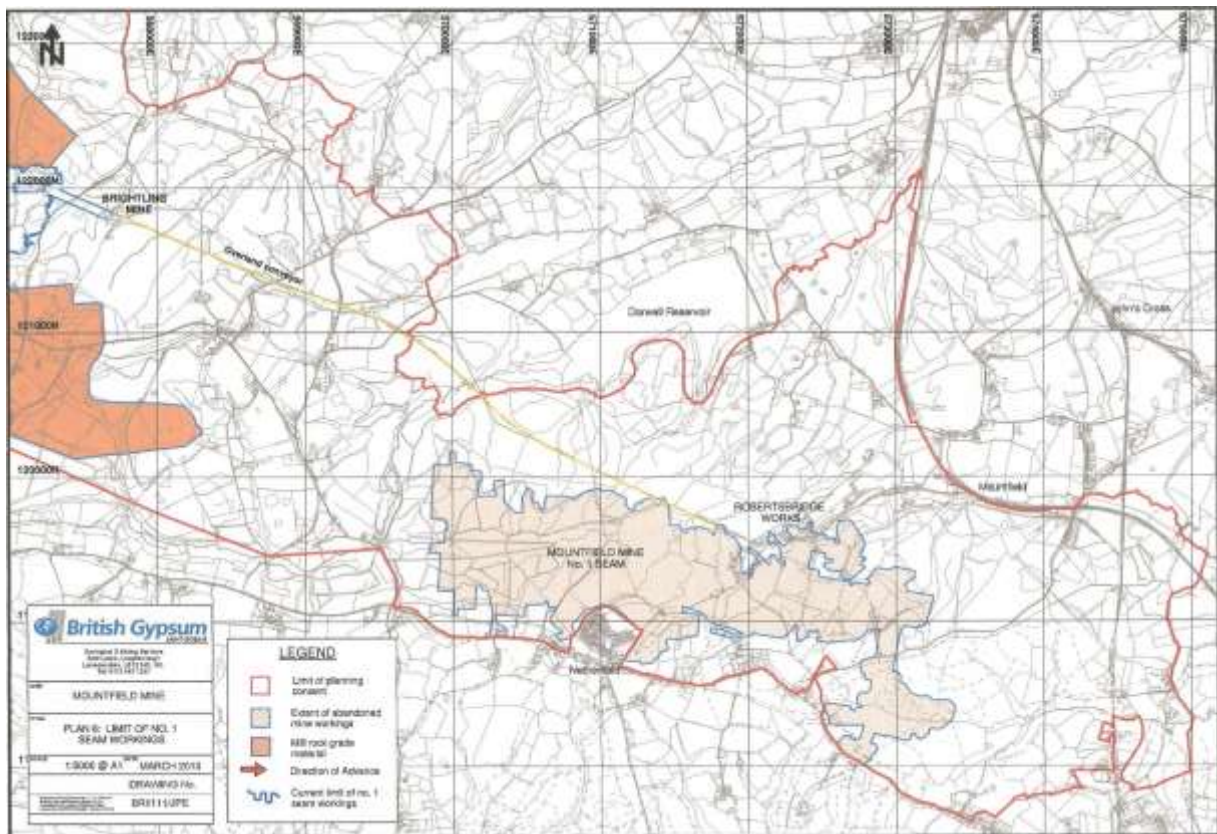
A problem faced by the owners was that there were no experienced miners in the area. Like their counterparts in Australia and elsewhere they looked to Cornwall, where the tin mines were contracting, and in particular to Lanivet near Bodmin, where the mine had opened in 1838. The large number of non-Sussex residents in the censuses is almost entirely due to them.

Gunpowder was used to extend the seams and for some surface works, and it was inevitable that accidents should happen. As early as 1877 William Veness, a labourer, was carrying gunpowder in a cask while smoking his pipe: it exploded but he survived, and even walked all the way to Battle to consult Dr Hudson.⁵ Four years later too much powder was being used to remove a corner to make way for trolley lines to join, and the resulting explosion badly hurt William (or Harry) Collins, one of the Cornishmen who were essential to starting the project. On this occasion Dr Hudson was more easily reached and came at once.⁶ Collins was not so lucky in 1903. Reports state that three men were driving a new shaft but only one of two charges went off. The second was being investigated when it too exploded. Collins was very badly injured and was taken to hospital in Hastings, where he died very shortly; William French of Netherfield was taken there too but recovered.⁷ (The company now takes great care of safety and has suffered very few accidents in recent years.)

The mine continued to expand until the length of the seam reached some 11 miles (18km), and this original working closed in 1993. From 1963, though, an aerial ropeway had run from a new mine at Brightling to the works at Mountfield and the railway there. The ropeway was replaced by a conveyor belt in 1986.

A report of 2010 stated that Brightling was the largest deposit of gypsum in the UK and had reserves sufficient for at least another 30 years. In that year miners were expected to recover over 100,000 tonnes of the material, and the company (now British Gypsum) exported to more than 50 countries. Once it had employed over a thousand men, but this had then come down to just over 100.⁸

In the early twentieth century the mine was owned and operated by Gypsum Mines Ltd, taken over by British Plaster Board Ltd then later PLC at the end of the 1920s. BPB expanded to become a monopoly after ICI ceased its gypsum operations in 1968, and took over several overseas companies. In 2003 it made a further large investment at Brightling that expanded its capacity by 30%.⁹ But in 2005 it faced a hostile takeover by St Gobain of France, to whom it was sold. It is now a subsidiary of that company.¹⁰



The map shows (red line) the limit of existing planning consent for mining and processing; (pale brown) the abandoned workings, including the original mine; and (orange) the area now being used for mining.¹¹

Sources

See footnotes; census data are from ancestry.co.uk

George Kiloh

© BDHS 2018

- ¹ F H Edmunds, in *New Scientist*, 29 August 1957.
- ² Hastings and St Leonards Observer, 4 October 1873.
- ³ Hastings and St Leonards Observer, 13 March 1874.
- ⁴ Hastings and St Leonards Observer, 4 October 1879.
- ⁵ Sussex Advertiser, 13 June 1877.
- ⁶ Hastings and St Leonards Observer, 28 May 1881.
- ⁷ Sussex Express, 17 November 1903.
- ⁸ The Guardian, 17 June 2010.
- ⁹ <https://www.british-gypsum.com/about-us/locations/robertsbridge?tab0=0>
- ¹⁰ Wikipedia.
- ¹¹ <http://www.globalgypsum.com/magazine/articles/660-british-gypsum-brightling>