

## AN INDUSTRIAL HISTORY OF MONMOUTH.

### CHEMICAL (NAPHTHA) WORKS.

About the middle of the 19th century, there is no firm evidence as yet to hand, a small chemical works was started in a field on the Wonastow Road in Monmouth opposite the lane coming in from the Goldwire Lane and Clawdd Ddu. No deeds have so far come to light regarding the establishment of the trade but it is thought that a Mr. Jones purchased the house, at that time an ale-house called the "Victoria," in the years between 1830 and 1840. He is said to have made many alterations to the house adding the pleasant porch and generally enlarging the house which still stands on the corner of the Clawdd Ddu Lane and the Wonastow Road. In the fields opposite he erected an untidy range of brick-built sheds which contained large square tanks with ovens and furnaces beneath by which the cordwood, placed in the enclosed tanks, was cooked in order to distill wood spirit, naphthalene, and the by-products of charcoal and wood tar.

By the year 1871, the works were well established and are mentioned in the Post Office Directory for that year as being owned by Messrs. Henry Richards and Co., and were then named "The Monmouth Chemical Works."

A large haulage trade was needed in order to give a constant supply of timber and cordwood to the works and this was supplied by Messrs. Hunt Bros. of Drybridge Farm who not only hauled cordwood for this factory, but had a large timber hauling trade keeping many scores of shire horses, having lovely names such as "Boxer," "Lassie" and the like.

Naphthalene is now derived from coal-tar but originally, as at Monmouth, got from a process of wood distillation. The cordwood, having arrived at the works, was placed in large square-shaped covered tanks or ovens each equipped with tapping vents at various levels. The furnace below the tank was then started and eventually wood-tar, containing Benzine, Creosote, Naphthalene and Pitch was distilled off. The wood-tar was made to produce naphthalene by two methods. The first method called 'fractional distillation,' was achieved by raising the heat to between 180 degrees centigrade to 200 degrees centigrade when naphthalene collected in the distillation column, or in this case, the tank. At this stage the Benzine and the Creosote were wasted, the system of collecting being then very inefficient. The Naphthalene and the Pitch were then distilled off and collected in naphthalene traps and the impure parts of the naphthalene were scraped from the top of the layer of pitch. The latter product had little commercial value, and as will be seen, was used locally for domestic purposes.

The second method was by steam extraction, when the impure naphthalene was liquified when steam was passed through. Pure naphthalene is volatile in steam and is crystallised out. This industry flourished during the 19th and early 20th centuries since naphthalene formed the basis for the manufacture of dyes used in the huge and developing cotton industry in the north of England. The advent of the coal gas industry almost completely ended the process of the extraction of naphthalene from wood because coal contains 10% carbon to that of wood which is about 46%.

Many Monmouth people can recall seeing men leaving these works and going to their homes in the evening looking like chimney sweeps, so covered with carbon dust were they. The smells from the place had to be lived with in Monmouth when the south westerly winds were blowing. The place must have been extremely malodourous during this time for not only the inhabitants endured the naphtha smell but in Monnow Street the Tannery poured out its effluvia, which mixed with the brewery smells must have presented a fairly ripe mixture.



Besides the wood tar and pitch, the place also produced charcoal which was made up into small sacks to be sent off by train to the cities and towns which still found use for this product, either in charcoal heaters in offices or for use in charcoal irons and other tools. A regular sight in Monmouth on winter nights, when shops remained open until midnight, was to see a line of naphtha flares on hooks hung on to the fascia board above the shop window with the flares glowing away in a smoky and somewhat barbarous manner.

Two names remain of local men employed at these works, both are found in the register from the Monmouth Working Men's Institute. Thomas Bayliss, Ashford Buildings, Monmouth was enrolled as a member on November 29th 1879, and John Bayliss of Victoria Estate, described as a chemical worked was enrolled on October 27th 1887.

Mr. Nat Priddy, also of Ashford Buildings, Monmouth, was able to recall how people living in the neighbourhood were allowed by the firm to collect the waste pitch and take it away to be used for burning in their domestic fire grates in order to save coal in those hard times. Mr. Priddy recounted to the writer how he had seen cottagers using, on winter nights, little shovels made of iron especially for use in their homes to retrieve the little runnels of blazing pitch escaping into the hearth from the fire. It seems to have been a constant occupation in the evening. One supposes that such was the poverty prevailing at this time that some people were only too glad to get free warmth, at the cost of a little attention. Mr. Priddy remembered the Bayliss family working at the place, also a Mr. Green.

The works ceased to operate, like so many other local industries, at the time of the Boer War, which must have wreaked havoc among local manpower, in addition to the changes inevitably brought about by technical progress.

The Works itself was an untidy place of brick sheds, blackened by constant burning. Not only were local people able to get a little free warmth in the winter, but tramps and travellers found the Monmouth Naphtha Works on the Wonastow Road a place eminently suitable for a night's lodging, being attracted by the warmth of the fires. Thus the place became, at one time a haunt of such unfortunate people, and was thought to be a locality to be avoided at night by the townspeople. The Works had vanished from sight by 1908, except for one shed later used as a cattle shed.

The whole area has been recently developed by the Monmouth Town Council as a housing site, being named the King's Fee, from the Fee Farm by which the place was originally named. Early in this century, the field was always known as the Naphtha Works field and at one time prior to, and for some seasons after the First World War, was used as a playing field by the Monmouth Rugby Football Club.

#### INDUSTRIAL HISTORY

By the side of the Wonastow Road near the lane leading to the Naphtha Works, was the most prolific osier bed in Monmouth. Watered by the stream which bounds the road the osiers were tended by local basket makers who have been mentioned in the section dealing with timber and allied trades in Monmouth

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VI. BICYCLES AND MOTOR CARS  
March 5th 1968.