



Quarries and Limekilns

Quarrying has long been an important occupation in Devon, and many different types of stone are found throughout the county. Of these, granite, slate, marble, red sandstone and Beer stone are the most important. The Somers Cocks collection of prints includes images of quarrying for some of these stones.

William White, writing in his 1850 *Directory of Devonshire*, states that:

From the confused intermixture of the strata in Devonshire, the operation of earthquakes and volcanoes is strikingly apparent. *Granite* occupies the central and most elevated portions of the county, including all Dartmoor and the large district around it. Immense quantities of this durable stone are sent to Teignmouth and Plymouth for exportation to London and other distant places. Specimens of the red granite are exceedingly beautiful when polished. Laminated *schistus* is common to almost all parts of the county. *Slate* occupies an extensive surface in the northern, southern, and eastern parts of the county. *Transition limestone* occurs in many detached parts of the county, but principally between Torbay and Plymouth; the whole coast between these points being composed of this rock. This limestone is extensively got both for agricultural and building purposes. Beautifully veined *marble* is worked near Torquay, Babbicombe &., into mantle-pieces, tablets, pillars, vases, and a variety of ornamental articles. [...] *Red sandstone* occupies the district around Exeter, and most of the country around the hills of Haldon and Woodbury, as far as Torbay and Sidmouth. In some places it is sufficiently hard to serve as a durable building stone.

Also included in the collection are several prints showing lime-kilns. The Lysons brothers record that:

Prodigious quantities of lime are procured from the limestone and marble rocks, which occur in various parts of the county; [...] So extensive is the use of this article in Devonshire as a manure, that, besides the immense quantities raised in the county, there are at least 20 kilns between Weare Giffard and the mouth of Bideford harbour for the purpose of burning lime imported from Wales, and three or four more scattered round the bay.

Limekilns appear in prints throughout the county. They were often located near limestone quarries, but many were situated at the coast or on navigable waterways to make transport of the stone feasible.

There are no depictions of the very important quarry at Beer which has been worked on and off from Roman times. The stone, when freshly quarried is creamy-white, but turns grey upon exposure. In Exeter this stone has been most notably used for parts of the cathedral, and the Elizabethan portico of the Guildhall. Throughout east Devon (and elsewhere in

Devon as well) the stone has been regularly used in parish churches. Thus many, many buildings recorded in the prints are composed of this stone.

1. Granite (a)

- *Magna Britannia*
Lysons, Daniel and Samuel
London: Thomas Cadell, 1822. p. ccxciii

Granite of the best quality, which has of late been brought much into use for bridges and other public works, may be obtained in any quantities from the Dartmoor rocks; but on account of the difficulties of carriage, it has never till of late been thought of as an article of commerce. A rail-road is now making to convey granite from Dartmoor to Plymouth; and a rail-road has been completed by Mr. Templer, which conveys this article from his quarries at Heytor to the Stover canal. The heytor granite is said to be equal in quality to that of Aberdeen, and has great comparative advantages in the facility of carriage. The concern is in its infancy, but a considerable quantity has already been exported from Teignmouth; 150 men are now working the quarries, and it is expected that double that number will soon be employed.

This image shows a detail of the granite quarry at Haytor.



Image 1 SC1349, An Interior View of the Devon Haytor Granite Quarries from an Original Painting by J Cartwright, Robert Havell Jnr, 1825

2. Granite (b)

- *Present Day Life on Dartmoor and Early Historic and Mediaeval Remains on Dartmoor*
Crossing, William
Plymouth: The Western Morning News, 1903

The tools used by the quarrymen are much the same as ever they were, and consist of jumper, the borer, stone picks, points, chisels, and the muckle, but he is greatly aided by modern machinery. Steam derricks and steam travelling cranes are now used, and other appliances that enable him to perform his work more efficiently and easily.

The working of the stone after it has been quarried is a very important branch of the granite industry on the Moor. Anything that can be fashioned out of granite is made there; channelling, kerbing, pitching, rollers, corbels, pillars, and even gravestones.

This image shows men at work at the quarry at Holwell-Torr.



Image 2 SC1352, Holwel-Torr Granite Quarry High Torr, Thomas Hewitt Williams, 1829

3. Slate

- *Devon*
Hoskins, W. G.
London: Collins, 1954. pp. 263-4.

In the extreme south of the county, the various slates and schists have provided good building material since the 12th century. Most of the mediaeval churches in the country west of Dartmouth are built of slate, which beds evenly with very fine joints, and can be readily dressed with an axe. Many of the towers, as for example Halwell and Stokenham, are noble. There were scores, if not hundreds, of small quarries for this stone, the best known perhaps being those of Charleton near the Kingsbridge estuary. These probably yielded slatestone for the late Norman churches that arose in such numbers. They are specifically mentioned as a valuable piece of property in an *inquisition post mortem* taken in 1439. [...]

Many quarries in south, west and north Devon produced tolerable roofing slates, and most of the older farmhouses and buildings are roofed in this way: most picturesque in their weathered irregularity and their multi-coloured lichens. The Devon roofing slates were, however, inclined to go soft with weathering, and by the mid-19th century were giving way to the more durable Delabole slates from Cornwall.

This image shows a detail of the Carn Slate Quarry, Bickleigh Vale.



Image 3 SC2353, Carn Quarry Bickleigh Vale Devonshire, William Le Petit, 1831

4. Marble (a)

- *The History of Devonshire*
Moore, Rev. Thomas
London: Robert Jennings, 1829. p. 538

Beautiful marbles abound in Devonshire, and occur in the lime rocks at Chudleigh, Bickington near Ashburton, Buckfastleigh, Denbury, Staverton, Berry Pomeroy, Waddon, Churston, &., near Torbay, Babbicombe, St. Mary Church, King's Teignton, Drews Teignton, South Tawton, Yealmpton, Brixton, Oreston, &.; and some years ago a good deal of the Babbicombe marble was polished and sent to London. That obtained from the Chudleigh and Harcombe rocks is manufactured into beautiful chimney-pieces, and sent from the port of Teignmouth.

Workers at the West Hoe quarry.



Image 4 SC2107, Mouth Edgcumbe from the Hoe Looking Over the Quarries, J D Harding, 1830

5. Marble (b)

- *The History of Chudleigh*
Jones, Mary
Exeter: S. Drayton & Sons; Chudleigh: G. E. Searle, 1875. p. 140.

Chudleigh Rock is an immense mass of carboniferous limestone, rising perpendicularly to a considerable height, and presenting a bold outline, which has a magnificent appearance as approached from the Plymouth road. The sides are overgrown with trees and bushes, above which the masses of rock appear. The quarry has been worked extensively, and great quantities of lime of superior quality obtained for manure and other purposes. The marbles from the Chudleigh limestone are in great request for ornamental purposes. They are chiefly of a dark colour intersected by veins of white spar, and abound in organic remains.

Tourists viewing the "magnificent appearance" of Chudleigh Rock.



Image 5 SC0359, Chudleigh Rocks Devonshire, Henry Wallis, 1832

6. Marble (c)

- *Marble and Marble Working*

Renwick, W. G.

London: Crosby Lockwood and Son, 1909. pp 105-6

The marbles of Devonshire possess a beauty distinctively their own. They occur mainly in the Middle and Upper Devonian Period of Palaeozoic time, and are among the older of the marble formations. The varieties produced range from light pink and yellow to dark grey, almost black, some of the red varieties being of great brilliance. The silent evidence respecting their age presented by the fossil markings of certain of the varieties is of interest both to geologists and palaeontologists. The district from which the marbles are obtained ranges from Newton Abbot to Plymouth, and inland to Chudleigh and Ashburton. A grey marble streaked with red is found at Ipplepen, and a more handsome variety at Silverleigh; a light red variety at Stonycombe, near Kingskerswell; a bright red at Ogwell; the Petitors, yellow, clouded and grey at Babbacombe, near Torquay; a dark grey, with red and white veins, at Ashburton, with a somewhat lighter variety at Chudleigh; a rich-coloured red, with large fossils, at Radford; and several red and grey marbles in the neighbourhood of Plymouth. These include the White and Crimson-veined Black; Devon Sienna, the Spangled Devon Spars, and avositidae, with its fine fossil markings.



Image 6 SC3037, Marble Quarries at Petit-Tor near Torquay, Villeneuve, 1828

7. Red Sandstone

- *Devon*
Hoskins, W. G.
London: Collins, 1954. p. 261

The broad belt of New Red Sandstone, running from the Somerset border down to the south Devon coast at Paignton, produces serviceable building stones where sufficiently consolidated. There are old quarries near Poltimore and Broadclyst, but the most notable are those in the new red breccias at Heavitree and Whipton, just outside Exeter, which were extensively worked for the rebuilding of the attractive little red city churches during the 15th century. [...] To the south of Exeter, the mediaeval quarries at Exminster, Kenn and Ugbrook were important, and give a fine series of red sandstone churches in the lowlands between Exeter and Paignton. The most notable of these are Kenton and Paignton itself.

Kenton Church is built of red sandstone from Exminster.



Image 7 SC1389, Kenton Church, T Bonnor, 1793

8. Lime-kilns (a)

- *The History of Devonshire*
Moore, Rev. Thomas
London: Robert Jennings, 1829. pp.538-9.

So extensive is the use of lime as a manure in Devonshire, that not only are prodigious quantities raised from the limestone and marble rocks in various parts of the county, but there are at least twenty kilns between Wear Gifford and the mouth of Bideford harbour, for the purposes of burning lime imported from Wales, and three or four more scattered round the bay. There is indeed scarcely an inlet or creek, either on the northern or southern coast of the county, that is not supplied with a lime-kiln; and when the stone is not found in the vicinity, vessels are employed to convey it from the lime-rock districts. The immense quarries at Oreston near Plymouth and the adjacent parts, supply the kilns on the whole range of the Tamar, Tavy, and St. Germain's rivers, as well as some other districts. The beautiful cliffs at Berryhead in Torbay, and at Babbicombe, furnish those on the Teign, the Exe, and the adjoining coast. The artist and the man of taste may possibly turn from works of this kind with something like disgust, lamenting that the ruthless hand of commerce is permitted, with provoking unconcern, to demolish by piecemeal the grand and magnificent ornaments of the coast, and that the owners of these splendid scenes, with the sordid love of gain absorbing all other considerations, are literally retailing the picturesque and beautiful by weight and measure; whilst the friends of industry and productive labour will observe only in such operations a rich increase of agricultural produce, and consequently of general benefit.

A row of lime-kilns sit on a ledge above the Sidmouth coast.



Image 8 SC2642, Lime Kiln Sidmouth, C S Williams, 1825

9. Lime-kilns (b)

Nearly the whole of the south-western portion of Devon abounds with lime-works. Those of

Chudleigh especially, and its vicinity, are numerous; and the rocks here have long been celebrated, not only for their beauty, but the excellence of the lime which they supply, which is remarkable for its extreme whiteness. In the centre, and towards the northern district of the county, little lime-rock is found; and the quarries in that direction produce a darker kind of lime, which is not so well adapted to every kind of soil. The principal of these quarries are at Drewsteignton and South Tawton; and the large excavations near the present lime-works of the latter place show that works of this kind have been carried on there for a great length of time. Besides those already specified, the following may be mentioned: namely, those at St. Mary Church, Buckfastleigh, Bickington near Ashburton, Branscombe, on the southern coast; South Tawton, Bampton, Canonsleigh, Hackworthy, Castle Hill, Swimbridge, Combe Martin, & Earl Fortescue, who owns the works at Castle Hill, had formerly lime-works at Challacombe, but they have been discontinued. The great lime-works at Swimbridge are on an estate called Marsh; and there are other smaller works in that parish and Landkey. There are also several small lime-works in Combe Martin, and those of J. D. Basset, Esq., which are on an extensive scale, as are those at Canonsleigh in Burlescombe.

A lime-kiln on the beach at Combe Martin can be seen in this print.



Image 9 SC0413, Comb Martin, William Miller, 1825

10. Beer Stone

- *Devon*
Hoskins, W. G.
London: Collins, 1954. pp. 259-260

The extensive quarries to the west of Beer were worked in Roman times. There is evidence that Beer stone was used in some buildings in Roman Exeter, and in the Roman villa discovered near Seaton. It was used also for exterior work at Exeter Cathedral from the early 12th century onwards. [...]

Beer stone was extensively used for interior work, not only in the cathedral at Exeter and the larger churches like Ottery St. Mary, but in nearly every parish church in east Devon, and in those parts of south Devon that could be reached by water. In scores of parish churches the arcades are of Beer stone. So, too, are the deeply-carved capitals, decorated usually with a naturalistic foliage, which are so characteristic of these Perpendicular churches. [...]

The Beer quarries were at their zenith during the 15th century and the early 16th, when so many Devon churches were being rebuilt or enlarged. The sudden cessation of church building after about 1540 must have brought about a dramatic decline at the quarries, especially as the stone was not generally regarded as suitable for external work and the industry could not benefit much, therefore, from the era of country-house building which followed that of church building.

The Elizabethan portico of Exeter Guildhall is built of Beer Stone (although the pillars are granite).

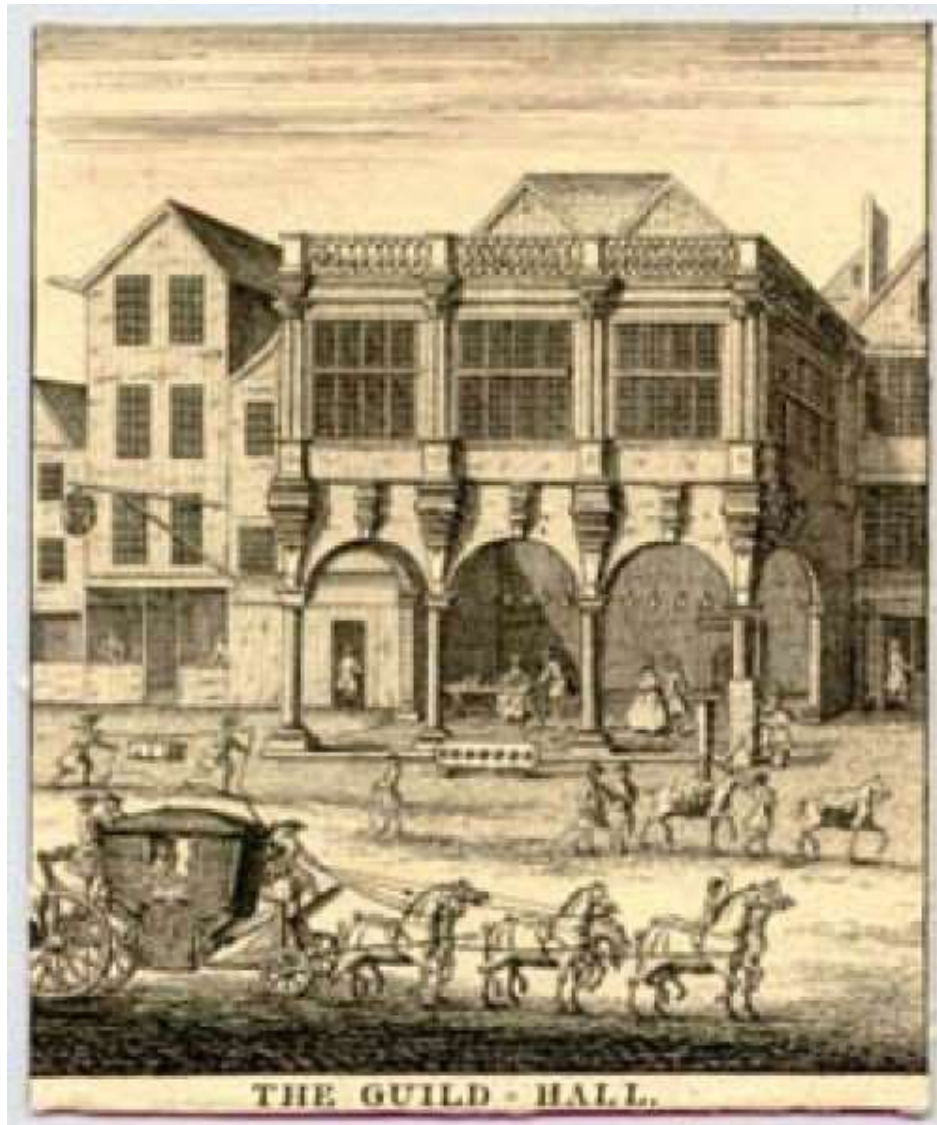


Image 10 SC0982, The Guild-Hall, R White, 1744

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