

PILKINGTON'S CAVERN. CASTLETON

With comments on Bray's cavern and Stemple Highway

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ABSTRACT

The long-lost Pilkington's Cavern of 1789 is now known to have been entered via a mine shaft on Faucet Rake and to have descended a series of natural caverns to reach the Speedwell Mine's Far Canal at a total depth of some 600 feet. Lead ore was mined at upper levels and taken down some 150 feet for washing.

A marathon caving-cum-mine descent in the hills near Castleton was described by Sullivan (1780 and 1785, vol. 2, 65-70 and 81-89) as leading into a wild underground torrent, generally assumed to have been the Speedwell Cavern's stream cave system. Sullivan's account is based on letters written in August 1778, before the Speedwell canal tunnel had reached the stream caverns. A few years later Pilkington (1789, vol. 1, 73-75) gave a much more factual account, also apparently written several years earlier. He gave depths and distances but unfortunately no bearings and no exact location, though he did refer to the "level driving from the Winnats". A plagiarized version of Pilkington's description was published in a pamphlet by Richard Milne in 1813 with sundry errors introduced (see Warwick, 1947). In spite of searches in various places estimated by working backwards from assumed points of entry into Speedwell, and to the entrance shaft being "400 or 500 yards" west of Peak Cavern", it was not until 1944 that a breakthrough was made when Ford dug through a silt choke on the side of the Far Canal into what became known as the Assault Course series of passages (Ford 1956). In these a high cavern was found with stemples still in the walls, and the remains of a wooden platform some 50 feet up in the roof. This fitted the description of Pilkington's last descent. However, it was not until 1981 that this was climbed using self-drilling bolts. After traversing 160 metres of narrow winding passage a series of five further pitches was climbed and it was quite clear that these fitted Pilkington's account of 1789. A full description has been given by the author (Shaw 1983) and only an outline of the features relevant to mining is given here. The description is given moving upwards as explored and so is in the reverse direction to Pilkington's account.

After the first stempled climb in the 1944 cavern, the narrow passage showed clear signs of the miners having blasted off corners to get long timbers through. Shot-holes were driven in both directions, and the rubble was either bedded into the floor or transported to the bottom of the next cavern. Artefacts found in this passage included the end of a pick, a brass button, a buckle, the remains of a pair of boots and some nails.

At the top end of this passage a small calcite pipe vein was found but the miners seemed to have ignored it. Close by was the bottom of a natural rift chamber which was bolt-climbed, Round Pitch. This was soon followed by Galena Pitch, into a chamber with the remains of a washing floor in the form of a few rotten boards with washed galena on or between them and against the wall, where a trickle of water fell. A series of short climbs up natural rifts was followed by Chain Pitch, well decorated with flowstone. Pilkington noted the use of a chain and a length was found in a crevice here. Above this was another washing floor of boards with washed galena, but little sign of mining except stemple holes. Above, two stempled climbs led via a short passage to a climb amongst boulders into a large chamber, Mud Hall. Though not as large as Pilkington's account it is impressive, with a flat bedding plane roof and sloping muddy sides. At the upper end a trench had been dug through a thick clay by the miners to ease the otherwise flat-out crawl. The trench led to a partly collapsed drystone wall, which may have marked a mining boundary. Beyond the wall is Watricle Cavern, which Pilkington described thus:

"When the miner first broke into it, it appeared beautiful beyond description. Upon introducing his candle thro the hole which he had made he was struck with astonishment. But when he entered the cavern, it in beauty exceeded his highest expectations. The roof and sides were covered with water icle, and almost as white as snow".

The stalactites were stripped and sold as curios and have now started to grow again.

Watricle Cavern is developed on Faucet (= Foreside) Rake, west of the Bottomless Pit Cavern, and for the first time in the present exploration there is abundant evidence of mining activity. There are three veins, two close together and the third a few yards to the north. The veins converge westwards and all have been worked, though the stopes are very narrow, rarely more than 15 inches wide. The veins

contain galena, fluorite, baryte and calcite, and they were blasted out, leaving $\frac{1}{4}$ inch diameter shot-holes. A bench built of limestone blocks is on one side and was used as a dressing bench, though the process was carried out dry as there is no water here. Presumably the partly dressed ore was then carried down two or three pitches to where there was sufficient water; then it had its final washing and the final product was carried back up. This section of the mine-cum-cave yielded a number of artefacts; a wood and iron kibble, tallow dips, a leather harness and with chain attached for dragging corves, iron banding from a corve, a broken wedge, and a clay pipe of late 18th century style.

Pilkington's original entrance shaft, which he recorded as 50 yards deep, was not certainly located as there were heaps of boulders suggestive of a run-in or back-filled shaft in several places.

The lost cave system of the 18th century has thus been re-discovered. From a shaft on Faucet Rake the miners escorted Sullivan and Pilkington on different occasions (and apparently others, though the surviving accounts are too vague to be much use). They descended to a total depth of around 600 feet and entered the stream cave system somewhere in the vicinity of its intersection with the canal. Pilkington's account fits the downstream end of the Assault Course streamway, which became sumped when the canal was flooded, leaving the present flat-out muddy crawl of the Assault Course entrance passage as the only link. This of course means that, though Pilkington's account was published in 1789, it may have been written concerning a visit 12 years earlier as the canal was completed and flooded at least since 1777.

Two interesting points arise from this discovery and analysis: one is that mining records and archives say virtually nothing about the existence of a major stream cave system and its ramifications, and we would have known very little about them if it had not been for Sullivan's and Pilkington's 'tourist' descriptions. The second point is that the miners found it worthwhile to carry partly dressed ore down some 150 feet of stemples in natural caverns for final washing before carrying it out to the surface again, instead of doing the washing on the surface.

STEMPLE HIGHWAY AND BRAY'S CAVERN

Martyn Farr's discovery via the far reaches of Peak Cavern (Farr, 1981-2) of a worked-out lead vein, named by him Stemple Highway, may equate to a part of the Speedwell Mine Title named in the Barmaster's Book as a "vein on Upper Hourdlo near the late Jno Eyre's Grove on New Rake". Stemple Highway trends NW-SE close to the crest of Hourdlo, and appears to be a southeasterly branch out of New Rake, though there is little surface evidence of it. Surveys of Peak and Speedwell Caverns suggest that Stemple Highway is close above the Boulder Piles and chokes in the Main Streamway of Speedwell (nowhere near Pilkington's Cavern). The remaining veins and pipes which produced ore measured for Mr. Oakden (proprietor of Speedwell Mine) can all be related to accessible or partly accessible workings off the Speedwell's Far Canal.

Stemple Highway may be the cavern noted by Bray (1783) who noted "at some distance on the other side of the castle, a cavern in a mine, which, if it was not for the great difficulty of access, would be well worth visiting; from the description it seems to resemble, in miniature, the famous grotto in Antiparos, in the (Greek) Archipelago". Antiparos is in fact a short passage into a vast vertical cavern and this does not really fit with Pilkington's Cavern.

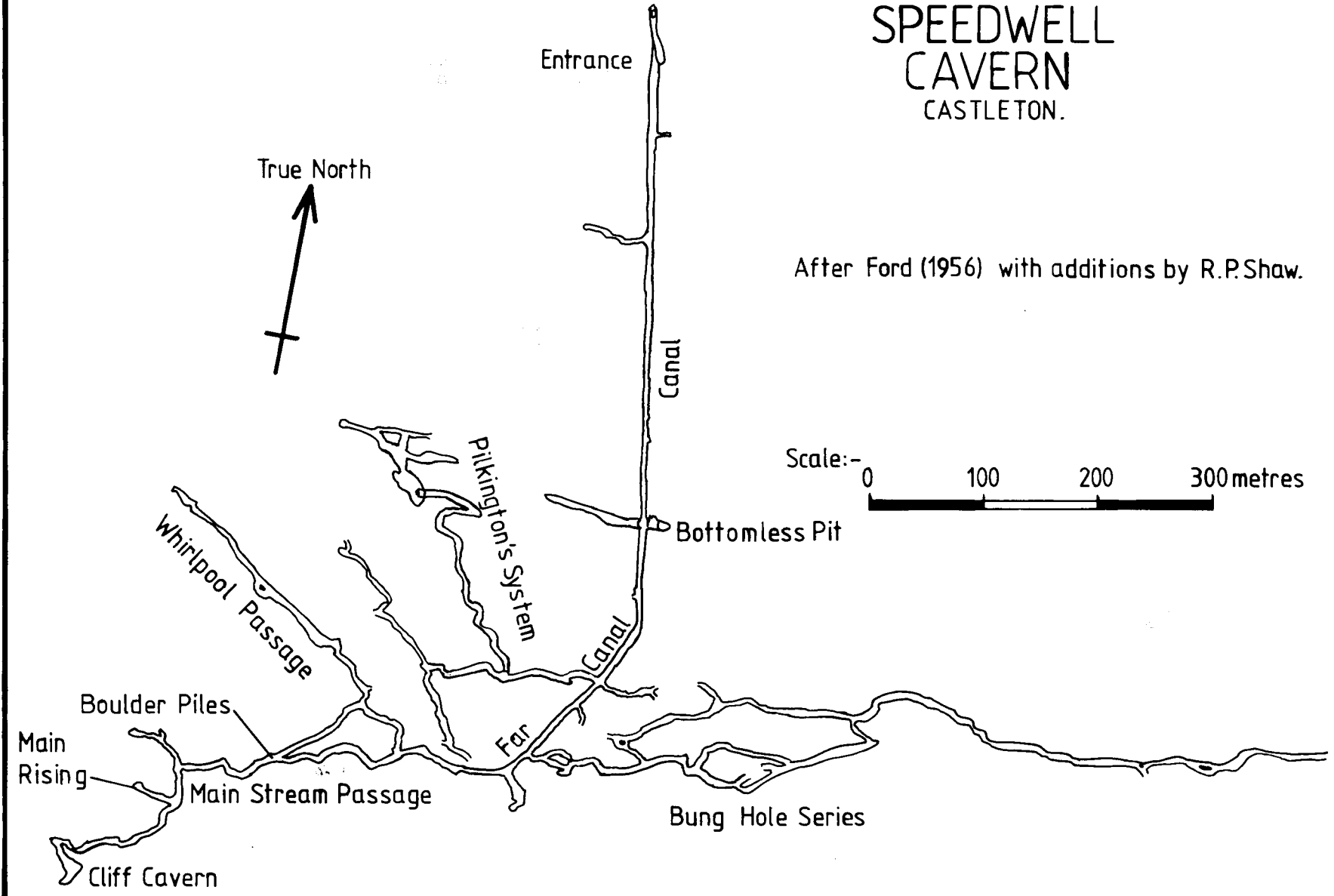
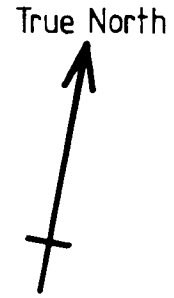
The cavern discovered by Martyn Farr in Stemple Highway had stemples disappearing into the gloom high overhead and it may well have been the miners' original route into the Speedwell streamway, independent of Pilkington's Cavern.

In 1796 Hatchett (see Raistrick 1967) may also have been referring to Bray's Cavern, for he described briefly that, beyond the plankway in the Speedwell stream caverns (which ends at the Boulder Piles), "by climbing up about 300 yards there is an opening to the day".

Taken in conjunction with Pilkington's Cavern, Stemple Highway and Bray's Cavern suggest that there were two independent routes into the Speedwell stream caverns before the canal tunnel was driven, and thus the canal was a deliberate venture to reach the caverns. One cannot help wondering whether accurate surveys of the two-cave-cum-mine systems were carried out to guide the canal tunnel to its target, but regrettably the available Barmasters records are silent on even the existence of the stream caverns.

SPEEDWELL CAVERN CASTLETON.

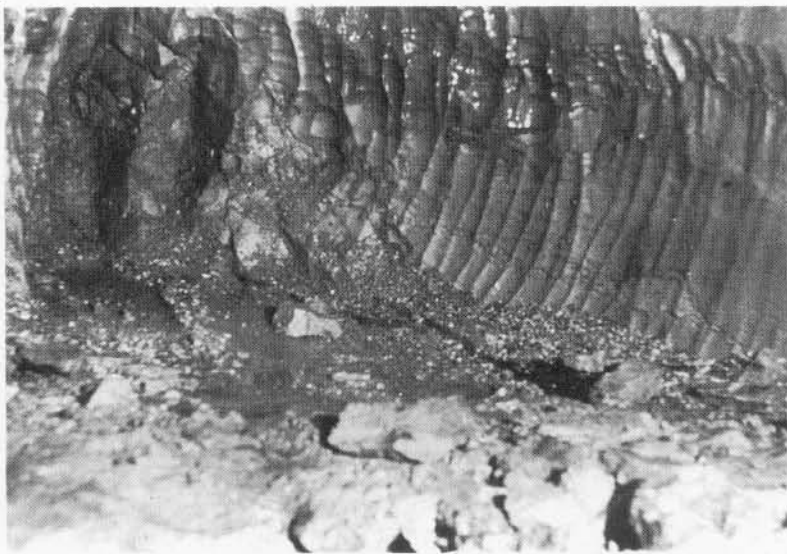
After Ford (1956) with additions by R.P.Shaw.



PILKINGTON'S CAVERN



1. Bottom of Round Pitch with fallen stemples on miners' debris and washings with stemple sockets in wall behind.



2. Above Galena Pitch. Remains of ore stockpile on boards at ore-washing floor.



3. Remains of leather harness for dragging corves.

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