

## The Erme Estuary, Devon, historic wreck site, 1991–3

### **N. Oldham**

*White Cottage, Blackpool Sands, Stoke Flemming, South Devon, UK*

### **M. Palmer**

*146 Northampton Road, Rushden, Northants, UK*

### **J. Tyson**

*10 Stone Way, Duston, Northampton, UK*

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#### **Introduction**

The River Erme is a small river which flows from the edge of Dartmoor to the south coast of Devon. Near its mouth, sandy beaches are exposed on either side at low water. Seaward of the beaches, the estuary is flanked by commanding cliffs, while across the entrance is a notorious reef called Mary's Rocks. These rocks give the appearance of being split in two but consist of one reef with very narrow entrance channels on either side. They are only partially exposed at low water, while at high water they can be covered by as much as 2 m. Immediately adjacent to the river mouth is the village of Mothecombe, but the dominant local manor is Ermington, which has records dating back to the inquisition made during the reign of Edward I. Between the reef and beach there is 7–10 m of water, depending on the state of the tide. This can give the impression from the sea, particularly at high water, that it is a tranquil and hospitable bay providing safe anchorage. However, it is far from being a place of refuge and local knowledge and extreme caution are required to navigate a boat safely to the deep water behind the reef, even during calm conditions (Fig. 1).

In 1520 Leyland warned that the bay as 'wher is no Haven, lyth ful of Flattes and perciulus Rokkes and no ship cummeth in Tempest hither, but in Desperation.' Leyland further describes the loss of two of Philip of Castile's ships in January 1506 when he and his wife, Joanna, were travelling from Antwerp to Castile to claim its throne. His fleet of some 300

ships was overtaken by a storm which dispersed them along the Channel with catastrophic loss of life and ships. Two of these ships were noted as being lost in the Erme Estuary at Mothecombe.

These wreckings are also mentioned by Trisdon Ridsen (1720: 183) who states that Philip, King of Castile, landed at Mothecombe because of a tempestuous storm with the loss of two of his ships in the Erme. Spanish State Papers (Gairdner: 379) shows in fact that Philip himself actually landed at Melcombe Regis. This is further confirmed by Moncrieff (1897: 68). Ridsen (1720: 183) also describes the wrecking of a ship on 13th January 1632, giving details regarding customs and describing goods that were legally 'wreck' and those which were not. This wreck is recorded in contemporary manorial records. These are now in the hands of the Mildmay family who are the present Lords of the Manor.

From the sea, Burgh Island to the east of the Erme can easily be mistaken for the Great Mewstone, east of Plymouth Sound. This has resulted in calamitous errors of judgement; for instance, the Court Marshall records the loss of the *Pygmy*, a naval cutter of 14 guns, on 15th December 1793 together with the officer in charge, Lieutenant A. Pullibank, and many of the crew (PRO: ADM1/5330).

#### **Archaeological evidence**

In 1990 a possible cannon site was reported in the Erme Estuary, 400 m north of the Mary

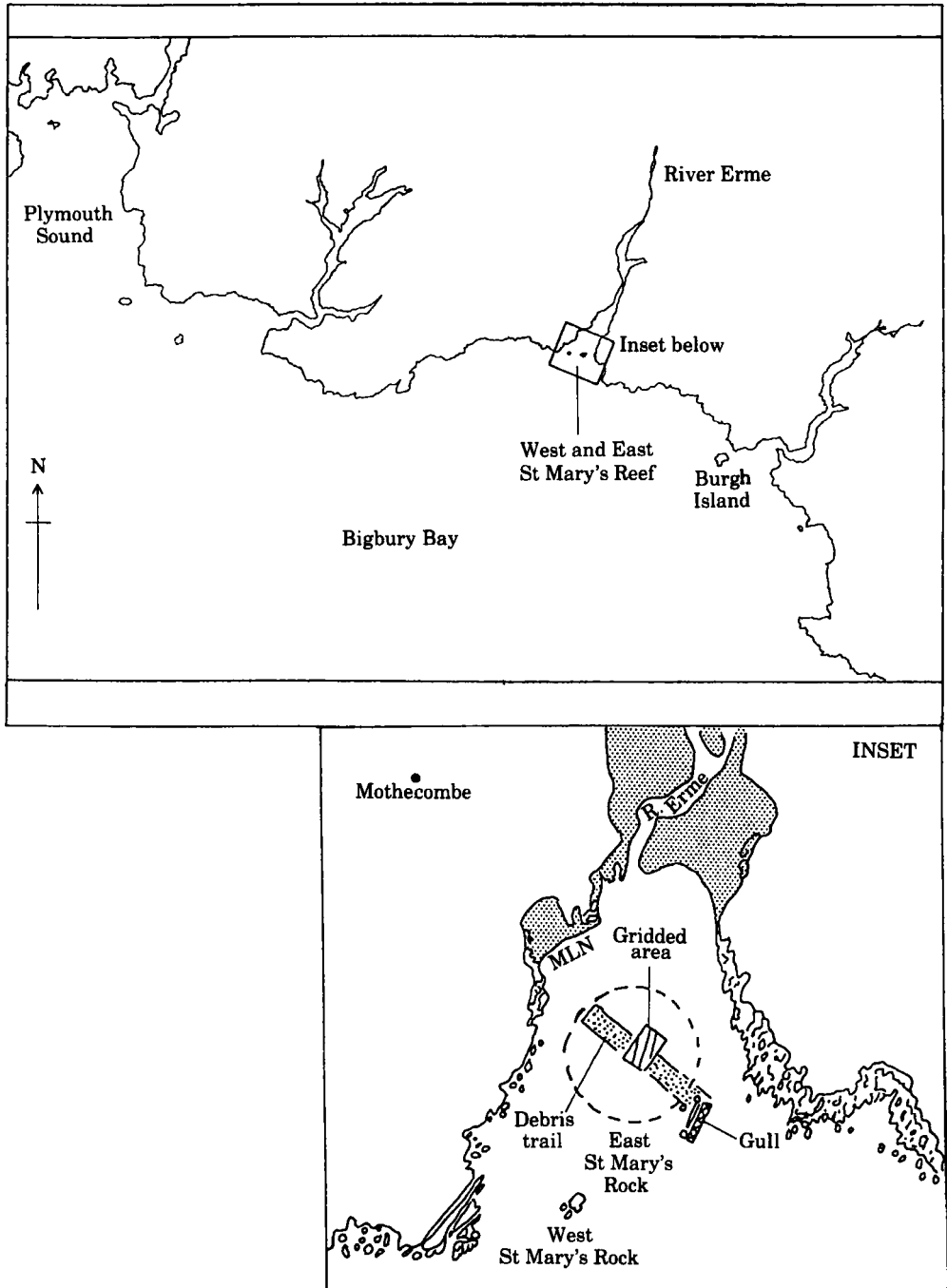


Figure 1. Map of Bigbury Bay, with the location of the Designated Area (inset, circled).

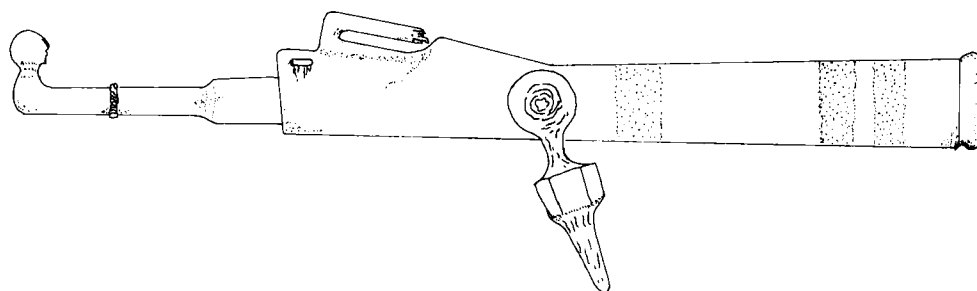


Figure 2. Swivel gun. Length 1.4 m (Stephen George).

Rocks, towards Mothecombe beach. A team of divers from the south-west branch of the Nautical Archaeological Society organized an investigation of the site, and recording and survey work was begun to try to identify the wreck. No ballast or wreck mound was noted on the flat seabed, but a scatter of iron guns was observed. The cannons were of different sizes and types and precise identification was difficult because of concretion adhering to them. After recording *in situ*, a small swivel gun (Fig. 2) was carefully raised for further analysis and conservation. It was found to have a piece of knotted rope around the tiller, and with the tampion in place was still loaded with flint pebble shot. The flint shot was clearly recognizable from X-ray, and later, during conservation, when the tampion and contents were removed. The breach block was not located during the initial survey but was recovered during field-work later in the season. The gun had been constructed from a solid sheet of iron, turned into a tube and jointed. Reinforcing rings shrunk over the barrel were no longer in place, but marks where they had been were evident. This gun is still undergoing conservation. Opinions over the age of the gun, which is of a type notoriously difficult to date, range from 1500 to the late 18th century (Carpenter, 1993; Smith, pers. comm.).

The team considered the site of potential importance and applied for designation under the Protection of Wrecks Act. In May 1991 together with a license for a comprehensive pre-disturbance survey this was granted by the Department of Environment (Protection Order no. 1991/110/Order No. 1).

#### *Pre-disturbance survey*

The objectives of this survey were to:

1. produce an accurate plan incorporating all visible features and objects and metal-detector contacts indicating burial material;
2. establish the extent of the site;
3. record as much *in situ* information as possible about located objects, and identify any action necessary to safeguard each item.

The seabed comprises mobile and shingle which makes it difficult to establish firm datum points. A large iron anchor on site provided an initial point of reference. It was decided that the most efficient way systematically to search the area and plot information was by a rope grid on the flat seabed. A weighted line 30 m long and marked at 2 m intervals was laid through the site and anchored initially by blocks at each end. Two 24 m-long lines were laid perpendicularly at each end of the base-line. This system allowed the enclosed area to be divided into 30 × 4 m corridors and also permitted 'add-on' lines extending the size and range of the grid. This method was not without its problems. The lines regularly disappeared, probably due to the activities of anglers and pleasure-boat owners anchoring illegally. Site disturbance has been a continual problem, despite a small, clearly-marked buoy over the site. Experiments with alternative fixings and different methods of marking are in hand.

Once the grid was laid, visible artefacts were plotted onto the survey plan together with natural features. A systematic metal-detector survey was then carried out over the whole of

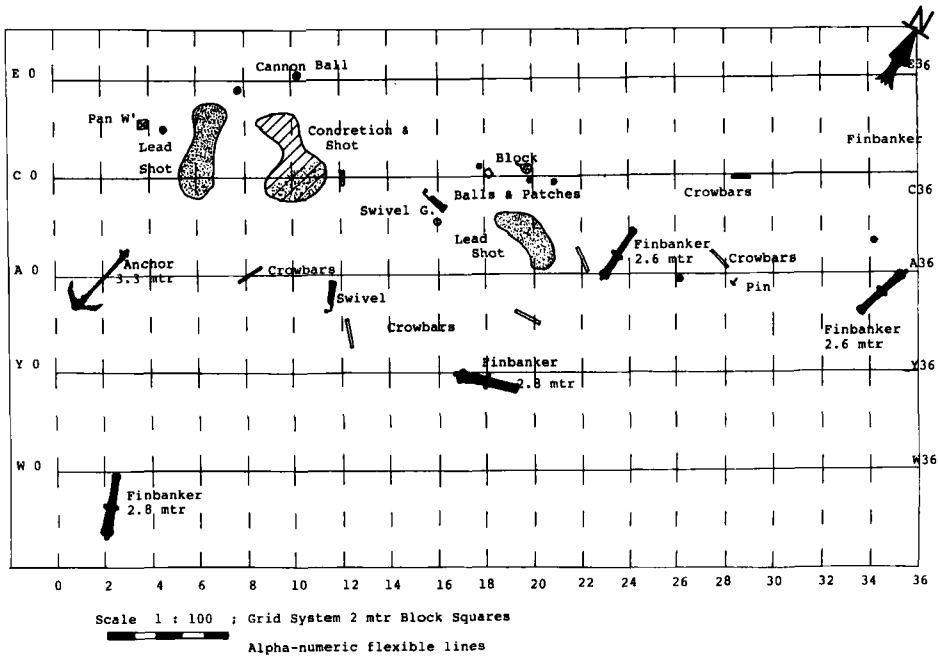


Figure 3. Pre-disturbance survey, 1991-2.

the enclosed area and contacts were recorded and plotted (Fig. 3). The survey revealed a number of cast-iron cannons together with a rigging block, small diameter lead shot, and two fire shot. Although the iron spikes on the concretions had corroded away, tarred rope was still intact. Various isolated concretions were noted. Metal detector sweeps and visual searches were made outside the grid and these located further guns and cannon which were triangulated to the extremity of the grid. Many

records were made of contacts lying beneath the sand.

A large cast-iron cannon (Fig. 4) was eventually recovered for identification. This has now been identified as being a Swedish *finbanker* manufactured between 1690 and 1720 (Carpenter, pers. comm.). Unusually for the period, it is heavily ornamented, particularly around the pronounced barrel rings and fillets supporting the astragal. It is engraved with the weight marks *XXI* which represent its weight in

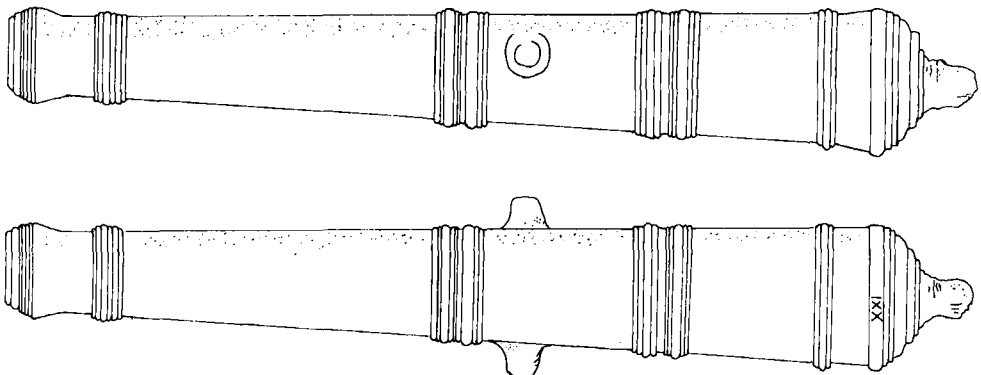


Figure 4. Iron *finbanker* gun. Length 2.69 m (Stephen George).

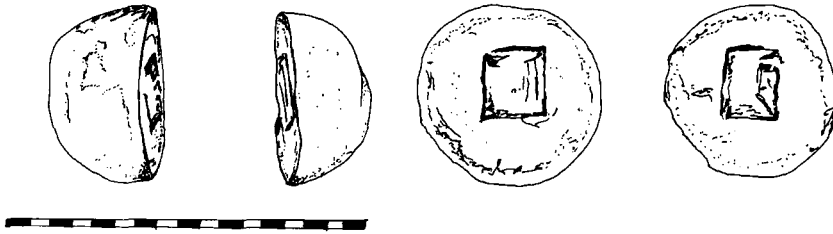


Figure 5. Bar shot; cm scale (Stephen George).

Swedish pounds. It was probably made for a Swedish ship as these marks were not normally put on guns of this type made for export (Roth, pers. comm.). The apparent difference in date between this gun and the swivel gun raised earlier suggests that they derive from different wrecks.

**Excavation**

During 1992 a license was issued by the Department of Heritage for partial excavation within the Designated Area to:

1. test different parts of the site;
2. establish the extent and spread of buried material.

The excavation was planned in two areas. Portable cofferdams 2 m square made of weighted timber were prefabricated and placed horizontally on the seabed. They held back the loose sand and helped define the limits of the excavation. The advantage of this system was that the depth of excavation could be extended as the sections were constructed to be able to sit one on top of the other, each being 250 mm high. They were prefabricated in 2 m squares to eliminate any bending of the sides. The disadvantage was that the working area was limited, and on reflection, a larger size would have been preferable. The excavation was carried out by divers operating water dredges fitted with adjustable volume nozzles. The maximum depth reached in both areas was 1 m and the stratigraphy was very loose sand to a depth of 450 m overlying loose rocks and shale which became more compacted at depth. Bedrock was not located but the compacted nature of the lower sediments, and the lack of any archaeological material within it, indicates that it has probably been stable since before the wrecking of ships on the site.

Small lead shot and numerous crowbars were found, together with isolated concretions. None of the material was deeper than 0.3 m, presumably because only the top 0.3 m of sand is mobile. No ship timbers or coherent structure were found. Considering the number of guns on the site, it was surprising not to find more cannon shot.

During the second half of the 1992 season, a debris trail was noted between the main site and the reef, 400 m to the south and outside the Designated Area. On the edge of an 80 m-long gully on the seaward side of the reef, an iron gun was located. This was used as a major datum point for work (still in progress), in this area. The gully, with vertical sides between 1 m and 3 m apart, is partially fitted with loose rock, sand and shale. It was investigated both visually and with the aid of metal detectors; the position of artefacts and contact points were plotted.

Numerous bar shot have been found in the gully. These were constructed of two lead hemispheres joined by an iron bar. Despite the fact that none of the bars survived, voids in surrounding concretions has allowed some original dimensions to be ascertained. Figures 5 and 6 show comparisons with those from the *Campen* (1627). Small-diameter lead shot in the gully is similar in size to that found on the main site.



Figure 6. Bar shot: compare with Fig. 5; cm scale (Stephen George).

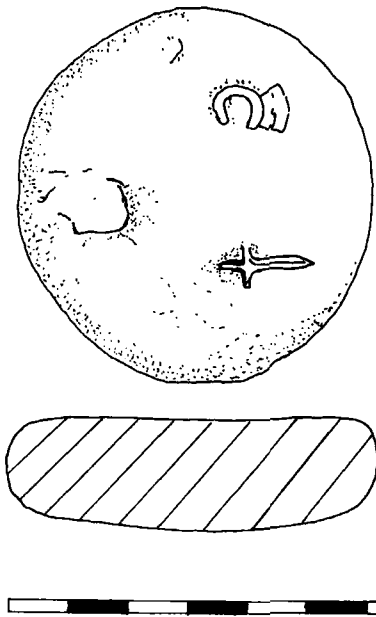


Figure 7. Bronze pan weight; cm scale (Stephen George).

A French silver half ecu of Louis XIII, dated 1621, was located within this gully, together with one other silver coin and two copper coins, one clearly showing a rampant Lion. These have all been identified as French, and of the same period. A 450 g pan weight, 60 mm in diameter, was found in rock and shale 0.4 m beneath the surface. It is clearly marked with a stamp depicting a dagger, a crown and a 'C' (Fig. 7). A dagger was the weight mark of the Guildhall in London, while the crown with a 'C' was the mark of Charpentier of Cheville between 1549 and 1780, so identification is at present inconclusive. Other recovered artefacts include a small cast bronze figurine (Fig. 8), possibly a religious object provisionally dated to about AD 500 and originating in the Iberian

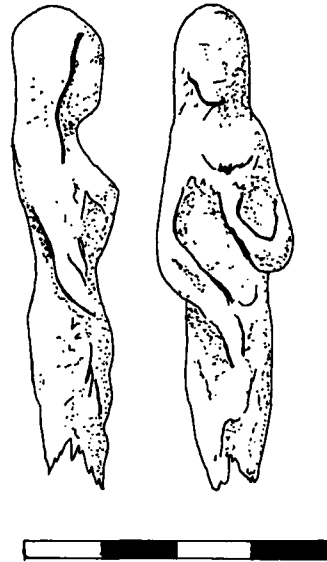


Figure 8. Bronze figure; cm scale (Stephen George).

Peninsula (Aylmer, pers. comm.), and a bronze pestle of a type used over many centuries (Fig. 9). These recoveries may shed some light on the origins of the wrecks, but research continues. Other items include many different sizes of lead patch, presumably from the ship's hull, sounding weights, apothecaries' instruments, and a large heart-shaped single block, probably part of the standing rigging (Fig. 10).

**Conclusions**

In an area like the Erme Estuary where there have been many recorded shipwrecks, and no doubt many that went unrecorded, it is difficult to associate located artefacts with specific ships. The information recovered from two sites 400 m apart in a dynamic environment could relate to one, two or even more wreck events.

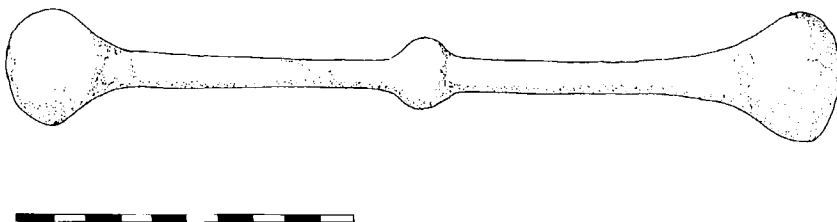


Figure 9. Bronze pestle; cm scale (Stephen George).

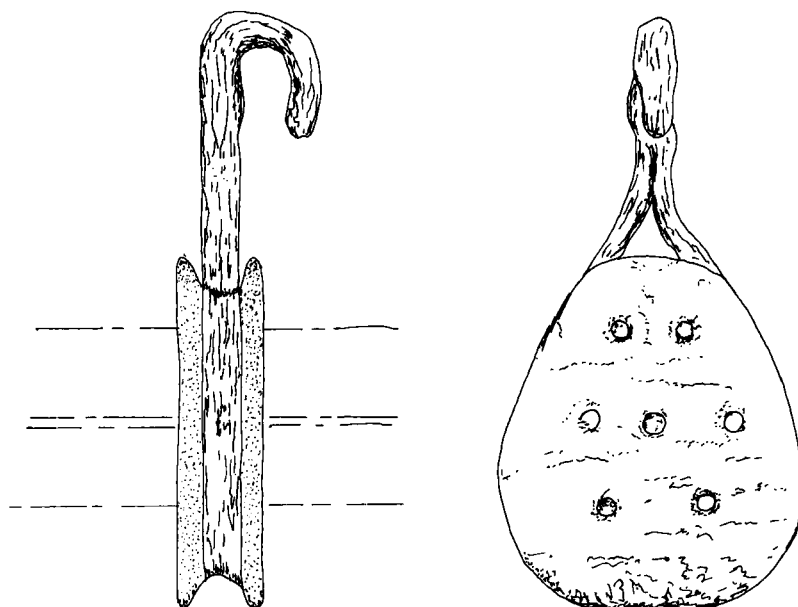


Figure 10. Single block; height 58 cm (Stephen George).

Although most of the identified material could have been in use in the mid-17th century, some of the items could have been made early in the 16th century, while others, such as the cast-iron *finbankers*, are possibly early 18th century. The sediments within which the finds were located were mobile and did not allow finds to be related stratigraphically to each other. There are a number of candidates for wrecks of approximately the right period which are recorded. At this stage no definite correlation can be made between the historical records and the wrecks.

In addition to those losses in the Erme recorded by both Leyland and Ridsen, other recorded losses in the vicinity of Mothecombe and the Erme have been obtained from research into manorial records, county records, the Public Records Office and other contemporary sources, revealing:

- 13th January 1632, 'a significant wreck' (Ridsen, 1720: 183);
- 20th February 1637, a French ship (C.S.P. DOMI: 270);
- 21st February 1668, a Genoese ship (C.S.P. DOM1668: 242);
- 29th November 1691, a Dutch ship (C.S.P. Venetian: extract Italian: 311);

- 1st February 1695, a French ship (C.S.P. DOM1695: 238);
- December 1698, unidentified (C.S.P. Venetian: 311);
- 1700, the *Rochester*, formally the *Hope* (Manorial Records 1297 to 1850 are not indexed);
- 15th December 1793, the *Pygmy* (PRO ADM1/5330);
- 1795, the *St John Baptista* (Lloyds List: 2770).

Further work will hopefully produce more evidence for the sources of this shipwreck material.

During field-work in 1993, a separate wrecksite was located within the Erme Estuary. Whilst no structural timber was located during the initial survey, many ancient tin ingots were found. These may relate to the discovery during excavations in 1962 on Mothecombe beach of ingots and pottery dated to about AD 500 and identified as either Aegean or from Asia Minor (Fox, pers. comm.). This separate site within the context of the Erme and the Designated Area is subject to a separate Protection Order by the Department of National Heritage and to a separate report.

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