



MARINE
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SURVEYS

The *Albion* and *Hindostan*: the fate of two outward-bound East Indiamen

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Introduction

This paper is concerned with two United East India Company wrecks in the Thames Estuary which became the victim of salvage operations in 1985-6. Permission was obtained from the salvors by the charity Marine Archaeological Surveys to record much of the material raised from these sites, and a more detailed publication is in progress. Since 1983 MAS has been concerned with the identification and evaluation of archaeological sites in British territorial waters. (Redknap and Fleming, 1985).

The *Albion* (1765)

In 1985 attention was drawn to material reported to the Receiver of Wreck at Ramsgate from a site approx. 9.5 sea miles (c. 17.6 km) to the north of Margate, lying to the south of Long Sand, in a charted depth of 17 m and at that date lying outside UK territorial waters (Fig. 1). The salvors believed the site to be that of the home-ward bound *Walpole*, wrecked on Margate Sand in 1803. However, our examination of the material recovered from the site suggested an outward bound East Indiaman probably dating

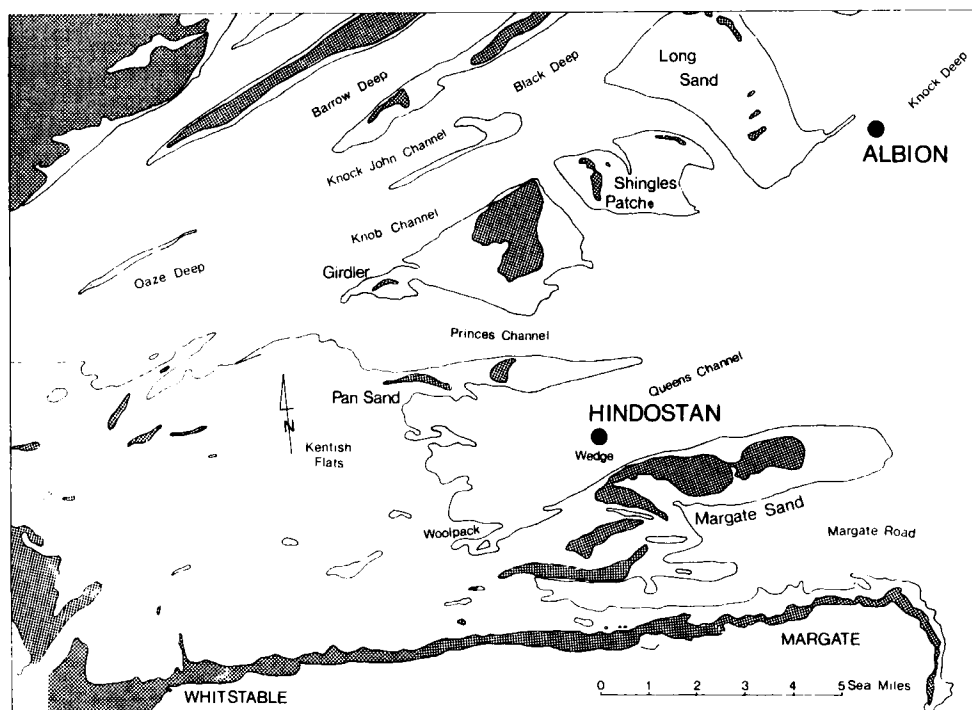


Figure 1. General map of the Thames Estuary. Apart from sites, only the main channels, 3 m contour and areas that dry at low tide (shaded) are depicted.

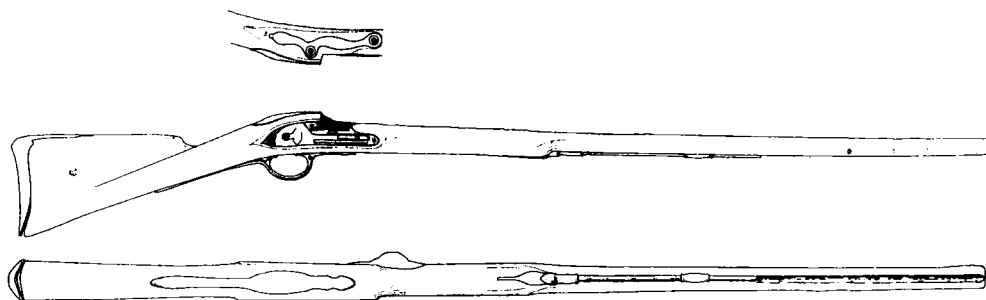


Figure 2. Musket of Lawrence pattern from the wreck of the *Albion* (1765). The trading mark of the UEIC is stamped on the side of the butt. Length overall: 1.28 m.

to the 1760s. Lead ingots all bore the UEIC mark, and were stamped with the numbers 73 or 74, and a musket from the wreck was identified by David Harding as an EEIC musket of Lawrence pattern for land service, manufactured between 1760 and 1769 (Fig. 2). The appearance of 'Albion Knowl' on William Heather's map of the Thames Estuary in a position that corresponds with the site of the wreck provided further evidence, and archive research confirmed that the *Albion* was lost to the westward of Knock Sand on 16 January 1765.

Documentary evidence

The *Albion's* previous voyage to the East had been to China during the shipping season of 1761–62. Where she had been during 1764 is not apparent, but she was taken up by the Company for another voyage in the season 1764–65. As she had never officially sailed, the voyage is not entered in *Hardy's Register of Shipping* (1835), and her destination has to be deduced from other evidence.

The Court Minutes show that she was carrying treasure to China (India Office Records: B/80, 354), and that she had recruits on board, probably destined for one of the Company's settlements. Three officers recently appointed to the Madras army were to sail on her (IOR: B/80;28/12/1764), suggesting that Madras was also a destination.

The *Albion* arrived at Gravesend on 7 December 1764 (IOR: B/80, 305), where the recruits boarded and cargo was laden, including 47 chests of silver for the China investment. On 28 December she was given permission to spend

10 days at Gravesend, and on 16 January 1765 she sailed from Gravesend for the Downs with a pilot, John Hall, on board. Instead of relying on his own judgement, Hall followed the preceding East Indiaman, *Horsendon*, which found herself in shoal water and anchored, but neglected to make a 'Signal of Distress'. The *Albion* (Captain John Larkins) proceeded unaware of the danger, and struck the sandbank. Passengers and crew seem to have been taken off, and 46 of the 47 chests of treasure were saved (IOR: B/80, 354, Court Minutes 17/1/1765). It seems strange that all but one chest could be recovered, and it is possible that the 'missing' chest was taken by the rescuers or salvors as a 'perquisite' in return for their assistance, perhaps with the tacit agreement of the Company.

EIC officials were sent to Margate to direct salvage operations, and the treasure from the *Albion* was reallocated to other China-bound ships (IOR: B/80, 354). The Committee of Shipping reported to the Court of Directors on 13 March 1765. Captain John Larkins and his crew were pronounced 'entirely blameless', and the captain and pilot censured for not making a distress signal, while John Hall was disqualified from ever piloting an East Indiaman again.

The ship and its fittings

Of the *Albion* herself, all we have at present is a pile of timber from the site and stored within the Ramsgate harbour complex since 1986. This included parts of 16 floor timbers, each 3–4 m long with a width of 335 mm and depth of 345 mm (Fig. 3). All visible fastenings on floor timbers were wooden treenails of 41 mm diameter, irregularly spaced (for example 10, 18, 19, 33, 35

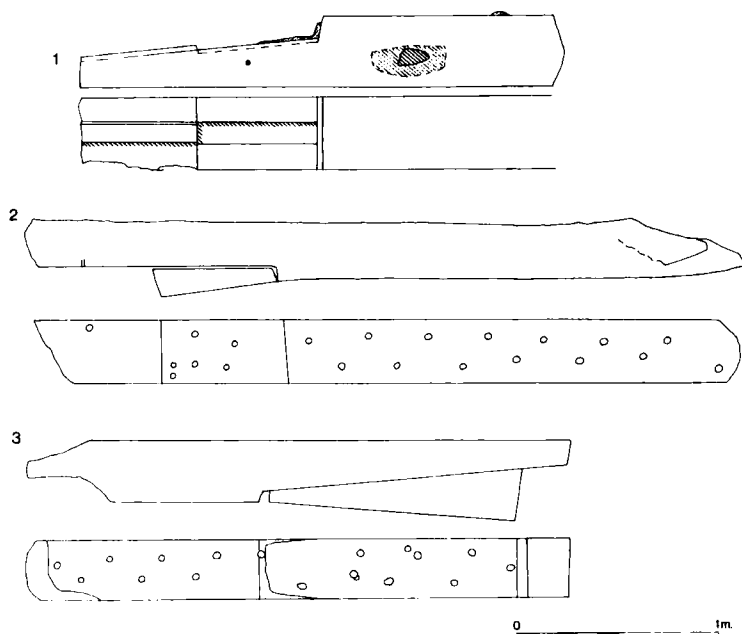


Figure 3. Timbers reputed to come from the *Albion*. 1, scarf on keel; 2 and 3, floor timbers, showing treenail fastenings.

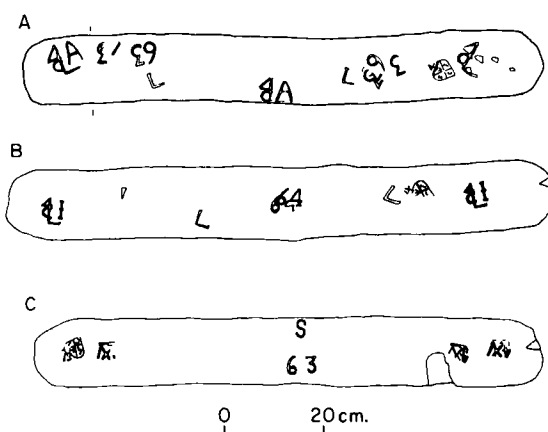


Figure 4. Top views of three lead ingots from the *Albion*, each showing a different 'merchants mark'.

and 50 cm). Wedge-shaped filling pieces were fastened by treenails to the undersides of the floor timbers to take up the void created by the turn of the garboard strakes, a feature visible on colliers of the 1830s (J. Adams, pers. comm.). One length of timber appeared to be a section of keel, with scarf bearing traces of pitch and hair luting (Fig. 3). Three iron guns are known to have been lifted in 1985, together with large

quantities of iron shot with recorded diameters of 122, 128 and 159 mm.

The cargo

In the time available to MAS, 71 lead ingots were recorded (Fig. 4). Flat topped and round-ended, they weighed between 165 and 175 lb (76.8–79.4 kg), corresponding to small pigs or 'pieces' (cf. Whiting and Willies, 1985: 107).

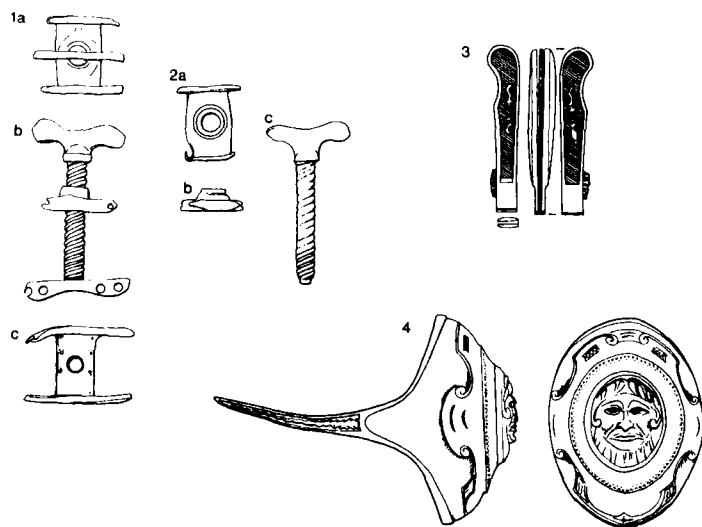


Figure 5. Iron tourniquet parts (1a top view, 1c bottom view; 2a top view, 2b side view), (3) pocket-knife handle and (4) pistol butt cap Scale 1:4 except no. 4 (1:2).

Some variation existed in length between ingots (from 940–1050 mm), within all three major stamp groups. Few cases of overstriking were recorded, and the depth and condition of the stamps was often insufficient to indicate the sequence of punching. All ingots bore at least one UEIC stamp, the numbers 63 or 64 (two or three times), the single letters L, B or S, and so-called merchants marks which define three main groups, consisting of an L, reversed 4 and D, and an initial A, I, W. The 29 recorded ingots within the A group all possess the larger sized 63 and 64 stamp and smaller L stamp. The nine examples within the I group all had small 64 stamps, and smaller letter L's. The 18 examples from the W group all have large L's and small 63 or 64's.

If we take the financial accounts of the *Albion* to read 1600 cwt, 1 qt, 5 lb, this indicates that a total of 179 233 lbs (or 81 301 kg) of lead were originally on board. While only one ingot was accurately recorded (165.8 lb/75.21 kg), a total of approx. 500 lead ingots were seen at the Ramsgate Droit House, which would leave c. 96 733 lbs (43 878 kg) of lead or about 586 ingots unaccounted for.

Additional evidence for trade and supply are the small glass 'cakes' in amethyst, natural green, emerald green, colourless and other hues. They are either rectangular (162 × 89 × 25 mm) or circular (diameter 139 mm), and reflect England's

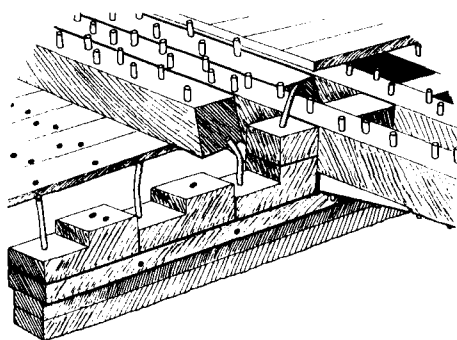


Figure 6. Provisional schematic interpretation of the hull bottom of the *Hindostan*, based on photographs. Copper pins fastened keelson (missing) to keel (scantlings not known).

growing interest in the production of enamels and glass and mastery of colours and opacifiers.

Examination of the EIC financial records (IOR: L/AG/1/6/15) provides further information on the value of the main commodities lost on the *Albion*: silver, £930 2s 8d; Copper, £3899 5s; iron, £240; lead, £1253 11s 3d; stuffs, £218 12s 6d; Long Ells, £2000 3s 7d. Later on the same page an additional £6250 14s 5d is entered for 'Broad Cloth' lost on the *Albion*. Only the most valuable items lost in the wreck are listed in the Company's Commerce Journal.

Surgeon's equipment is represented by the iron parts of two tourniquets of Petit-type (Fig. 5, 1–2). Petit (1674–1760) invented a screw compressor, and it was copied frequently. Even in 1782, rudimentary tourniquets of stiff leather with compress and wooden cylinder to twist the rope were being described (Bennion, 1979: 179). That it was slow to change from its basic design is illustrated by a close parallel from the wreck of the *Pandora* (1791).

Personal effects include a penknife with an inlaid horn handle in brass frame (possibly Indian; Fig. 5,3) and the pistol butt cap (Fig. 5, 4) may have been the property of one of the three Madras Army officers due to sail on the *Albion* (Captain Henry Marcell, Lieutenant William Collins and Ensign John Stubbs).

The *Hindostan* (1803)

The *Hindostan* was built in 1796, by which time six voyages were expected out of each ship (Sutton, 1981). Registered in Hardy's list at 1463 tons (1248 tons in the account of her loss), with a keel length of 144 ft (43.3 m) and breadth of 43 ft 6 in (13.3 m), with a crew of 132 men and 30 guns, she was one of the largest of the EIC ships. Her previous, third, voyage had started at Deptford, where stores and cargo had been taken on board. At Gravesend, provisions were loaded for crew and passengers in January. Much cargo space was reserved for troops going to Madras, and soldiers and officers embarked in February. Fresh provisions were put aboard at Portsmouth, as were passengers and their luggage and she then joined a fleet with a naval escort.

The fourth voyage of the *Hindostan* (Commander Edward Balston) was also to be to China, and to include the delivery of a division of artillery for the garrison at Ceylon. However, terms of passage could not be agreed upon and the 300 troops did not board at Gravesend. On 9 January 1803, the *Hindostan* anchored in the Queens Channel off Wedge Sand (Fig. 1), in the face of an increasing easterly wind. She lost her top gallant yard in the evening, and her sheet anchor was unstowed the next day. On the 11th her anchor cable parted, and she drifted with the ebb tide towards Wedge Sand, which she struck at 4.40 am, running aground in 27 ft of water. She was finally abandoned on 12 January, with the loss of 14 lives.

Much of her cargo, which was valued at £70 000, was eventually salvaged. It included 45 000 oz. silver bullion, copper, lead, tin, iron and personal property.

The ship and its fittings

The site was the victim of salvage in 1985, and much hull structure was lifted by grab. Photographs of this operation showed a heavily-framed section being lifted out of the water, and a preliminary attempt has been made to interpret photographs taken then and showing the lower hull structure (Fig. 6). Large floor timbers with characteristics similar to those from the *Albion* were fastened to the keel by long copper spikes. The composite keel is held together by spikes of varying length, some sufficiently long to pass through the keelson. In poor visibility diver inspection on surviving structure in 1985 suggested cladding on the outer planking, onto which the copper sheathing had been placed. Many of the details are similar to those of the *Earl of Abergavenny*, built in the same year.

Post-salvage survey by MAS using sidescan sonar show scattered material over a considerable area within a field of sand waves 0.5 m high, and this was confirmed by diving in 1987. The seabed is covered in a fine silty sand, with patches of silt. The scatter of concretion was in some instances identifiable as iron bar (part of the cargo); in other cases radiographs showed it to contain chain and rigging elements.

Artefacts salvaged include the upper half of a mercury barometer, inscribed 'Berge London late Ramsden', one of the better instrument makers of the period. A similar barometer was presented by Vice-Admiral Nelson to a colleague c. 1800 NMM. MT/B.M.14: A. Stimson, pers comm.; Banfield, 1985; fig. 208). This example may have belonged to the captain. No company stamp was visible on the surviving section.

Medical stores, or possibly equipment used by the surgeon, are represented by two ointment pots of late 18th-century form in tin-glazed earthenware, with blue anchor marks. They still contain hardened white ointment (Fig. 9). Similar forms from London have been identified as of either London or French manufacture (e.g. Britton 1986, no. 174 and 176).

Cargo

The value of the cargo of the *Hindostan* was esti-

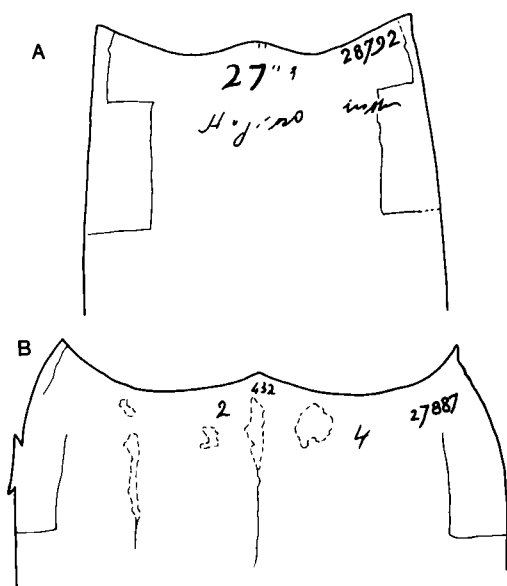


Figure 7. A, B Uppers of military style boots with ink letters and numbers still visible (A measures 15 cm across the top and B 19 cm).

mated at £70 000. At the time of her loss she had on board 45 000 oz. silver bullion, of which dollars valued at £11 000 were salvaged, along with some plate.

Recent finds from the site were dispersed among the salvors, and members of MAS have been given access to much of this material with the aim of documenting and publishing the surviving evidence. This includes a large number of small copper bar ingots. In length they vary slightly by as much as 13 mm, and in weight from 236.7 to 392 g. All bear similar tapering cross-sections and characteristic shrinkage wrinkles on their flat sides. One example now in the British Museum has been analysed and shown to be 98.5% copper with a high bismuth content indicative of a Cornish source (Craddock and Hook, 1987: Table 2). The Cornish Metal Co. output had been rising from the early 1790s, while that from Anglesey was in decline (Harris, 1964: 111), and the Rose Copper Co. plates from the Goodwin's East Indiamen, *Admiral Gardner* and *Britannia* (both 1809), show a similar

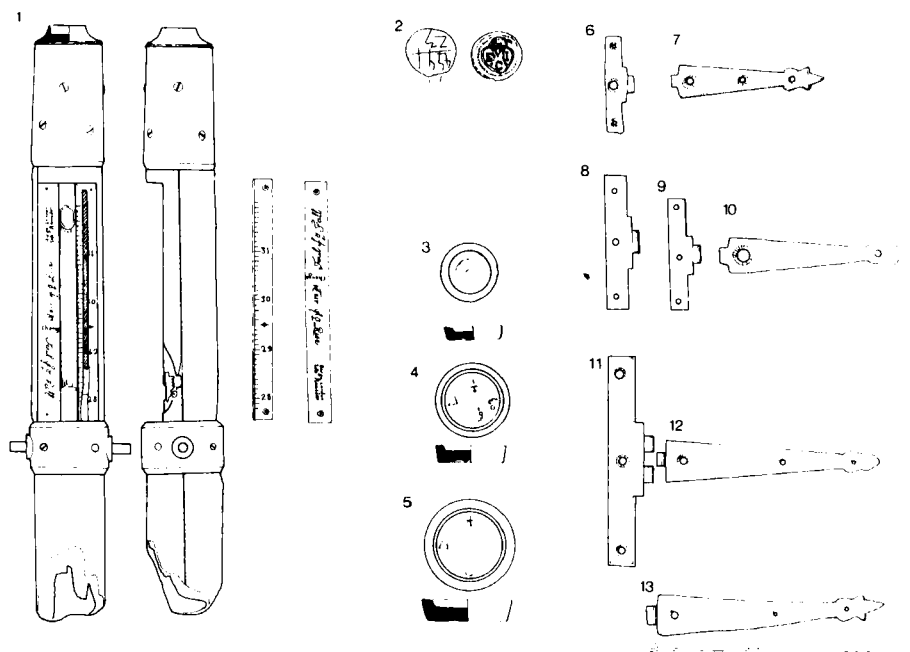


Figure 8. Finds from the *Hindostan* (1803). (1) Marine barometer with brass fittings and inscribed plates; (2) lead cloth seal bearing UEIC mark; (3) brass weights bearing the London Guildhall dagger, Crown under Royal cipher and A for avoirdupois (3–5) and a range of brass hinge elements (6–13). Scale 1:4.

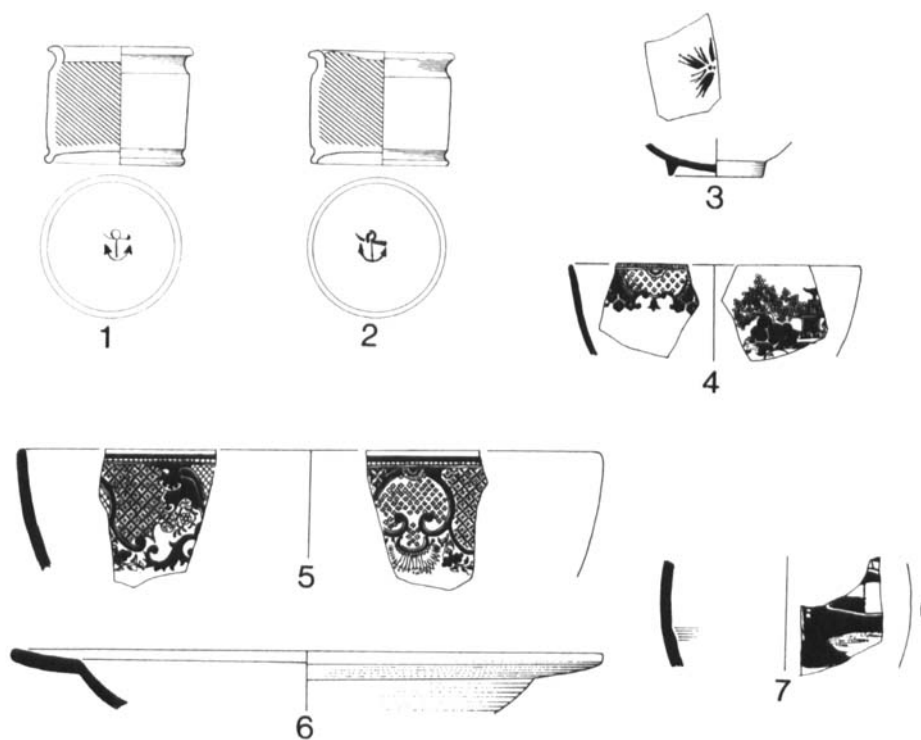


Figure 9. Pottery from the *Hindostan* (1803). (1, 2) Tin-glazed earthenware drug jars; (4, 5) transfer-printed wares; (3) creamware bowl with underglaze blue decoration, and (7) Chinese porcelain teapot (7). Scale 1:4.

composition to the *Hindostan* bars. Similar bars have also been found on the wreck on the *Earl of Abergavenny* (Cumming: this volume). Large quantities of these ingots were transported and are characteristic of the East India trade. For example, in 1801 the Governor of Ceylon ordered 100 000 lb of copper for coinage purposes, only 10 000 lb of which was supplied in the form of coin.

V, X and XX cash pieces have been found on the *Hindostan*, all machine-struck in England, probably by Boulton at the Soho mint. Some are marked 1803, but were probably struck in 1802. Other coinage includes George III coins for 1795, 1798 and 1802. Mercury was also being carried. This was reported to be lying in large puddles on the seabed.

Cargo is also represented by lead seals bearing the UEIC mark (Fig. 8, 2), reminder of the importance of cloth in the outward bound trade (Egan: this volume). Leather shoes and boots, some packed inside barrels, are of a type worn by

officers in an infantry regiment of this time, and scrutiny has revealed rare evidence for makers' marks and instructions (Fig. 7).

Other finds

Other material from the site includes a large range of brass furniture fittings, some undoubtedly from personal furniture being sent out to the colonies (Fig. 8, 6–13). Undated 18th-century brass catalogues exist, but the typology presented from such a well-dated closed group is of considerable interest in view of the longevity of old patterns. The pottery recovered from the site may have been privately owned, and represents a cross-section of post-medieval tableware: transfer-printed wares, creamware, London stoneware, and a fragment of a Chinese teapot (Fig. 9).

Discussion

The density of net fastenings reported by fishermen for the Thames Estuary resembles that for

the Goodwins, and these two areas illustrate the enormous potential for future research. While the Goodwins have long been known as the 'ship swallower', the notorious sandbanks in the Thames Estuary have carried the name the 'Burying Grounds'.

These two sites also illustrate the value of artefactual research from shipwrecks in enlarging our understanding of specific subjects, such as ingots and alloys (processes and degrees of purity and typologies). However, the fate of these two sites also illustrates the problem facing an inadequately resourced and structured discipline. So often, the archaeology takes the form of an opportunistic response to an emergency, where there is little chance of planning research except through the arbitrary collection of finds. Often ignored are some of the less spectacular classes of evidence that can disclose much about organization and life on board. The academic status of East Indiamen has changed over recent years as interest in their contents, construction, and potential contribution to historical and archaeological research has been more widely recognized. The opportunity to examine internal layout, and stowage was lost in both of the cases presented here, as was any contribution to the

recognition of for example regional shipwright practice and the influence of EIC construction on later bulk carriers. The fate of these two East Indiamen underline the pressing need for systematic pre-emptive and informed evaluation of our underwater sites, and for the reassessment of the East Indiamen as a class of evidence worthy of conservation and protection. Richard Larn has demonstrated the finite nature of the resource—the loss of these two sites represents 1% of EEIC losses overall, and for the later history of the Company these outward bound vessels are the more significant.

Acknowledgements

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