NOTES

Two Late Bronze Age copper-alloy ingot caches from the North Downs at Botley Hill (Surrey) and Biggin Hill (Kent)

The author's attention was recently drawn to two caches of Late Bronze Age (LBA) copperalloy ingot fragments found with the aid of a metal detector by John Gibson on the summit of the North Downs in the mid-1980s. With the exception of one or two very fragmentary pieces in the smaller cache, neither appeared to have contained any finished or fragmentary tools, weapons or ornaments. This may help to explain why little notice has been taken of either cache hitherto.

Cache 1

The first and larger of the two caches was found in September 1985 on ploughland west of Long Coppice, which lies on the western margins of Biggin Hill, some 500m over the county boundary into Kent (TQ 4062 5844). The findspot lay just below the 200m contour on a north-facing chalk spur between two steep-sided dry valleys. The chalk is mantled by Claywith-flints deposits.

The cache had been buried 'in a compact heap' just below the level of the plough-soil and into the top of the Clay-with-flints. It comprised at least 22 fragments of plano-convex copper-



Fig 1 Copper-alloy ingot fragments from Biggin Hill, Kent (BH 1–2) and Paygate Cottage, Botley Hill, Surrey (PG 1, 11 and 12).

Table 1 Contents of cache 1, Biggin Hill

Туре		Measurements	Weight (g)
1	Edge fragment (fig 1, no BH1)	L: 47mm; B: 100mm; T: 28mm. (Diameter of ingot: c110mm)	454.96
2	Edge fragment (fig 1, no BH2)	L: 55mm; B: 57mm; T: 39mm. (Diameter of ingot: c120mm)	332.10
3	Edge fragment (worn)	L: 50mm; B: 65mm; T: 20mm. (Diameter of ingot: c115–120mm)	300 46
4	?Edge fragment	L: 52mm; B: 52mm; T: 18mm	199.97
5	?Edge fragment	L: 49mm; B: 50mm; T: 22mm	233.95
6	Edge fragment (worn)	L: 45mm; B: 48mm; T: 22mm	169.79
7	?Edge fragment	L: 41mm; B: 50mm; T: 25mm	202.70
8	Edge fragment	L: 40mm; B: 47mm; T: 22mm	111.46
9	Edge fragment	L: 30mm; B: 60mm; T: 20mm	104.86
10	Edge fragment	L: 39mm; B: 40mm; T: 20mm	94.20
11	?Edge fragment	L: 38mm; B: 48mm; T: 25mm	205.43
12	Edge fragment	L: 45mm; B: 50mm; T: 23mm	150.29
13	Fragment	L: 22mm; B: 27mm; T: 16mm	56.01
14	Fragment (worn)	L: 33mm; B: 33mm; T: 17mm	70.45
15	Fragment (worn)	L: 35mm; B: 27mm; T: 18mm	57.48
16	Fragment (worn)	L: 30mm; B: 27mm; T: 11mm	45.25
17	Fragment (worn)	L: 34mm; B; 25mm; T: 19mm	47.18
18	Fragment (worn)	L: 37mm; B: 21mm; T: 18mm	35.35
19	Fragment (worn)	L: 24mm; B: 20mm; T: 16mm	31.11
20	Fragment (worn)	L: 32mm; B: 18mm; T: 10mm	25.08
21	Fragment (worn)	L: 27mm; B: 24mm; T: 13mm	26.73
22	Fragment (worn)	L: 11mm; B: 10mm; T: 7mm	3.89

alloy ingot with a combined weight of 2958.73g. Individual fragments ranged in weight from 3.89g to 454.96g (with a mean of 134.48g). The largest and heaviest fragment comprised roughly one quarter of a circular ingot some 110mm in diameter and 28mm thick. Although a majority of the larger pieces were in fresh condition, many of the smaller fragments were worn and rather powdery.

Cache 2

The second cache was found later the same year some 3km to the south-south-west on ploughland close to Paygate Cottage on Botley Hill in Surrey (TQ 3948 5570). The findspot was reported to have lain within a large shallow ?natural depression above the 265m contour and on the summit of a major chalk spur running south-east to north-west. Again, the chalk is mantled by Clay-with-flints deposits.

As with the first cache, this one had also been buried in a compact group just below the level of the plough-soil and into the surface of the underlying Clay-with-flints. It comprised at least eight fragments of plano-convex copper-alloy ingot with a combined weight of 1216.04g, together with several copper-alloy ?droplets and possible fragments of cast objects weighing a further 9.73g. Individual ingot fragments ranged in weight from 5.33g to 402.01g (with a mean of 152g). The largest and heaviest fragment comprised around one-sixth of a circular ingot some 120–130mm in diameter and 25mm thick. The possible cast objects included one fragment of rough tapering rod of flattened circular section, either perhaps part of an awl or possibly a casting runner, and one fragment from the shaft of a ?pin, also of circular section.

Discussion

A number of LBA metalwork hoards have already been recovered from this area of the North Downs (eg Needham 1987, fig 5.16), most of which are made up of scrapped items and ingot

Туре		Measurements	Weight (g)
1	Edge fragment (fig 1, no PG1)	L: 60mm; B: 60mm; T: 25mm.	
		(Diameter of ingot c120–130mm)	402.01
2	Edge fragment	L: 65mm; B: 56mm; T: 26mm.	
		(Diameter of ingot c140–160mm)	322.22
3	Edge fragment	L: 43mm; B: 59mm; T: 18mm	175.95
4	?Edge fragment	L: 37mm; B: 29mm; T: 18mm	69.58
5	Fragment	L: 48mm; B: 43mm; T: 10mm	76.94
6	Fragment	L: 37mm; B: 33mm; T: 22mm	99.52
7	Fragment	L: 36mm; B: 28mm; T: 17m	64.49
8	Fragment	L: 20mm; B: 11mm; T: 8mm	5.33
9	?Droplet	L: 12mm; B: 9mm	1.84
10	?Droplet	L: 10mm; B: 6mm	1.04
11	Fragment of cast object (rod of tapering		
	flattened circular section) (fig 1, no PG11)	L: 17mm; Diameter: 8–6mm	4.80
12	Fragment of ?cast object (circular section:		
	?pin) (fig 1, no PG12)	L: 13mm; Diameter: 4mm	0.73
13	Fragment of ?cast object	L: 17mm; B: 8mm	0.93
14-	15 Two fragments	=	0.39

Table 2 Contents of cache 2, Paygate Cottage

fragments – the so-called 'founder's hoards' of Carp's Tongue/Ewart Park type (*ibid*, fig 5.18). The proximity of the circular LBA 'ringfort' enclosure at Nore Hill (Skelton 1987) is unlikely to be coincidental in this context. The enclosure lies just over 2km distant on the northwestern extremity of the same chalk spur that produced the second ingot cache, and its builders may well have had a pivotal role in the production and consumption of a range of goods, including metalwork. Ingot fragments have been recovered by metal detector from the interior of the enclosure (and beyond), together with several fragmentary tools (*ibid*, 52–3 and fig 7, nos 1–2). The latter include a Thorndon-type socketed knife; the surviving portion of the oak haft has recently furnished a radiocarbon date of 1020–820 cal BC (2765 ± 45 BP, OxA-4654) (Needham *et al* 1997, 64, 72) which puts it squarely within the currently accepted range for Ewart Park metalwork.

Whether or not the burial of the two caches noted here represent deliberate, non-utilitarian, ritual acts (and the author would contend that they very probably did), those responsible certainly chose to enlist memorable and presumably significant points in the landscape for the purpose. Thus both caches were deposited on locally dominant topographic highs, while that from Botley Hill was apparently deliberately tucked into the side of an extensive ?natural hollow or undulation in the underlying geology.

Moreover, and for reasons about which we can now only speculate (eg Needham 2001, fig 8), their original depositors also chose not to exercise the option of retrieval and reintegration of either metal cache into everyday circulation and use.

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