# A SMOKE-CURING CHAMBER AT BROCKLEY

## by John McCann

One of the minor mysteries of vernacular architecture is why smoke-curing chambers turn up in some parts of England but not in others. A large concentration has been reported in Somerset and the border zones of Devon, Gloucestershire and Dorset, another large concentration in Kent, Surrey and Sussex, and an isolated example in Northamptonshire. In Suffolk domestic curing chambers are unknown, although special-purpose buildings in connection with the sea-fishing industry have been recorded. It seems likely that domestic smoke-curing was practised in Suffolk, but if so the evidence has largely disappeared or has escaped notice.

#### REGIONAL TYPES

There is a distinct type in the south-west of England. There the main chimney is normally external, made of stone; the curing chamber was built of stone at ground level beside it, and was supplied with smoke by its own fire of smouldering sawdust or wood chips, with a controllable air

intake, and vented into the chimney. In the south-eastern counties the main chimney is usually internal, built of brickwork; the curing chamber was at first-floor level or higher, supplied with smoke from the main fire. In some cases it was merely a hanging area in the side of a full-width smoke bay, or within a brick chimney, shielded from the heat of the fire (Fig. 24). In 1833 J. C. Loudon wrote: 'In Cambridgeshire and other parts of England, hams and bacon are frequently smoked by hanging them in a wide kitchen chimney, and making a fire of sawdust on the hearth'.'

The advantage of the separate fire was that it was possible to select one fuel for the best flavour while using another for domestic heating and cooking. Loudon said that juniper was used for smoking Westphalian hams and Emden geese; beech, spruce and fir were used in Sweden and Pomerania, and oak, ash and beech in Hampshire.

At Harlowbury, a manor house at Harlow, Essex (TL 477131), a Victorian curing chamber in a ground-floor kitchen has survived intact. It is brick-built, with cast iron doors at top and

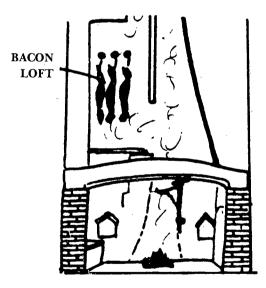


Fig. 24 — One type of bacon loft found in Surrey. Sometimes the cupboard is outside the chimney. (Reproduced by courtesy of Joan M. Harding and the Charlwood Society from Four Centuries of Charlwood Houses, Medieval to 1840, 1976).

bottom and an iron hanging rack, connected to the chimney by a short iron pipe; it evidently had its own fire of smouldering sawdust or chips. In the same house there is evidence of an earlier curing chamber supplied with smoke from the axial chimney — a vent in the brickwork 6ft (1.83m) above ground with a pattern of smoke-blackening around it and on adjacent structural timbers, and alterations to the chimney wall above it — but the chamber itself has been removed. Elsewhere it is often possible to suspect the former existence of a curing chamber from similar

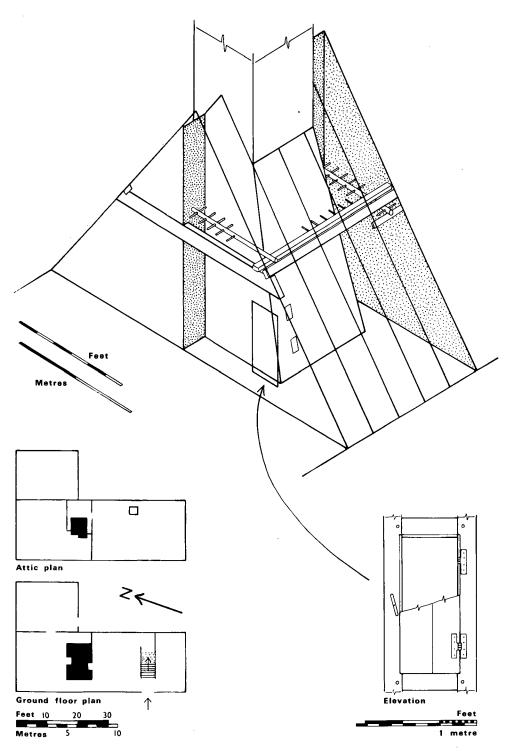


Fig. 25 - Smoke-curing chamber at Brockley.

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evidence, but not to prove it. I am therefore grateful to Christopher Coe for drawing my attention to a complete example at Sutton's Farm, Brockley (TL 821547). In this case it has survived intact because it is in the attic, which has never been used as domestic accommodation.

### THE BROCKLEY CHAMBER

### Description

The chamber is made of lightweight timber framing infilled with wattle and daub, occupying the space between the axial chimney and one slope of the roof, and extending around the front and back of the chimney. It was completely sealed internally with a thick layer of daub, which is still present over the boarded floor. A well-fitting door 3ft 6in high by 1ft 6in wide (107cm × 46cm) in a rebated frame allows access from the attic (Pl. V). The attic is fully floored and approached through a trap-door with staples for a removable ladder; it was apparently always intended and used for farm storage. There are two vents 4½ in by 9in (11.4cm × 22.8cm) in the 4½ in (11.4cm) brickwork of the chimney, low in the chamber, the lower one now sealed with clay, the upper one closed with loose brick-ends (Pl. VI). There is no indication of another vent high in the chamber, as descriptions from Somerset and Surrey would lead us to expect, although repointing of the brickwork may have obliterated the evidence. Wooden racks for hanging food extend round three sides of the chimney. Nearest the entrance the rack consists of a round pole 3in (7.60cm) in diameter supported in the framework at one end and on the side-purlin of the roof at the other, with five pegs lin (2.54cm) in diameter and 12in (30cm) long penetrating it at about 6in (15cm) centres and projecting on both sides (Pl. VII). A similar rack extends across the far part, with nine similar pegs, but supported 6in (15cm) lower on a strip of wood nailed across the rafters. Another rack of squared timber 3in (7.60cm) wide by 2½ in (6.35cm) high, with six pegs projecting on one side only, is jointed into the collars of the clasped-purlin roof, very close to the purlin. There is some beetle infestation, and some of the pegs are broken. The racks, the inside of the walls, the rafters and the internal surface of the door are heavily smoke-blackened. In modern repairs to the roof the wattle and daub infill between the rafters has been removed, but wattle fixings consisting of auger holes in one rafter opposite wedge-shaped depressions in the next indicate its former presence. Auger holes could not have been made in these positions after the rafters were fitted, confirming that the curing chamber is an original feature of the house; elsewhere in the roof there are no wattle fixings.

Surprisingly, the outside of the brick chimney is not sooted. This prompted the suggestion that the chimney had been rebuilt since the smoke chamber fell out of use, but examination of the junctions between the daub walls and the brickwork shows that there has been a layer of daub on the brickwork, which has been removed. The chimney has been re-pointed with lime mortar, and presumably the outer layer of daub was removed at that time. It is possible that the daub was present to protect the brickwork from the salt used in pickling.

## Method of Use

Originally the vents would have had removable plugs of wood or clay. They are within arm's length of the entrance door, so in use it would have been possible to hang meat on the racks while the chamber was free of smoke, and to remove the plugs from outside the door. Loudon said that smoke-curing was practised with bacon, beef, mutton, venison, geese, ducks, eels, salmon, cod and haddock.<sup>3</sup> 'The curing principle is the pyroligneous acid, which being purer in wood than in coal, the former is always employed'.<sup>4</sup> An Essex recipe book of 1756 describes the method:

To pickle Hams and Tongues. Lay them in Common Salt 48 hours then take 2 Pound of brown sugar 3 Pound of Bay Salt 4 ounces of Salt petre boil these in 4 Gallons of pump Water Scum it well when its cold lay in your Hams let them lay three Weeks turning them every Day Then hang in a Chimney from touching one another, then smoke them in Paper Bags. This is enough for two Hams.<sup>5</sup>

They were usually smoked for three weeks.

### Period of Use

The Somerset houses reported have walls and original chimney of stone, and the curing chamber is contemporary with the main construction, which in most cases is of the 16th or 17th century. In the south-eastern counties the houses are timber-framed, with a brick chimney which may be contemporary or a later insertion, usually of the later 16th century. There is often evidence that the curing chamber has been constructed after the main chimney, possibly in the 18th century. Sutton's Farm is an unusually intact timber-framed farmhouse of the late 16th century, with a contemporary brick chimney. The house is datable by the ovolo mouldings of the main joists, the carpentry joints, and the general design (Fig. 25). Evidence has been quoted which shows that the curing chamber is contemporary with the roof construction, and there is no reason to believe that the roof has been altered.

In the south-west curing chambers were passing out of use, sealed or converted to other uses, apparently about the same time that others were being made in the south-east. At Tytherington, ten miles (16km) north of Bristol, four have been reported in one parish. One of them, when opened, was found to contain a newspaper dated 1769; so far this is the most exact evidence found of the date of closure. Where smoke-curing was practised on a commercial scale, as seems to apply in the south-west, closure would correspond with the decline of the industry. Where the chamber was designed to be supplied with smoke from the main fire, as at Sutton's Farm, it would have passed out of use with the introduction of coal as domestic fuel. In 1748 Professor Pehr Kalm, a Swedish botanist studying agricultural economy in England, reported:

The fuel which is exclusively used in London is coal. In the villages which lay nearest London, coal was the principal fuel, although there they spun it out with sticks cut in the hedges. But a couple of Swedish miles, or about 14 English miles [22km] from London, and in places to which they had not any flowing water to carry up boats loaded with coals, for the most part bare wood was used, either from the trees they had cut down in repairing hedges, or from dug-up tree-roots, or fuel of some other kind, as brackens, furze, etc. 8

Brockley is eleven miles (18km) from Sudbury, the nearest point for waterborne coal. The curing chamber at Sutton's Farm may have continued in use until coal was generally adopted later in the 18th century.

#### **ACKNOWLEDGEMENTS**

I am grateful to Mrs Sylvia Colman, Mrs Linda H. Hall and Miss J. M. Harding for information and helpful discussion, to Christopher Coe for the original observation and practical assistance, and to Mr and Mrs I. A. Coe for their interest and kindness in providing full access to their house.

### NOTES

<sup>2</sup> Loudon 1833, 366.

Williams 1976, and personal communications of April 1982 from Mrs Sylvia Colman, Mrs Linda H. Hall and Miss J. M. Harding.

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- 3. Sutton's Farm is 23 miles (37km) inland, and not near a fishable river.
- <sup>4</sup> Loudon 1833, 366.
- <sup>5</sup> Winmill 1981, 11 12.
- 6 Williams 1976, 57.
- Newhouse Farm, Tytherington (ST 674882). Personal communication from Mrs Linda H. Hall. The date given here is correct; it was given in error as 1796 in Williams 1976, 61.
- <sup>8</sup> Kalm 1892, 137 38.

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