

**LAND AT BIRD IN EYE FARM, SOUTH OF BIRD IN EYE HILL,
UCKFIELD**

HERITAGE STATEMENT OF COMMON GROUND

BETWEEN

**CROUDACE HOMES LTD AND WEALDEN DISTRICT COUNCIL ('THE
PARTIES')**

REFERENCES:

PLANNING INSPECTORATE REFERENCE: APP/C1435/W/24/3356658

WDC REFERENCE: WD/2024/1799/O

DESCRIPTION OF DEVELOPMENT

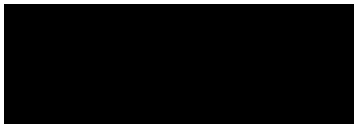
"Outline planning application for the erection of up to 190 dwellings, with associated works, parking, landscaping, publicly accessible open space and SANG provision, with access from the B2102."

APPELLANT: Croudace Homes Ltd

LOCAL PLANNING AUTHORITY: Wealden District Council ("WDC")

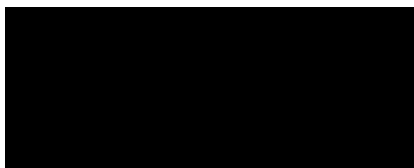
DATED: 17 June 2025

SIGNED ON BEHALF OF THE APPELLANT:



DR CHRIS MIELE MRTPI IHBC

SIGNED ON BEHALF OF THE LOCAL PLANNING AUTHORITY:



MS JOANNA TUCKER BCS (HONS) MA MRTPI

STATEMENT

1. The Parties agreed a Statement of Common Ground ("SoCG") on 24 January 2025 and an Addendum SoCG on 4 June 2025.
2. This Heritage Statement of Common Ground ("HSoCG") is prepared further to that statement and seeks to narrow the issues between the parties to assist the Inspector.

AREAS OF AGREEMENT

3. The Oasthouse to the north west of Bird in Eye Farmhouse was listed at Grade II on 31st December 1982, list entry number; 1028381. (CD 7.11)
4. The Parties agree the following documents are relevant to informing the assessment of significance of heritage assets and setting including the assessment of the effect of the Proposed Development on heritage assets (albeit the Parties agree that this list is not exhaustive):
 - 4.1 Historic England Good Practice Advice Note 2: Managing Significance in Decision-Taking in the Historic Environment, 2015 (CD 7.8).
 - 4.2 Historic England Good Practice Advice Note 3: The Setting of Heritage Assets, 2017 (CD 7.5).
5. The Parties agree that an understanding of historical and architectural significance of the designated heritage asset can be assisted by the following documents (albeit Parties agree that this list is not exhaustive):
 - 5.1 Relevant Historic England list entry description for the identified designated heritage asset (attached at **Appendix 1.0**) (CD 7.11)
 - 5.2 Gwen Jones's work, "An Example of Early Nineteenth-Century Technology: Bird-in-eye Oasthouse, Framfield Parish, East Sussex" (attached at **Appendix 2.0**)
 - 5.3 Historic England National Farmstead Character Statement, 2014 (CD7.14).
 - 5.4 Historic England Farmstead Assessment Framework, 2015 (CD7.15).
 - 5.5 Historic England National Farm Building Types, 2014 (CD7.16).
6. The Parties agree the following with regard to the special interest of the designated heritage asset (not exhaustive):

Historical Interest

 - 6.1 The Read Kiln was common in Kent and Sussex, but represents a unique technological advancement at Bird in Eye Oast.
 - 6.2 This one is understood to have been in use until 1965.
 - 6.3 The kiln is an unconverted example of a 'Read Kiln'.
 - 6.4 As built, and contemporary with the kiln, is an attached stowage barn to the east and covered store to the south. A second stowage barn was added to the north side c.1900.

- 6.5 The oast stowage barns have been converted to commercial use, but the attached square stone kiln remains unconverted at both ground and first floor. The listed building retains evidence of the distinctive original kiln and flue system remains intact, along with the hop press housed in the original stowage barn.

Architectural Interest

- 6.6 The oldest section of the oasthouse was completed in the 1820s and is referred to as the kiln and attached stowage barn and store. The original structure features stone walls to the north, south, and west elevations, which support a slate-covered timber framed roof. A distinctive timber cowl sits atop the roof and pivots in the wind. The cowl is an important functional design feature; it was used for ventilation and to draw the air through the structure when the kiln was operating. The cowl is also a recognisable feature of this locally distinctive historic building type.

- 6.7 Later additions in the early 20th century (c.1900) include a second adjoining brick-built stowage barn with drying floor at first floor and storage/loading area to ground floor to the north, clad in timber weatherboarding. These alterations evidence the evolution of the building over time.

7. The Parties agree that the external stair to the oast is not original although it is likely that a stair was present in this location historically.
8. The Parties agree that the farmland, paddocks and fields to the west of the listed oasthouse form one part of the setting of the designated heritage asset.
9. The Parties also agree that elements of the setting of the listed building are now in commercial use, including the modern wide span agricultural shed buildings and the former 19th century farm buildings.
10. The reason for refusal for the current appeal set out in the Council's Statement of Case does not identify harm to any other heritage assets.

POSITIONS REGARDING WHETHER THERE IS HARM TO THE SETTING OF THE HERITAGE ASSET, and THE APPROACH TO ANY SUCH HARM (IF ANY)

11. The Parties agree that when considering the impact of any harm caused by the development to the significance of the listed building, that harm should be given great weight in the decision-making process (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial, total loss or less than substantial harm to its significance as set out in paragraphs 213 to 215 of the National Planning Policy Framework, 2025.
12. The parties do not agree on the level of harm to the significance of the oasthouse through the proposed development within its setting. If there is some "less than substantial harm" to the significance of the oasthouse through development within its setting, this falls to be assessed in the heritage balance under paragraph 215 of the NPPF, which matter is for the planning witnesses to address.
13. The Parties to this Statement consider that it is appropriate for the Inspector and Secretary of State to consider the nature and extent of any harm as per Chapter 16 of the NPPF, 2025 and the guidance at Paragraphs 006 – 009, 013, 018, and 020 of the Planning Policy Guidance¹ and Historic England's Good Practice Advice in Planning Note 3 'The Setting of Heritage Assets (Second Edition), 2017.
14. The Parties agree that neither the National Planning Policy Framework nor Planning Policy Guidance specifies scales of impact within the less than substantial scale.

¹ Reference ID: 18a-018-20190723

15. Recognised that the PPG states that *“Within each category of harm (which category applies should be explicitly identified), the extent of harm may vary and should be clearly articulated”*².
16. The Parties agree that the heritage impact of the current proposals are less than the previous appeal proposals. The Parties further agree that the current proposals cause no direct physical harm to the fabric of the listed building itself.
17. The Council’s position is that the appeal scheme will result in a moderate level of less than substantial harm to the significance of the listed building, for the reasons stated in its Statement of Case.
18. The Appellant’s position is the proposals do not cause harm to the setting or significance of the listed building, for the reasons stated in its Statement of Case.

POSITIONS REGARDING HERITAGE BENEFITS

19. The Parties agree that proposed new landscaping immediately to the north and west of the oasthouse and the removal of car parking currently in this location would be a positive change from the previous appeal scheme and could be controlled by planning condition or S106 requirement.
20. The Parties agree that the proposed historic interpretation has the potential to better reveal the significance of the heritage asset and could be controlled by planning condition or S106 requirement.

² PPG, Paragraph: 018 Reference ID: 18a-0180-20190723

APPENDIX 1.0

HISTORIC ENGLAND LIST ENTRY

OASTHOUSE TO THE NORTH WEST OF BIRD IN EYE FARMHOUSE

Official list entry

Heritage Category: **Listed Building**

Grade: **II**

List Entry Number: **1028381**

Date first listed: **31-Dec-1982**

List Entry Name: **OASTHOUSE TO THE NORTH WEST OF BIRD IN EYE FARMHOUSE**

Statutory Address 1: **OASTHOUSE TO THE NORTH WEST OF BIRD IN EYE FARMHOUSE, BIRD IN EYE HILL**

This List entry helps identify the building designated at this address for its special architectural or historic interest.

Unless the List entry states otherwise, it includes both the structure itself and any object or structure fixed to it (whether inside or outside) as well as any object or structure within the curtilage of the building.

For these purposes, to be included within the curtilage of the building, the object or structure must have formed part of the land since before 1st July 1948.

[Understanding list entries](https://historicengland.org.uk/listing/the-list/understanding-list-entries/) (<https://historicengland.org.uk/listing/the-list/understanding-list-entries/>)

[Corrections and minor amendments](https://historicengland.org.uk/listing/the-list/minor-amendments/) (<https://historicengland.org.uk/listing/the-list/minor-amendments/>)

Location

Statutory Address: **OASTHOUSE TO THE NORTH WEST OF BIRD IN EYE FARMHOUSE, BIRD IN EYE HILL**

The building or site itself may lie within the boundary of more than one authority.

County: **East Sussex**

District: **Wealden (District Authority)**

Parish: **Framfield**

National Grid Reference: **TQ 48385 20780**

Details

FRAMFIELD BIRD IN EYE HILL 1. 5208 Uckfield Oasthouse to the north- west of Bird in Eye Farmhouse TQ 4820 43/860 II 2. C19. Square stone building with slate roof and retaining its cowl. Inside, a flue (still intact) winds round the walls of the kiln. Fresh air entering at intakes near the floor was heated indirectly from the hot flue wall before rising through the hop-drying floor. Said to be the only fresh air oast surviving in Sussex. Listed for technical rarity.

Listing NGR: TQ4838520780

Legacy

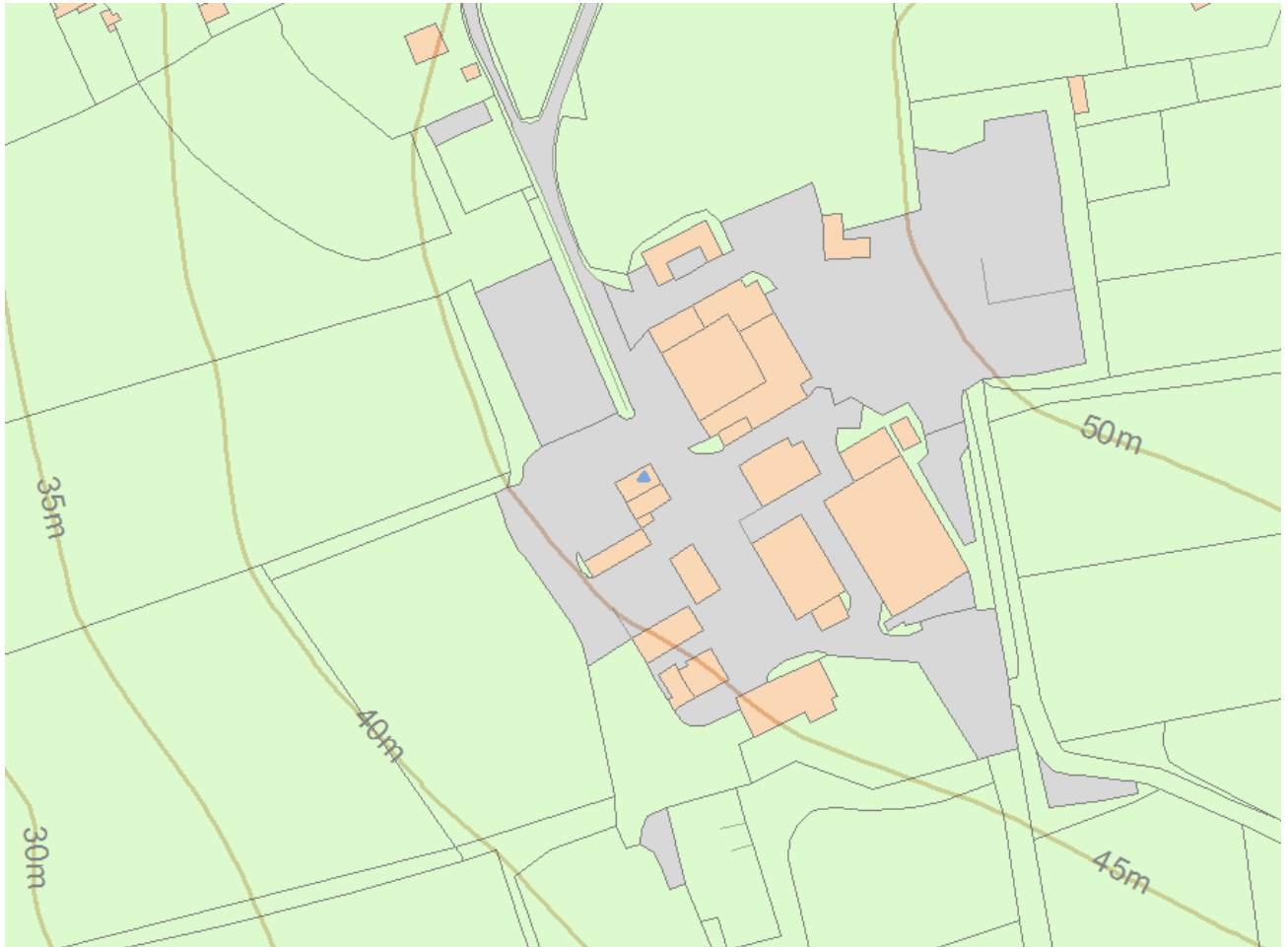
The contents of this record have been generated from a legacy data system.

Legacy System number: **296085**

Legacy System: **LBS**

Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.



Map

This map is for quick reference purposes only and may not be to scale.
This copy shows the entry on 19-Jul-2024 at 15:18:53.

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(<https://historicensland.org.uk/terms/website-terms-conditions/>).

End of official list entry

APPENDIX 2.0

EXAMPLE OF EARLY NINETEENTH-CENTURY
TECHNOLOGY: BIRD-IN-EYE OASTHOUSE, GWEN
JONES

AN EXAMPLE OF EARLY NINETEENTH-CENTURY TECHNOLOGY: BIRD-IN-EYE OASTHOUSE, FRAMFIELD PARISH, EAST SUSSEX.

Gwen Jones

Introduction

After the establishment of hops as a commercial crop towards the end of the sixteenth century, hop drying practices continually evolved in order to eliminate loss or failure during drying and to maximise, thereby, the profits made from hop sales. Loss or failure arose from difficulties in maintaining requisite temperatures, in spreading the heat across the kiln, and in preventing contamination of the hops by the products of combustion. Initially, a controlled rise to about 60 degrees centigrade (140 degrees fahrenheit) is needed to drive off the greater part of the moisture contained in the hops, while later on, a gentler temperature - 49 degrees centigrade (120 degrees fahrenheit) - ensures thorough drying. Wind speed and direction can change very rapidly so driers using every type of open grates or braziers needed draught openings on all sides of the kiln. That meant careful positioning of the building, and even with the draught to keep the fires bright and achieve the right temperatures, a baffle plate suspended above the grates was often needed to spread the heat more evenly across the kiln. If, as often happened, pockets of cold or damp air persisted, the hops dried unevenly and even a small amount of damp hops in a bag could cause the rest to deteriorate. To compound these problems, the burning of wood, coal, charcoal or 'welsh coal' (anthracite) on open grates inevitably involved contamination of the hops to a greater or lesser extent. Theories to combat this contamination were put forward from at least the second half of the seventeenth century (1).

Experiments using enclosed stoves or furnaces began in the first half of the eighteenth century. Although the later years of the century brought improved stoves which are said to have been widely used, many driers found it harder to judge the state of the fire and, therefore, harder to raise and maintain the temperatures proper to each stage of drying. Many are known from both documentary and building evidence to have continued with the use of open grates despite improvements to stoves such as added pipework designed to carry the heat up towards the drying floor (2). It was against a background of persistent problems that John Read, gardener, inventor and native of a large hop-growing parish, Horsmonden, turned his attention to perfecting a new type of oasthouse in which many such problems would be eliminated.

Read's Design (Fig 1)

He eventually submitted his perfected design to John Claudius Loudon for inclusion in his 'Encyclopaedia of Cottage, Farm and Villa Architecture' in 1835 and sent him the ground plan and sections of an oasthouse actually erected in 1832 in Teston, near Maidstone (3). His first experiments had been made in 1796; it had indeed taken him "many years of experiment and adaptation".

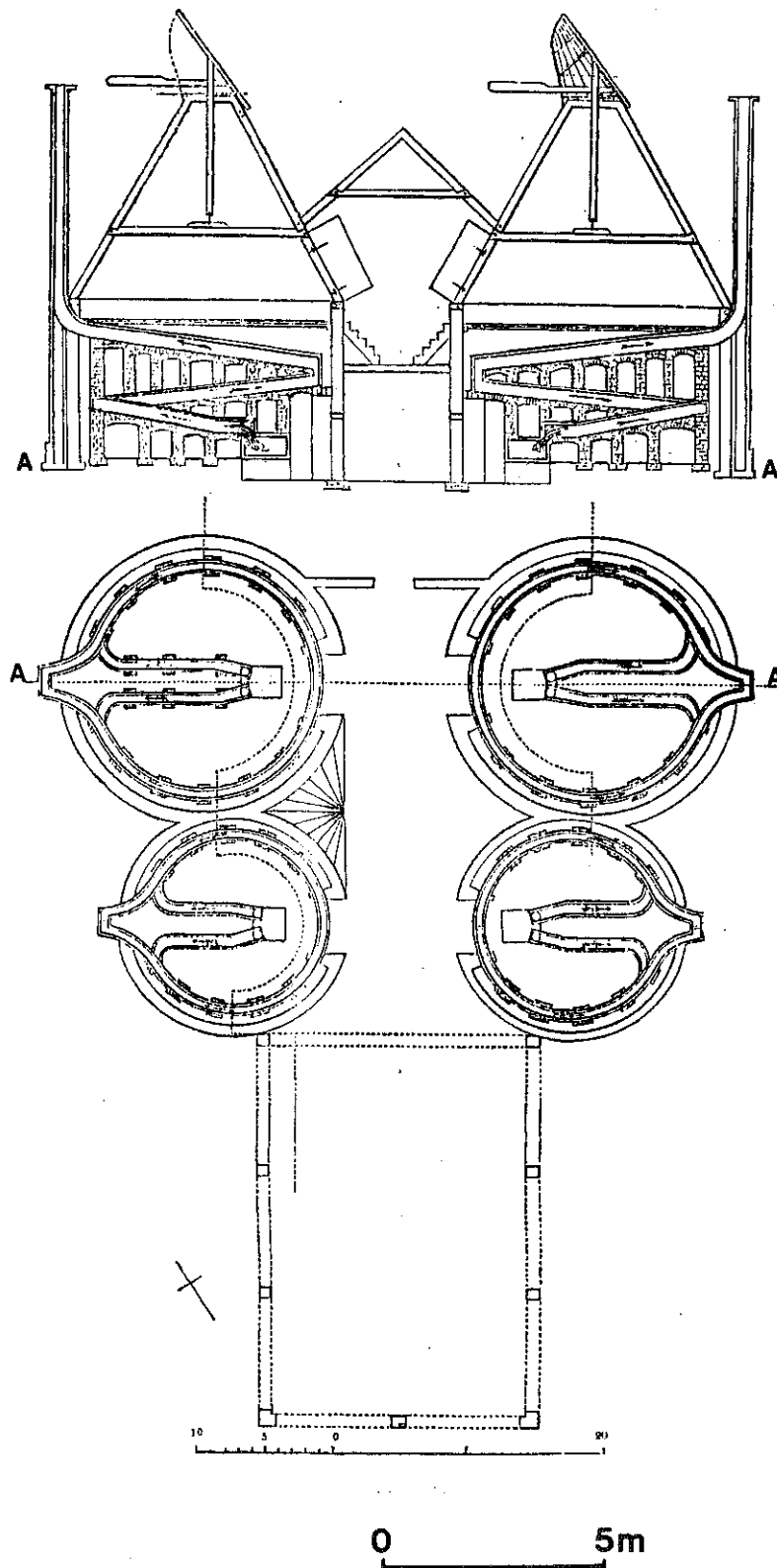


Fig. 1

The plan and section of the oasthouse at Teston as published in Loudon's *Encyclopaedia of Cottage, Villa and Farm Architecture*.

Loudon was clearly excited by the originality of the design. Read's experience as a gardener, of using smoke flues in hothouses and steam in pineries had brought him to an inventive application of similar principles for the drying of hops. Once his ideas had been perfected in practice, he adopted a circular kiln because of its greater strength and economy in the use of brick. He is not known to have claimed to have invented the circular kiln, but its invention has since frequently, and erroneously, been attributed to him (4). (Round kilns have been in use since prehistoric times for the drying of grain, malt, seeds and various other substances.)

The illustrations and accompanying explanations in Loudon's Encyclopaedia demonstrate a system of brick flues supported by brick piers and arches built about 150 - 200mm away from the internal face of the wall of the kiln. The flues were designed to carry the heated air not only right up to the drying floor, but also all round the kiln. With open grates, such proximity would have resulted in poor draught and in scorching the bottom layer of the hops. The brick flues, however, were to produce and maintain a controlled and even heat emanating from the side walls of the kiln, thus eliminating pockets of cold or damp air, whilst heat rising from the furnace itself would more than adequately spread across the centre of the kiln.

The Kiln

The pages of the Encyclopaedia set out in general terms the specification for every part of the kiln, giving some dimensions and omitting others. The walls were of 225mm brickwork on 450mm footings. A door on both ground and first floor opened from the stowage into the kiln. The one provided on the ground floor was kept low, not more than 1.37m maximum, because Read held that a low door improved the draught. Fumes from the furnace were ducted away into a chimney built on the outside wall immediately opposite the door.

Plenum Chamber

A cockle or furnace of cast iron stood at the end of a short, covered entrance passage with two doors, one on either side of the furnace, leading into the area behind (5). The furnace itself had two doors, one to the fire box, and one to the ash pit below. Both furnace and flues were blackened on the outside in order to increase the radiation of heat, and the inside face of the walls was whitened in order to prevent the bricks from absorbing heat.

From the rear of the fire box two horizontal sections of pipe constructed of either iron or firebrick and of just less than a metre in length, conducted the heat towards the wall of the kiln where it entered the flues which immediately separated and started to rise round the wall. Each flue passed half way round the kiln in opposing directions and came together again when they reached the piers above the entrance passage. Here each one rose vertically for a short distance and then returned back round the kiln, still rising, until they connected with the chimney flue at a point just below the drying floor. The side walls of the flues were built directly upon the piers or arches which supported them.

They were constructed of three courses of brick-on-edge and sealed across the top by either brick or tile. Initially it is stated that either could be used, but later in the description, tile is said to be preferable because duty could be saved. Two courses of tiles 150mm by 75mm are stipulated, the joints staggered in order to prevent smoke from penetrating into the plenum chamber. The piers which supported the flues were also built of open brick-on-edge work and between them stretched an arch 110mm deep. Read suggests that the flues could easily be cleaned, either by removing one or two of the covering-tiles to insert a brush, or by burning in the furnace a few handfuls of dry brushwood or dried hop-bine which would create sufficient draught to carry all the soot out of the chimney.

Drying Floor and Cone

The joists for the drying floor were lodged on a course of corbelled brickwork. Across them were laid iron laths, 50mm across the top, roach bellied underneath, and shallow, being only 6.25mm at their thickest. Perforated tiles such as were used in malt kilns were laid across the top of the laths and the weight of this floor was supported by one or perhaps two iron girders with iron stanchions where necessary. When the drying floor was laden, the hops were prevented from falling out at the doorway by boards slotted between guides nailed to the door frame.

No firm dimensions are given for the height of either the eaves or the top of the conical roof, but Read appears to have considered it crucial that the circular roof should start gathering in at a point 450mm above the top of the tiles. Where the roof gathered in, the opening was closed by a pair of doors which could be lifted and laid back on the slope. A collar beam across the kiln just above the opening carried the pivot of the spindle of the cowl. The rafters, rising from a plate laid on top of the kiln wall and tapering from 100mm x 50mm at the bottom to 75mm x 37mm at the top, rose to an iron curb which also supported the stay for the cowl.

The Stowage

Very few details were given of the stowage, probably because there was little to improve in the traditional ideas for stowage building. The introductory remarks proclaim the necessity of having a "...cool well-ventilated loft adjoining...formed over a cart-shed, or some other building open on one or on all sides", and the section through the two larger kilns shows in outline the sort of building considered necessary. The level of the cooling floor was considerably below that of the drying floor. Access to that was via a pair of movable steps which could be hooked to the wall just below the door opening. When the hops were dry the steps were to be removed and the hops shovelled out of the kiln down on to the floor. They would lie on this floor until deemed to be sufficiently cooled, at which point they were to be trodden into pockets or bags at a treading hole fashioned into the floorboards. The ground floor of the building perhaps served as the 'shed' whence the hops were sent to market. The

'store loft' prescribed for those hops which were not to be sent until prices were right, was probably in another building, given that the bags needed to be 'carefully excluded from the air'.

A Surviving Example of a 'Read Kiln'

Given firstly, the published design, and secondly, the numbers of round kilns known to have been constructed in Kent and Sussex, it might have been thought that Read's ideas were finally considered suitable only for circular kilns. Necessarily, however, his early experiments must have been conducted in the square or rectangular kilns traditional at the end of the eighteenth century and at the beginning of the nineteenth. The recent recording of an oast in which a 'Read kiln' survives intact finally dispels any doubt: it has one square kiln. And, as if to underline this fact, another oasthouse nearby which has two square kilns, also reveals remnants of Read's system.

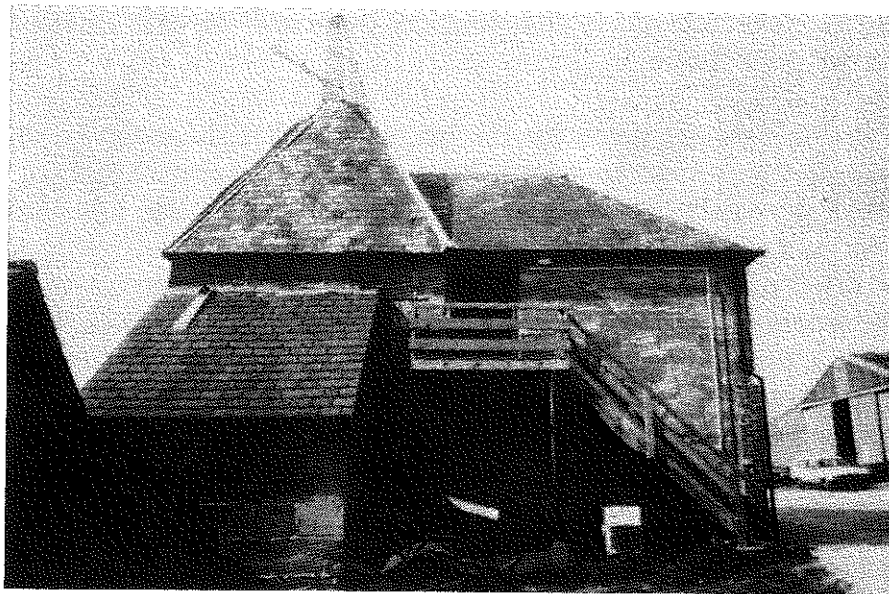


Fig. 2

Bird-in-Eye oasthouse. The kiln remains unconverted. The stowage is used on the ground floor by a saddlery firm, on the first floor by an upholstery firm whose workshop occupies the former stable building nearby.

Bird-in-Eye Farm Oasthouse, Framfield Parish, Sussex. (Fig.2)

The farm was part of the Buxted Park Estate and documentary evidence shows that Bird-in-Eye farm (formerly spelt Budny/Budney), always moderate in size - roughly 70 acres - was established at the very end of the eighteenth century on land originally farmed with Gatehouse farm. A mixed farming economy was adopted and the farmstead eventually acquired a brick-built barn, oasthouse, stable, dairy, cowshed, tackle-store and enclosed yard (6).

The oasthouse, first mentioned in a lease of 1838, originally comprised a single kiln and stowage on a north-west/south-east axis (assumed west/east for the convenience of this discussion) with a covered entrance and storage area on the south wall. To the north a lean-to was added and subsequently altered and enlarged (Fig.3).

Stowage

The stowage measures 4.6m by 4.36m. The north, south and west walls at both ground floor and first floor levels were originally of dressed and coursed stone blocks, 225mm thick. The east wall was open at ground floor level and at first floor level was timber-framed and weatherboarded. Owing to later alterations, only a fragment of the north wall now survives at first floor level. There may initially have been a north window, but at the present time just one window in the east wall lights this floor.

Access to the cooling floor is by an external staircase on the south wall. There is a press, by Drake and Muirhead, and its position slightly off-centre suggests that the original treading hole may have been re-used for the press. At wall-plate level dragon-ties brace each corner and the hipped roof has two main trusses, one at the hip and the other positioned just before three Jack-rafters join the main roof to the slope of the kiln. Externally the roof is of slate on battens (Fig.4).

Kiln

The kiln measures 4.32m by 4.05m. The walls are of stone with some brick coursing in the north, east and south walls.

A two-leaf external door originally opened into the plenum chamber. Its entrance arch has a single brick lining and two metal doors, one either side of the furnace, are hung on the internal face of the entrance. These open into the area to the rear of the furnace where the system of flues supported on piers and arches rises from a concrete floor 460mm above ground level (Fig.5).

The drying floor is 0.87m above the cooling floor and a short flight of steps gives access to it. At the base of the door a board slotted into guides nailed to the jambs keeps the hops in the kiln. Above, a door hung on the right-hand jamb closed the gap to the point where the roof starts to slope inwards. Here

two other side-hung doors open and fold back on to the slope (Fig.6). The ends of the joists to the drying floor are supported on brick corbelling on the north and south walls and are strengthened centrally by a timber girder. The drying floor has timber laths over which an oast haircloth was spread. The roof is of slate on battens. The rafters are lathed and plastered internally. Dragon-ties brace each corner. Three metres above the drying floor two cross-beams support the spindle of the cowl.

Lobby

The covered entrance and storage area or lobby is brick-floored. It is a single storey building which is contemporary with the stowage and kiln. It has a blank entrance opening in its east wall and a window in the south wall. Below this window is a draught opening. (There there is now another draught opening in the west wall where formerly there was a door). The roof is of slate on battens, underfelted, and the rafters are supported on a central purlin. Both half-gable ends are weather-boarded. The building shields the entrance to the kiln and was also used as a sleeping area for the drier (Fig.7).

Firing System

The fire was lit in a rectangular metal furnace whose fire bars were set level with the concrete floor over a sunken ash pit at natural ground floor level. Two openings in the roof of the furnace connect with two short lengths of parallel brick ducts supported by brick piers between curved arches. These ducts carry the warm air from the furnace to the flues at the inner face of the external wall (Figs.8 & 9).

The flue walls are constructed of three courses of brick-on-edge which rise directly off the piers and arches which support them and they are covered at the top with special bricks 310x145x56mm. From a central point in the north wall they are taken in opposing directions round the perimeter of the kiln and gradually rise towards the underside of the drying floor. Where they come together above the door on the south wall, the ducts rise vertically and independently for approximately one metre, and then turn and again follow opposing directions, running horizontally round the perimeter of the kiln supported by a second series of brick piers and arches. Where they meet, at the central point on the north wall, they turn to enter an external brick chimney (Fig.10).

The ducts were cleaned via removable plates set in the face of each straight length and the system's construction is stabilised by occasional brick spacers set between the internal face of the kiln and the walls of the flue. There are two draught openings in each of the south and north walls and one central opening in the west wall.

Discussion

The two most obvious differences between Bird-in-Eye and Read's building are in the use of stone rather than brick and in the kiln shape. Building stone is found in the locality and this may explain its use, especially as stone was also used in other parts of the farmstead. The choice of a square, rather than a round kiln, must presumably have been the landowner's and we shall never know why it was made.

The inspiration for the system used must, however, have been Read's. Since he described his stowage in only the most general and traditional terms, the one at Bird-in-Eye can be said to conform with the principles he laid down: it was originally open-ended on the ground floor; the level of the cooling floor is below that of the drying floor, and given the small scale of the building, the roof is sufficiently high to render it airy.

The flue system is so nearly identical to the one published that it is quite possible that Read actually supervised the building of the oasthouse himself: he is known to have overseen the construction of many, making visits to the owners both at the design stage and after completion of the building (7). It would not have been possible for him to expect each owner to adopt exactly the same template. Each oasthouse built had to respond to constraints both financial and topographical. Read's design had to be capable of alteration and adjustment. Here the shape of the kiln is used to institute a major change: the way in which the flues return horizontally round the top of the kiln. This may, indeed, have been intended as an improvement as the heat is maintained at a constant level beneath the drying floor.

Other changes are less fundamental. The pillars are not constructed in brick-on-edge work. The need to take the flues across the angle of the corners occasioned the use of unusual curved bricks. Furthermore those bricks, 310mm by 145mm which are placed across the top of the flues may well have also been specially made for use in such kilns (8). Either these were just easier to lay, or the double tile course recommended in the *Encyclopaedia* was not found to be adequate in practice. As a result of the adoption of these bricks, mortared together to prevent the smoke from penetrating into the kiln, it became necessary to provide a front opening in each length of the flues so that they could be swept clean.

The furnace used follows Read's design closely except that its ash pit has no door (9). There are still two doors, however, but at Bird-in-Eye the top door opened to allow a pan of sulphur to be placed on top of the fire-box. As sulphur was already in use by the end of the eighteenth century, it may be that it was not mentioned by Read because he thought that to recognise the need for cosmetic improvement of the colour of the dried hops would reveal an inherent weakness in his system (10).

The door into the kiln, at 1.97m above ground level, is not as low as Read stipulated, but since both the brick floor of the lobby and the floor on which the furnace stood were respectively 230mm and 460mm above ground level, a better draught may have been achieved without making entry into the kiln so difficult. As for his recommended blackening, "in order to increase the radiation of heat", the furnace at Bird-in-Eye is blackened externally but the flues are not. Indeed they show some signs of having been whitened.

Corbelled brickwork is used to support the ends of the joists to the drying floor but they are strengthened by a timber, not metal girder. They are also more numerous because this drying floor was designed to have timber slats and a hair cloth rather than metal slats and terracotta tiles. It may be, of course, that the original 'malting' floor had to be replaced, perhaps at a time when perforated terracotta tiles were less easily obtained. In that case, the slatted floor must have been put in before 1906 when a valuation surviving in East Sussex Record Office lists an oasthair amongst the fitments (11).

It is true that Bird-in-Eye Farm is not in a major hop-growing area, and that is perhaps one reason why it never needed to be replaced or refurbished, but the fact that this oasthouse remained in use until 1965 is testimony to the soundness of Read's conception. The kiln's capacity was increased in 1945 by putting in a 'puller' fan which augmented the air speed by drawing the hot air through the kiln more quickly. This not only reduced the time taken to dry the hops, but made it possible, when conditions were right, to load them more deeply. To cope with this extra capacity, the cooling area was extended to the north.

In view of the numbers of such kilns which must have been built, it perhaps seems surprising that this is the only complete example discovered so far. The reason is that most kilns have been stripped of their fitments when the industry in the twentieth century was revolutionised first by electric fans, then by 'pure' hot air blown through the kiln and finally by diesel firing. It is to be hoped that what is described above will make it possible for other recorders to recognise fragmentary remains of the same system elsewhere. It would be particularly interesting to know whether any such kilns were ever built in hop-growing areas other than Kent and Sussex. As we have seen, the kilns did not need to be round.

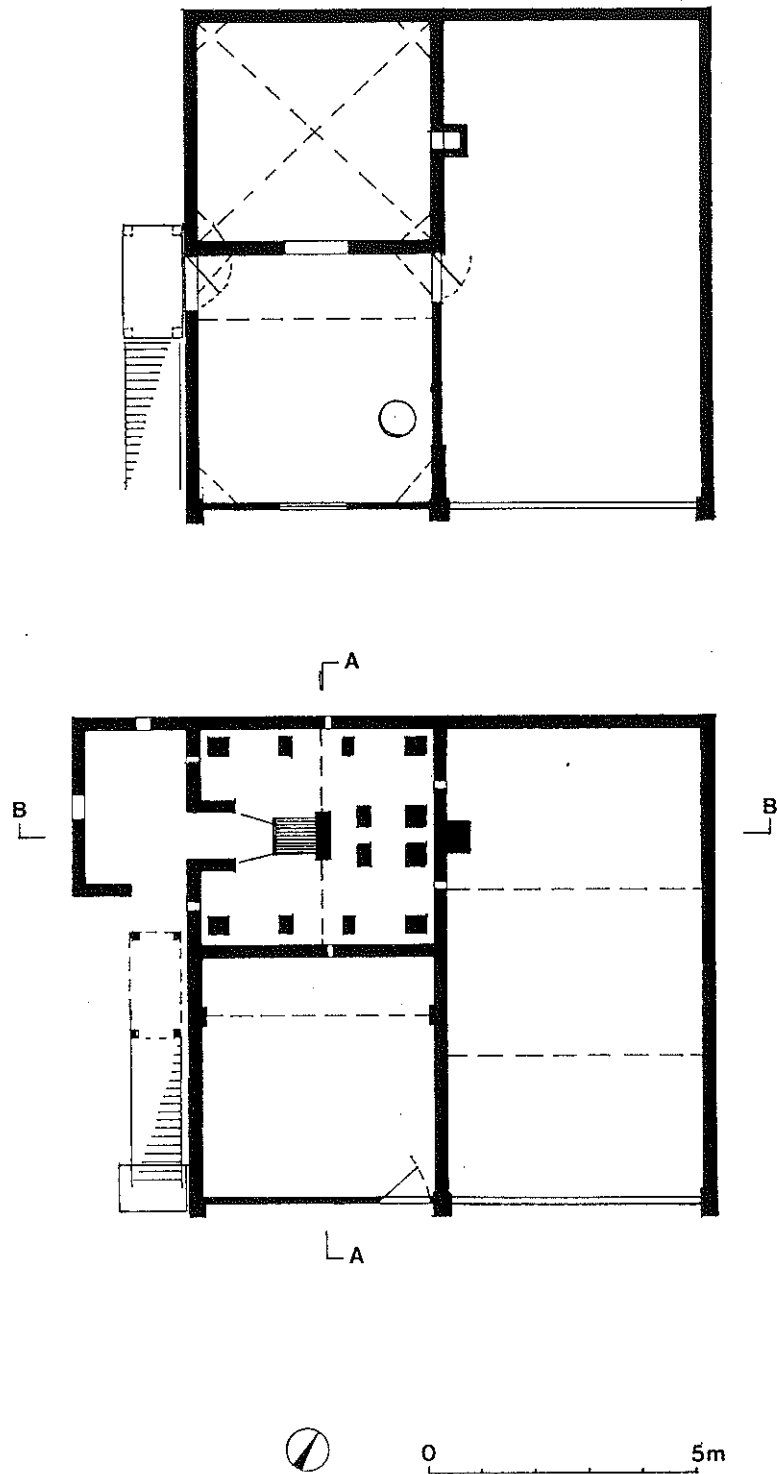


Fig. 3

Bird-in-Eye oasthouse: plans. The first floor plan shows the extra cooling area added after the installation of a 'puller' fan. This addition replaced a lean-to added to the north wall between 1899 and 1910.

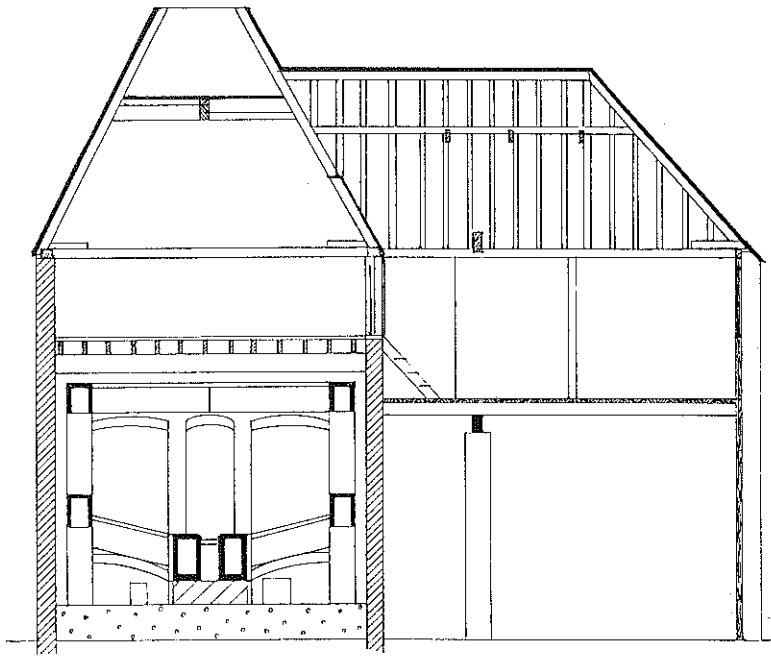


Fig. 4

Bird-in-Eye oasthouse: section A-A.

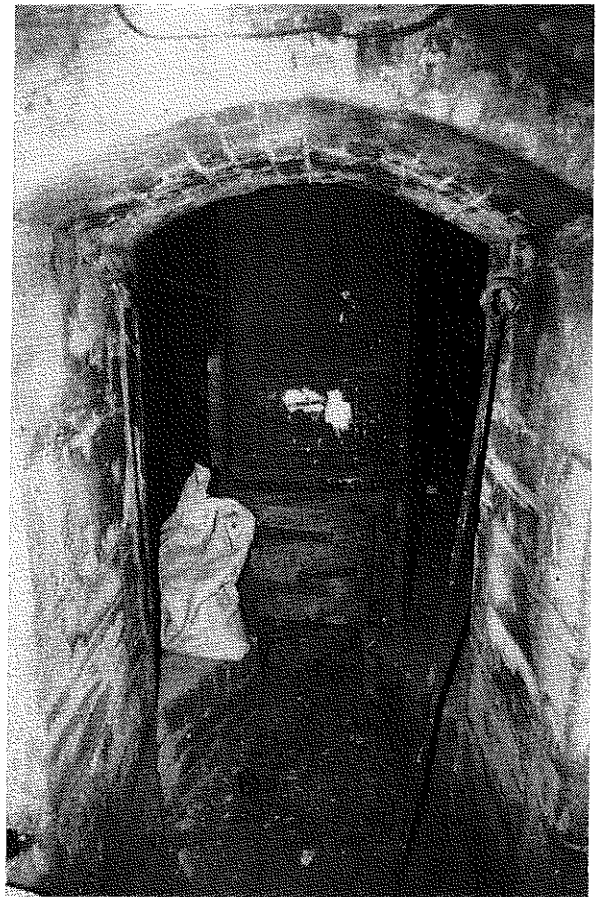


Fig. 5

The entrance arch and the iron furnace at the end of the short passageway. The long-handled rake placed against the right-hand wall allowed the drier to rake out the ash without standing too close to the furnace.

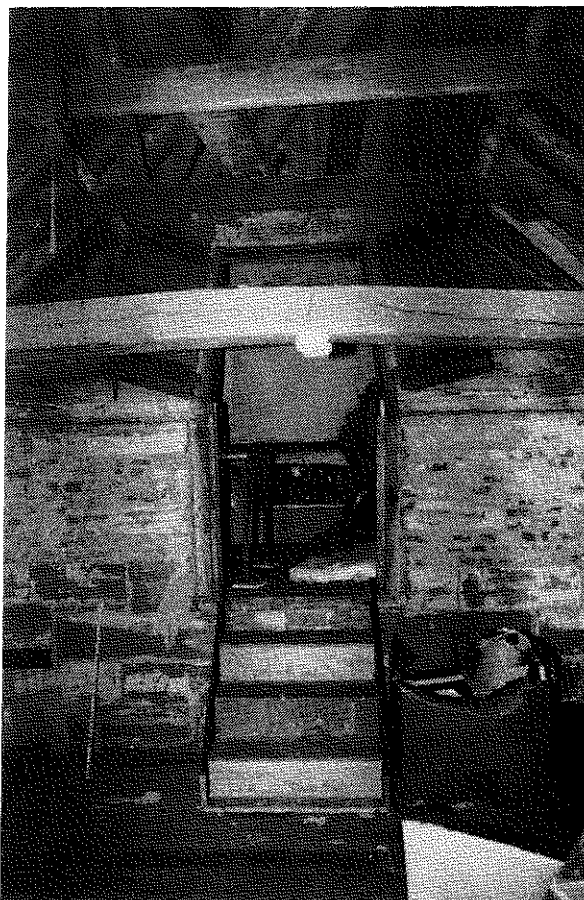


Fig. 6

The entrance to the kiln on the first floor. The steps are not the original flight. The guide nailed to the left-hand jamb indicates the height of the board slotted in to keep the hops in the kiln. The rides on the right-hand jamb mark the former position of the door above. The doors which closed across the slope of the kiln are still in situ.

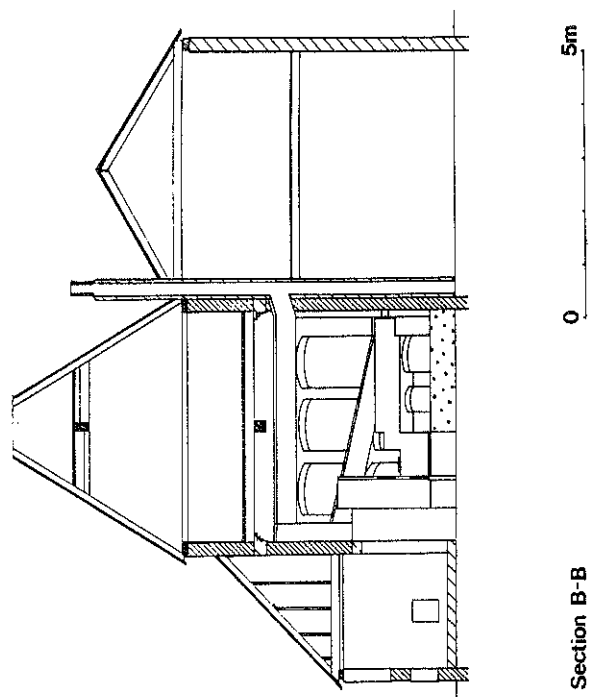
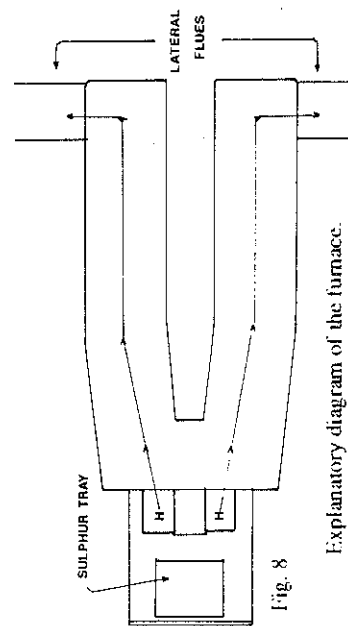
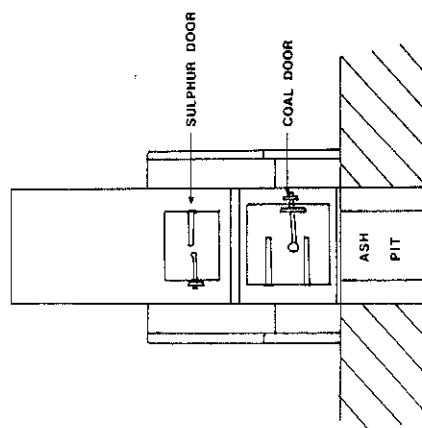
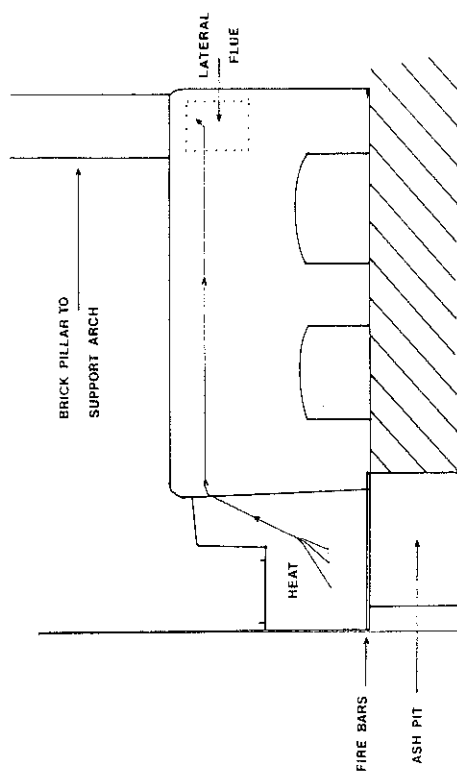


Fig. 7

Bird-in-Eye oasthouse: section B-B.

Fig. 9

Diagram to show the circulation of the heated air round the kiln.

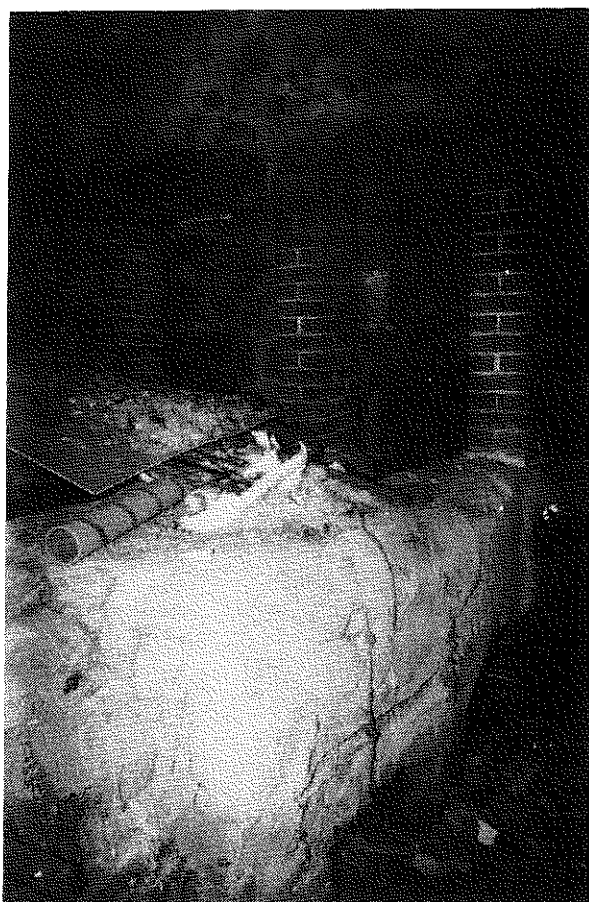
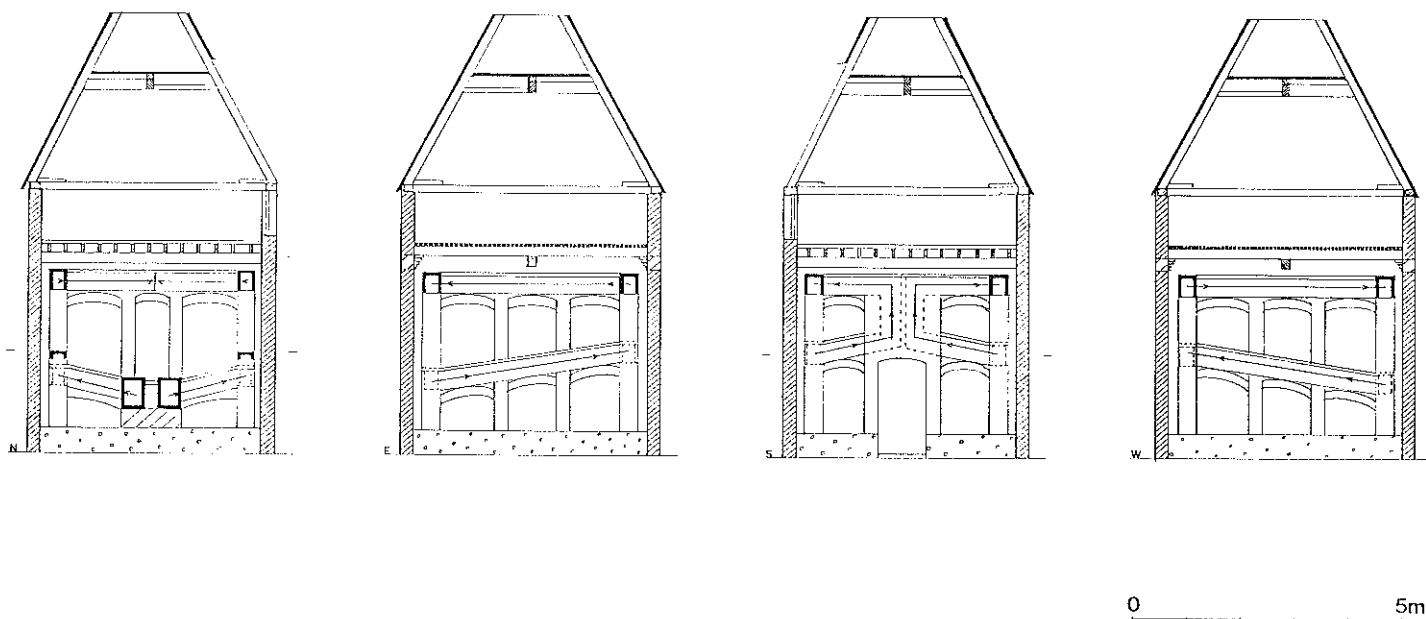


Fig. 10

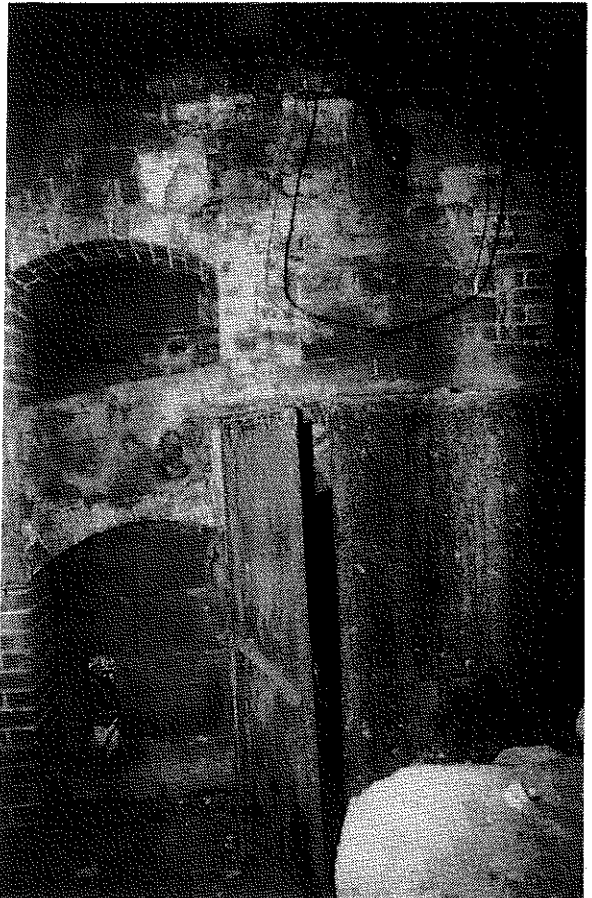
10i: The furnace. The photograph shows the horizontal ducts leading to the flues on the north wall.



10ii: The north wall of the kiln. The separation of the flues is visible at the lower level. The point at which they entered the chimney is shown at the top: the curved bricks are intact on the east side but have collapsed on the west side.



10iii: The rise of the flues on the west side of the kiln.



10iv: The south wall of the kiln. A draught opening is visible in the stone wall at ground level. The vertical rise of the flues is marked by the bricks-on-edge in the centre between the two upper arches.

References

- (1) See, for example, Worlidge, J. Systema Agricultura - The Mystery of Husbandry Discovered, (1669).
- (2) Lance, E.J. The Hop Farmer, (1838).
- (3) Loudon, J.C. Encyclopaedia of Cottage, Villa and Farm Architecture, (1835).
- (4) See, for example, Goodsell, R.H. A Kentish Patchwork, (1966).
- (5) 'Cockle' is used in Loudon as an alternative for 'furnace', both being used to indicate an enclosed stove of iron. E.J. Lance (op. cit., pp 148/9), however, explains the word differently: "By the word cockle, is to be understood that the flues wind round about the house, that is, twisted, which flues, offer great facilities for forming a highly rarefied air." In both of these accepted senses the word could be applied to Read's kiln. The word's derivation is stated to be uncertain in the Oxford Dictionary, but a Dutch origin is suggested. Other dictionaries suggest an Indo-European origin linking the word with the very first ovens used for cooking.
- (6) For the farm's history see the following documents in East Sussex Record Office:
AMS 445; Framfield Tithe Map TD/E/6 1841, Uckfield Tithe Map TD/E/ 1841; SAS H 158; Ordnance Survey 1st Edition 25" map: Sheet Sussex 41/1 1874, 2nd Edition 1899, 3rd Edition 1910; A5290 2/2.
- (7) Quoted in Jones G. et al. 'Oasthouses in Ewhurst Parish: Evidence for the History of an Industry', Sussex Archaeological Collections, vol. 126, (1988)
- (8) Beswick, M. Brickmaking in Sussex, personal communication.
- (9) The Berry family who have worked the farm since 1908 recall that a replica furnace was specially made by a local craftsman when the one then in the kiln became too old to use.
- (10) William Marshall mentions sulphur burning as an established practice in The Rural Economy of the Southern Counties, (1798)
- (11) East Sussex Record Office (BMW A2 Vol.151)
The metal girders and stanchions which Read suggested might be necessary to support the weight of a tiled drying floor were found in a nearby oasthouse although even there, close-set timber slats had replaced the original widely spaced metal ones. The kilns had been enlarged, perhaps expressly to accommodate the new concept of hop drying. They reveal further adaptation of the published design. They have a lower drying floor and the flues appear

only to have made one circuit of the kiln. The chimney is above the entrance door rather than opposite to it. The evidence for it having dried according to Read's system is incontrovertible, however: excavation of the floor revealed the bases of the piers and the sunken ash-pit towards the centre of the kiln.

The grandfather of the present owner became tenant in 1908. The owner's father bought the farm in 1922 when the Buxted Park Estate was sold.

ACKNOWLEDGEMENTS

Grateful thanks are extended to Mr. Berry, the owner of the farm, for allowing the building to be recorded, to John Bell for invaluable help with the recording, to Mr. Anthony Cronk for first mentioning this building to me, and to the staff of East Sussex Record Office.