Great Hallingbury Local History Society. Gt. Hallingbury Village – The Years of Change 1992 p19, p21. Page 22 talks of the brickyard at Bedlars Green that was adjacent to the Hop Poles. It was purchased at the sale of the Hallingbury Estate in 1923 by Messrs Cannon who worked it to the outbreak of the second world war when restrictions caused the kiln to be closed down. This works almost certainly supplied the bricks for Hop Poles and the Forge.

Great Hallingbury Local History Society. The Great House of Hallingbury – Its Place in History. Heather M E M Cocks 1988 p23

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Mechanick Exercises by Joseph Moxon. Reprint from 1703 edition. Manual of Smithing

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Notes.

Thanks to Mike Hibbs, architect of Hibbs & Walsh and landlord of the Hop Poles,Peter Cullen who opened up to enable this survey to take place.

Elphin & Brenda Watkin July 2008.

close examination of the lower rear of the hearth structure. A series of iron clamps, around the lower part of the cast iron pillar, could be the one remaining element for the connection of the air supply. The ridge mounted vent in the central position would be suitable for the use as a forge to extract the hot air rising from the hearth and anvil area.
This is a very good and well built building the structure of which is mainly original but with the extremely long period since operation sadly leaves little of its method of operation.
Two other possibilities may be mentioned. The first refers to the Ordnance Survey maps. The detail of the building on the first edition could suggest that it was still an older building, maybe this was the thatched building mentioned in the village notes when relating to the fire and in fact the building was not actually built until after the fire.
This would be backed by the later edition that shows the correct building shape and the boundary wall.
The other possibility is that the structure would also have worked as a brewhouse in the centre, store to right and customer stables to left.
This building has only survived by being so close to the adjacent public house that has used it as a store, it may some day yeald more secrets.

Bibliography.

ERO D/CT 156B Tithe Award map 1840

ERO D/CT 156A Tithe Award 1840 (Transcription) Lists blacksmiths shop, beer shop, yard and garden but area of buildings on map appear quite spacious

ERO First Edition Ordnance Survey 25" map 31-4 1897

ERO County Series Ordnance Survey 25" map 32-11 1921

ERO SALE/A316 Sales catalogue Hallingbury Estate

ERO T/P 587/1 Photos Bedlars Green

ERO D/DU 800/7 Deeds of Hop Poles PH March 1813. A James Glasscock was occupant

ERO D/F87/18 A blacksmiths shop at Little Hallingbury sold in 1847 had a very similar holding to Hop Poles with just over 3½ acres and similar other buildings

ERO Box H1A Great Hallingbury Local History Society. 2000. A note from 6/10/1891. When our busy world is hushed: some reflections on our past. "The death of John Archer Houblon cast a great shadow over the area. He was succeeded by a nephew Major George Bramston Eyre of Welford who changed his name to Houblon on inheriting the Hallingbury Estate"

change. At the west intermediate wall position it is the doorframe that is again used to control space with no brick connection to the main build. The lean-to roof has seen a certain amount of repair with rafter replacements, but all are still attached as the originals. They use the lip of the lower wall plate for support at the inner end and rest on the wall plate of the outer wall. All fixing is with nails. It is now covered with chipboard and felt.
Each triangular apex of the lean-to, at each end and inside, is dealt with in a different way. Above the west door it is lath and plaster and would match the top of the gable of the main build. Above the east end it is now plywood following the later door changes and to the inside intermediate door it is boarded. The boarded fill is possibly original.
The floor to the central area of the lean-to sits about 6" below the floor of the main building and the heavy wooden floorboards oversail it as a finished step. It is all laid in brick with a further step down beyond the intermediate door to a brick floor to the west. The brick of the central area appears the most original floor finish.
The small lean-to room at the eastern end is much changed as the doorway has been increased in width by 4½", the floor is concrete for most of its width and then shingle fill against the outer wall. With its originally narrower door it could well have been a privy with the seats along the rear wall, the end wall beyond the door opening has shadow marks that could suggest a box type construction. The floor in that area was not concreted and the weed growth (nettles) immediately outside suggests enriched ground.

Discussion.

Overall very little within this building suggests use as a smithy. The brickwork is mainly undamaged and very clean. All the timberwork is very clean and unstained. Only the underside of the tiles shows discolouration or staining but even these are replacements as the sales documents of 1923 say the blacksmiths shop is slate covered. This document however does state that adjoining the house were the Blacksmiths Shop with Forge, Shoeing Shop and Store. The picture with the documents conveniently does not show the forge building but does show the ones on the other side of the road where the public house sign was also positioned. What it does show is the boundary wall around the front corner, now shortened back and lowered, that would preclude the double doored entry from accepting anything but horses as it appears to have only a small gate at the west end of the railings. Was this room also used as a stable for visitors to the public house? The layout of the doors if the shoeing was done in this room is a little inconvenient from the point of view of the forge position and possible anvil position to the left of the forge.
If the hearth was an iron one as many could have been in the later nineteenth century it could have sat on a continuation of the timber floor with the flue connected across to a rear brick flue that would mean that the present projection of the brick structure would be its maximum but the flue design does not seem high enough to take a typical iron forge hearth. The other problem is to locate the bellows position and air feed into the hearth. Nothing remains that suggests where this may be. If it was in the lean-to one would expect some remnant of fitting although the stack is positioned to the side of the cast iron column allowing access to the rear of the hearth. Unfortunately the modern partition precludes a

appear to be mortise and tenoned into the underside of the principal rafter and nailed to the tiebeam. The whole truss is tensioned by a ¾" diameter wrought iron bar anchored in the top casting and passing through the tiebeam and an under iron plate, 5" x 3", that provides the reaction plate against which a 1½" square nut is tightened on the threaded end of the bar.

The purlins are supported on the principal rafters by nailed tapered blocks, a heavy one, 4" high x 12" long, nailed to the outside of the rafter to provide a ledge on which the purlin sits and smaller ones, 1¼" high x 8" long, nailed under the purlin to each side of the rafter to locate it's position. The normal rafters, 4" x 2¼" are attached to a 7" high ridge board at the top and lapped over the upper wall plate at the bottom. They are supported half way by the purlins. The purlin size is 4" x 3" and the scarf joints in them are stepped splayed with nail fixings.

Above the east intermediate wall a collar supports the purlins and braces are run under the rafters from the purlins down to the outer corners of the roof. This suggests that this clear area left above the eastern room, always ceiled, was used for storage. If this was the case the completion of the glass tile lights across the roof would have provided light to this area. The ceiling joists run from the intermediate wall to a lacing piece built into the outer wall at the east end. It was not possible during the survey to examine the method of connection to the lacing pieces. This room is now ceiled with plaster board, as are the walls, and the floor is now covered with chipboard leaving no visual physical evidence.

The floors of the main range are mainly re-laid. The floor of the western area is now concrete covering any original features. The central area has a brick and timber floor in four main sections. The oldest and original is a section of heavily boarded, 3" thick timber, covering an area approximately 6' 6" x 7' with boards from 6½" to 1' 2½" wide. This would have been to the side of the hearth and the outer board is broken at the hearth end suggesting that the floor went across the full width of this room. That area is now infilled with a brick floor of more recent time. The front half of the area also in brick appears to have been laid at yet another period in the life of the building and possibly in various stages.

The present garage building in the western area still retains fittings suggesting use by horses. The rear and intermediate walls are still covered with vertical cock bead boarding topped with a rail at the side. On the rear wall the boards are higher and taken up to a heavy horizontal board above. It is bolted through the wall and has three tying rings for horses. There are no signs of feed provision suggesting that horses would only be tied for a limited period. The western wall is now all brick but has lacing pieces in the wall suggesting that it was also boarded originally.

As before stated this wall has a large cast iron vent set in the gable wall at a higher level that also lets in light as would be expected if this area was used for horses.

The other item surviving is another iron ring but in the underside of the tiebeam about three quarters distance from the rear. The use in this position is unclear as it is unusual to tie an animal from above but it could relate to holding the shafts of a trap or cart off the floor if a horse had been released from them.

The rear lean-to has no brick connection to the front range at each end. It is slightly inset from each end with the doorframes connected to the main building and the end brick walls commencing from the door frame. It is connected inline with the east intermediate cross wall of the main building. This wall is solid but has had an area infilled with modern concrete blocks from some previous

that was set at an angle shown by the remaining staple. The lift latch to the lower door is set in the same way and the latch, staple and door hook still survive. The door now has later bolts, locks, hasps etc. in various positions. The doorframe to the garage has pintles on screw plates still in place but not used on the repositioned later doors. The doorway to the store has the cut outs in the frame for similar pintles but any detail on the frame of the door between the garage and the centre room is now covered by the later narrowing of the door frame to take a modern door. The internal doorway in the lean-to has a similar frame but the pintles are lighter, no fittings remain. The two doors at either end of the lean-to have no original fittings, that to the west has a now fixed, non-opening, stable type door that may be mainly original material and the one to the east has the opening widened to take a later door.

The inside of the building is divided into three areas making one of 11' wide to the double doored garage entry to the west, a centre area about 17' wide and a smaller area to the east about 7' wide. The division walls are in 9" brickwork with the doorways towards the front (south) end.

That between the centre room and the western room is closed above wall height with a fully boarded division supported by vertical studs nailed between the wall plate and the rafters, with nailed struts down from purlins to wall plate on their western side. All these timbers are similar to other constructional timbers in the building suggesting that this division has always been closed. Mounted on the boarding is a hand painted sign "THE HOP POLES" that is assumed to be a former sign associated with the listed public house.

To the east the division wall finishes at wall plate level. This wall plate, 4" x 3", acts as a stop end to ceiling joists over the eastern room. It also has an added timber on top, 1¼" x 2", the only purpose for which appears to be to locate an axial beam, 4" x 6", from the central truss of the building, into which it is tenoned, that rests on the top of the wall plate. No purpose can be related to this beam that shows little visible evidence of having attachments or supporting some piece of machinery. The only clues are two holes, possibly to fasten some form of hanging bracket, and faint shadow lines, but not at the same heights, on the beam. Another remnant nearby is a wrought iron side hinged hook mounted to the inside of the window mullion by this beam. Although this hook is made for strength the fixing to the window mullion suggests a relatively light use.

The rear wall of the central area is mainly open to the lean-to being open for 15' 6" from the west division wall with a cast iron pillar at the mid point to support the span of the rear double wall plate and under the central roof truss. The rear wall plates are comprised of two timbers, the lower is 7" x 9½" with the upper being 4" x 9". The increased width of the lower plate projects to the lean-to. The pillar is supported on a brick plinth. The front wall plates are similar but the lower one is only 3" high as it is supported by wall over its length with the ½" added width for weathering.

The building has only two main roof trusses, one central to the western area and one central to the middle area. These are typical late Victorian softwood trusses, the tiebeams being lapped onto the wall plates and held with wrought iron staple straps. The principal rafters are angle notched to 1" deep into the top of the tiebeams and held in position by iron U-straps bolted through the tiebeam. The principal rafters are fixed at the apex with a truss top cast iron casting with timber wedges nailed to the underside of the rafters. Angle struts are fitted from the principal rafters, close to the purlin down to the centre of the tiebeam. They

The Building.

The forge building is built of well fired brick, average size 9" x 4¼" x 2½", laid in Flemish bond for the main range and Monk bond for the wall of the rear lean-to. The mortar joints suggest, where not weathered too much, that they were most likely penny struck. The bricks all have horizontal pressure marks with some inclusions suggesting a date in the second half of the nineteenth century. The window sills are a moulded cant brick with a 5" sloping front face.
Queen closer bricks have been used to most of the quoins but many have been trimmed to a smaller size to match the bond lines. The one opening with no Queen closers is that to the western side of the double doors. It appears to be unchanged and is possibly explained by the fact that the distance to the closers on the corner would make maintenance of the brick bond more difficult if closers had been used to the door opening.
The bricks include many with burnt headers and these have been used on the west gable end to produce a diamond diaper pattern. The upper parts of each gable end vary in that the one to the east changes to 4½" brickwork above purlin level with four air bricks set high in the gable with an inner pillar up to them to support it, while that to the west is lath and plaster at the high level above the diaper brickwork below. It can be suggested that the brick came from the brickworks, owned by the Estate immediately to the north of Hop Poles.
The roof is covered in single Roman profile clay tiles with four areas of glass tiles to south face with the roof noted in 1923 as being slate covered. The western three are near complete sets of nine glass tiles but the eastern light only has one surviving tile. The tile spacing along the roof would allow for the same size light at that point or alternatively one glass tile has been repositioned.
Each end of the main roof is finished with over-sailing timber bargeboards as used with pantile and profile tiles.
Centrally to the main roof, on the ridge, is mounted a timber louvre with gabled capping. It has large semi-circular cut-outs to the north and south and small round holes in its gable ends to east and west.
The roof to the lean-to is now covered in roofing felt onto a sheet material base. The gutters to the south front are cast iron whilst the lean-to has no gutters but direct run-off.
The windows are in softwood outer frames with narrower mullions under timber lintols. The main frame members are 4" x 3½" and the mullions 4" x $2^{5}/_{8}$" all with ½" rebates. Cast iron frames made up of fixed or opening casements, three lights wide by four high, are set into the rebates and are screwed to the frame through cast in lugs projecting to the inside at the top and bottom of each casting. Only one window has a opening casement and that is a variation on the fixed lights in having a cast in boss for the window catch, the fixing lugs are still in this casting but undrilled. The side hinges are riveted to the cast iron frame. The cast frame is 35¾" x 18¾" with each glass opening at 8½" x 5¾". No windows exist on the rear or to each end but the western end has a large cast iron vent with a semi-circular top set high in the gable.
The door frames are all made from a standard section of softwood but the only original door is the stable type split door to the central room. This door is 36" wide with the top section at 44" high and the lower section at 42" high. Each door comprises nine vertical boards 4" wide x $^{7}/_{8}$" thick with three internal ledges 4" x $^{7}/_{8}$" and no bracing. The top door has a finger hole to the now missing lift latch

The Hallingbury's had at least two from the nineteenth century with at least one farrier. It has been noted many times that a blacksmith may not be a farrier and vice-versa but some did operate as both.
The main requirement was the forge, usually of brick but it could be made of timber-framing lined with clay with most of the later ones being made of iron. The air supply was by a bellows that in various forms have existed for thousands of years. By the late seventeenth century these had developed to provide a continuous stream of air by the three board double action design that remained in general use until the later nineteenth century. In the late nineteenth century the cylindrical vertical form was developed that was used until the circular fan blowers, initially hand powered, appeared. On all very early forges continuous blowing could only be obtained by doubling up bellows and operating alternately to provide a continuous stream of air that was essential when very high temperatures were required such as for hammer welding. With the development of the electric motor and distribution systems for electricity they very soon became the electric powered blowers used today. As the large estates put in electric generation equipment it was often the estate blacksmith that first benefited from the development of electric power, but even today many blacksmiths will say that the double acting hand operated bellows gave them much better control of the heat source. In front of the hearth would be a tank for cooling water and the anvil placed to hand just a turn away from the forge.
Once a feature of most villages the blacksmith has been one of the major losses in the second half of the twentieth century and very few now remain. Often housed in relatively simple buildings but with space around they were ripe for redevelopment and now nothing will remain to point out where the village blacksmith once operated. As with Hop Poles (one assumes the name is synonymous with the rebuilding of the public house in the later nineteenth, possibly c1881 and comes from the Arms of the Houblon family who owned the Hallingbury Estate) many forges had an adjacent wheelwright's shop, another trade of which very little remains.
At the time of the Tithe Award in 1840 none of the existing buildings were on the site and the map suggests a layout much like that at the forge at Woodside Green also on the Houblon Estate.
In the 1851 census Rowland Mardell was blacksmith and he was also shown as the owner in the Tithe Award although the garden was in the ownership of the Houblon Estate and rented by him. He also employed two men and his son Sometime between then and c1881 it was bought in by the Houblon Estate and registered as a proper licensed public house. By 1881 a James Eldred was listed as blacksmith and licensed victualler, and, by 1895 it was a H Beechener, "Hop Poles and Smith". The early 1900's saw the Smith family as tenants and also at the time of the 1923 sale. A James Ball took over in 1926 and no further references could be found for what period smithing continued at Hop Poles but the son of Sam Smith became a blacksmith and took over the forge at Woodside Green.
The only remaining item at Hop Poles forge that can be positively identified is the forge area now reduced back to a flue that is heavily rebuilt at the lower levels to form a basic fireplace opening.

Historic Analysis and Survey of the Old Forge at the Hop Poles Public House, Bedlar's Green, Great Hallingbury, Essex.

NGR. TL 5237 2031

This survey is produced following an application to convert the building to residential with further new build to the forge building and other new buildings on the site. The planning application number UTT/2245/07/FUL and UTT/2245/07/LB was approved by Uttlesford District Council with an archaeological recording condition based on the advice given in PPG 16 that no development/conversion or preliminary groundwork's of any kind shall take place before a detailed building record of the former forge building and associated structures is undertaken. The specification was prepared by the HEM team of Essex County Council and given a site reference of LHOF 08.

Introduction.

The Old Forge is a brick and tile building situated immediately to the west of The Hop Poles Public House in the hamlet of Bedlar's Green in the parish of Great Hallingbury. In recent times the building has been used as a store for the public house with one room fully plastered and ceiled.
It is deemed listed as a curtilage building to the public house. The public house has had the name The Hop Poles since c1881 and a beer house has existed on the site from 1840. It was in the ownership of the Hallinbury Estate by c1881. The sale document of 1923 says the house is modern. An article in the local parish newsletter, Issue 26, for June 2005 states that the house was badly damaged by fire in1904 and was a thatched building. The thatch seems unlikely as the photograph from about 1900 shows the brick built house – unrendered, and with a different roof form covered in slate and chimney stack from that appearing in the 1923 sale documents. The picture from the sales document shows the house plastered as now with the roof span widened so more or less confirming the fire damage. The present forge building and the house are of a very similar age.
The buildings opposite the house, now demolished were the wheelwright's shop, stabling, cart-shed, barn, pigsty and sheds all listed as separate items in the sales particulars. The house is described with – "adjoining it a blacksmith's shop with forge, shoeing-shop and store". The Tithe Award lists it as blacksmith's shop, beer shop, yard and garden – before the rebuilding of the house?
The change in position of where the "smithy" is marked on the ordnance survey maps and other supporting information is very mixed and a positive development sequence of the site is difficult to determine.

History.

Blacksmithing is a trade that has been to the fore since the iron-age and carried on in a very similar form through to the end of the second World War. It was highly developed in this country by a thousand years ago with many villages having more than one blacksmith as well as those on the larger estates.