The subject of this essay is a house of a type which was common in mid-Suffolk in the XVI century. It is possible that the redistribution of land formerly held by Monasteries gave rise to these buildings. Several examples of this type can still be found, though most of them have been altered and added to until it requires a knowledge of XVI century principles of house planning and construction in order to recognise the remains of an original house.

The example now described is built on a brick base, with a brick chimney stack. The carcase is of timber (oak) with puddled clay panels (wattle and daub). The original roofing material was thatch.

The house was not irretrievably mutilated, so that restoration was a comparatively simple matter. The house was condemned by the Local Authority as unfit for human habitation in 1938. In 1939 it was acquired by a private owner and it was restored in that year and in 1940.

The site is on heavy clay land. There is the usual pond water supply associated with houses of this period on such land, the excavated material having been used as building material.

Plate I and Figs. 1 and 2 show the house as it was in 1938. The roof, though sound as to main timbers, was dilapidated in detail. The timber and clay walls had been repaired with brickwork in places, at no distant date, and there was a settlement of the old brick foundations along the SW side. The S angle post and part of the base plate were rotten. The clay panels were a good deal decayed and had slipped in many cases, letting in the daylight; and the exterior plaster was loose in some places and patched in cement in others. No original doors or windows appeared on the exterior, though there were indications of XVI century windows in the NW gable and on the SW side. (Fig. 2.)

The interior showed timberwork which, except for the S angle post and plate, was fairly sound and little attacked by worm. There were three or four probably original doors, one having its original strap hinges and latch.

The work of restoration was begun by repairing the roof; Plate I shows this partly done.

Then the interior of the walls was stripped of all old wallpaper, and the whitewash was removed from joists, beams and ceilings. This revealed the timber framework of the house, there never having been much internal plaster except for a thin coat over the clay panels, in ceilings between the joists on laths direct on the underside of floor boards, and one modern ceiling beneath the joists over the small bedroom.
Restoration of a Farm House in Suffolk.

Arthur Welford, ARIBA.
The house as it was in 1938.

The roof partly repaired.
Fig. 1.

Ground Floor

Pantry

Backhouse

Kitchen

Store

Coal
This also enabled the finding of the original window openings, confirmation being given by the absence of trenails in the plates above such openings.

The brick foundation, where settlement had occurred, was underpinned. This brickwork is of 1\(\frac{1}{2}\) in. to 2 in. well burned brick, but of poor workmanship, the bricks being mostly bats and set in poor lime mortar. Bricks in the XVI century were dear, and it seems likely that these were either throw-outs or came from an older building demolished.

Where decayed timberwork had been replaced by comparatively modern brickwork this was taken down, and the timber base plate, studs, and corner post were restored. All the new oak including timbers, window frames, and doors was locally grown oak.

The original puddled clay and wheat straw panels, where decayed, were taken out, separated from the "wattle," and thrown in a heap to weather. This "wattle" consisted mainly of hazel sticks up to 1\(\frac{1}{2}\) in. in diameter, sometimes split, and bound together with coarse string (hemp?) and wedged into the openings between timbers vertically. These sticks, or Rizzers, were mostly worm eaten to dust.

The old clay was allowed to lie and weather, some water being added, when it melted down into a smooth daub. Much of the original wheat straw was in fair condition and this was left in, new wheat straw being added.

New rizzers were made of hazel poles and wedged into the openings and were bound with tarred string.

The old clay and straw mix was then flung with some force, inside and outside, onto the rizzers by means of a clay-crome—a tool consisting of a long handle with a Y shaped iron head.

The whole of the exterior was then made good up to the existing plaster which was still sound with chalk-lime and hair. When set, the whole of the exterior walls was treated with a wash of freshly run chalk-lime, linseed oil, and size.

The problem as to the exact form of the original windows was solved in a fortunate manner. In taking out the clay fillings, inside and outside, several of the glassless type of window were revealed; these windows were formed of oak mullions about 2\(\frac{1}{2}\) in. to 3 in. square, set diagonally, and about 5 in. to 6 in. apart. (Plate II.) Then, in taking out the fillings in the SE end of the building several fragments of old window frames were found, wedged into the openings to form a foundation for the clay filling. Parts of mullions, transome, head, and sill were found; these were measured, together with mortices in sill and head, and a drawing was made. It was found that this detail exactly suited the old openings, and the new frames were made accordingly and fitted with leaded glazing and opening casements. (Plate II.)

The removal of the clay filling of the small staircase windows revealed moulded mullions in situ, together with \(\frac{3}{4}\) in. square diagonally set vertical glazing bars of oak, these latter having on them their original red paint. Both mullions and glazing bars were set direct into the frame of the house, having no separate window frame. These windows required nothing done to them except to be fitted with new leaded glazing.
Some old glass of about 1690 was found in the SW window of the small bedroom, and in the small SW window of the middle bedroom, after the clay filling had been removed. These windows were complete and the glass unbroken. The leads were narrow and the quarries varied in colour from yellowish to light purple. The lights were fitted between the “diamond” mullions from the outside and were fastened with small iron tacks without any iron frames. The leads were decayed and friable, necessitating new leading; in taking out the old lights pieces of cloth were cut to size, covered with treacle, and stuck to the glazing; the old tacks were then drawn and each light was allowed to fall outwards into a prepared box. They were then sent to the glazier for releading. They were refixed with very small oak splines.

Internally. Modern partitions in the old Parlour were removed. The screen across the Kitchen (Fig. 1) is of pine, panelled, and is of XVIII century date; it was retained as being a pleasant and useful feature. The partition across the Parlour Chamber was removed.

The brick floor of the Kitchen may be original from indications of a “new” piece of flooring in the place where the original chimney stack stood (see later). This floor was in very good order. The brick floor of the Parlour was taken up and relaid in sand.

Fireplaces. In the Kitchen was a poor cast iron grate of the late XIX century. This was taken out and the old hearth reopened; the bread-oven opening was found to be intact but the oven itself was fallen in beyond repair; it is shown conjecturally in Fig. 3. In the actual work a door was put in here (Plate III) but this is incorrect restoration.

In the Parlour, lately used as a Back Kitchen and Store Rooms, a hob grate, a copper, and a Dutch oven were taken out revealing enough of the original brick three centre arch of the original hearth for a restoration to be made.

The middle Bedroom had a XIX century grate; this was taken out and a three centre arch hearthplace was revealed; this arch was of brick, plastered with a hard plaster and with imitation stone joints scribed in.

In the Parlour Chamber the hearth was completely bricked in and plastered over. It was opened and a fine three centre arch of brick, plastered and with imitation stone joints, and the original hearth were found in excellent condition; the back and cheeks of the interior having been red ochred.

The Chimney Stack, except for the hearth places and above the roof, is built in unburned brick set in clay.

Doors. Three or four of these are original, one with its strap hinges and latch. They are all less than 5 ft. 6 ins. in height, suggesting the small stature of the people of the XVI century.

Windows are as before described. In the older part of the house the wall plates immediately above the windows project inside about 1½ ins. and are grooved on the underside for sliding wooden shutters. A fragment of a shutter was found amongst debris; it was of oak, about ¾ in. thick, with a slightly chamfered edge.

All the moulded floor beams and the chamfered joists were found, after the removal of whitewash, to be distempered a buff colour and also red-brown.
Plate II.

Glassless type of window.

The new windows.
FIG. 3,
Fig. 4, shows the house as it appeared about 1580, and this is substantially how it appears after restoration (Plate III). It was not possible to replace thatch in 1940 so the pantiles were retained.

The house was built at two separate periods; the first house (Fig. 5 and 6) may be dated about 1540. It consisted of Kitchen, Dairy, and Pantry; staircase, two bedrooms, and attic. A Byre is shown on the plan; although this is conjectural there is some evidence for it. A "diamond" mullion window, doorway, and some studding of the same period as the house were found incorporated in a stable at the NW end of the house—where they were obviously out of place—and there is the sawn off end of a roof plate, at a lower level than the main house roof plate, fitted to the S angle post of the house.

The chimney stack shown on Fig. 5 does not now exist, but evidence that it did exist is plain. There is a difference in pattern in the brick floor of the Kitchen, almost exactly corresponding with the base of the stack. The short floor joists in the space formerly occupied by the stack and the former staircase are "making good" joists, being of a different section and of inferior workmanship to the rest, and they are of (probably) elm, not oak; similarly the joists over the first floor in the Bedroom. And there is some rather rough making good to the roof timbers where the stack once pierced the roof. Also there are sawn-off tenons of the former partitions on either side of the former stack still remaining in the mortices in the beams.

It appears that about 1580 the enlargement of the house was made. The byre was pulled down and partly re-erected at the opposite end of the house. Then the Parlour, Parlour Bedroom, and the "new" stack and staircase were built alongside the old one, the old one then being demolished and the floors and roof made good. It would have been possible for the inhabitants of the old house to go on living there whilst the works were in progress.

It is interesting to note proof—in the old house—of what is known in the modern jargon as "prefabrication," in the numbering of joists and beam, and also principal rafters. In the Kitchen these numberings are found on the longitudinal beam at each mortice with the corresponding number on the end of each joist where its tenon fits into its appropriate mortice. The numbers are marked with a gouge and are as Fig. 7. The roof principals also are marked from I to III. Probably all the framework of the house was made "off the job," was carted to the site, and fitted and erected on the already prepared brick foundations and chimney stack, just as is the case with the modern Swedish Houses now being erected by many Local Authorities.

It is sometimes wrongly assumed that these old timber houses were dark, inconvenient, and unhealthy, and that only modern houses are what is now known as "functional." This house, at least, was excellently suited to the needs of the people who built it and to their way of life, until hearth tax and window tax robbed them of heat and light. At the present time it is, as it was in the XVI century, full of light, and is warm and dry.
PLATE III.

After Restoration.
PLATE IV.

Roof details.
Fig. 5. Section A--A
North. Wert 50,1A Wrz

Fig. 6.

South. West