

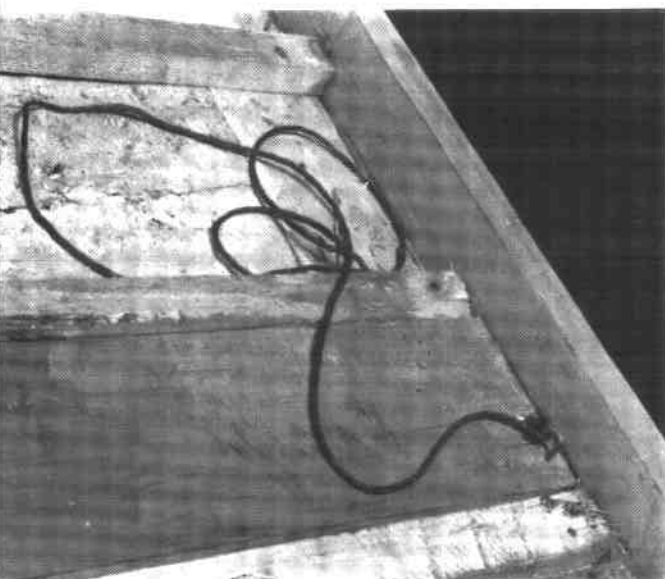


According to choice, a total of four, six or eight bunches are placed together as shown.

A load is hoisted on to the shoulder using the grip to keep the bunches together.

With the load comfortably on the shoulder, carrying is made easy. The left hand is left free to assist in scaling the ladder.





Methods of fixing eaves-bunches may vary, but when they are to be tied with tarred cord, a staple may be used to secure the string in the first instance.

A good well-tapered bunch is selected to start the corner, and the spot-board is used to set a bevel on the butt-end.

This bunch is laid at an angle of 45 deg. across the corner and is secured with the cord. The bevel shows the approximate eaves-line and the iron hooks are used as a temporary measure to keep the work firm.





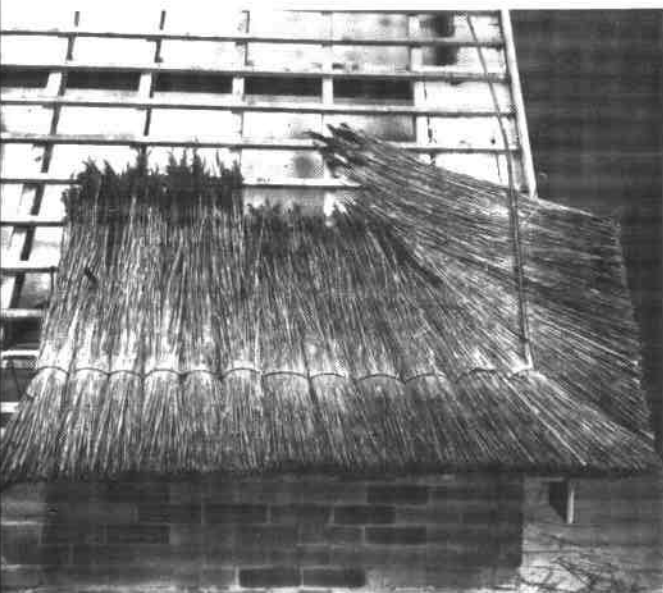
Closer inspection of the tie shows how the cord passes twice round the batten before being wrapped twice round itself. Because of its tightness, the cord is prevented from slipping and the bunch is securely held.

It is important to note the ample springing afforded by both the tilting fillet and the raised barge-board, which causes each bundle of reed to be fixed under tension.



The leggett is now used to dress the bunch to the required level of the under-eaves. A series of upward drives determines the final position and at the same time still further tightens the bunch in the cord.

More eaves-bunches are added in quick succession using the same tying method, but it will be noticed how the direction of the bunches gradually changes from the diagonal, until it corresponds with the line of the rafters.



The gable is formed by laying medium-short bunches, still at 45 deg., overhanging the barge-board. The iron hook is used to keep each bunch tight until the hazel sway is fixed.

A hazel sway is fixed in the vertical position by driving a series of iron hooks into the barge-rafter at about 18" (450 mm) intervals. The head of the hook grips the hazel sway, thus securing the reed under tension across the raised barge-board.

By reaching round the gable, the leggett is used to dress the reed back to a square surface, giving a 6" (150 mm) overhang.





With the eaves- and gable-bunches set, it is now necessary to carry out the operation known as back-filling. This is done by tucking the butt-ends of a small handful of coarse reed behind the tops of the fixed reed, and in the corresponding direction. This operation is continued in stages over the whole roof area and fulfils several functions. It gives additional tension to the fixed reed, and prevents the tops of subsequent courses driving between the battens, thus ensuring a neat and tidy appearance from within.



The brow-course is a single-bunch course which completes the thickness of the eaves and starts the ultimate thatch surface. As in the case of all gables and hips, a well-tapered bunch is selected and laid across the corner, following the same direction as the reed beneath it. Two reeding needles or pins are used to maintain a square edge to the course, after the bond is cut.

The ends of the bunches are dressed roughly into position with the palm of the hand, whilst the opened bunch is held in place with the left forearm.





A light fixing method is now used. A small quantity of reed is placed across the course which is firmly pinned down with iron hooks to the tight reed beneath. This is known as a temporary sway and is later removed.

The brow-course is dressed into position with the leggett, leaving a small portion at the top not dressed. This will mingle with the course above and prevent the join showing.

The illustration shows the brow-course partly laid. It is important to note how three measurements have been determined at this stage. They are (a) the distance from the external tip of the eave to the eave-board, which is 14" (356 mm), (b) the thickness of thatch overhanging the barge-board, which is 10" (254 mm), and (c) the thickness of the thatch coat from the surface to the batten face, 12" (305 mm).

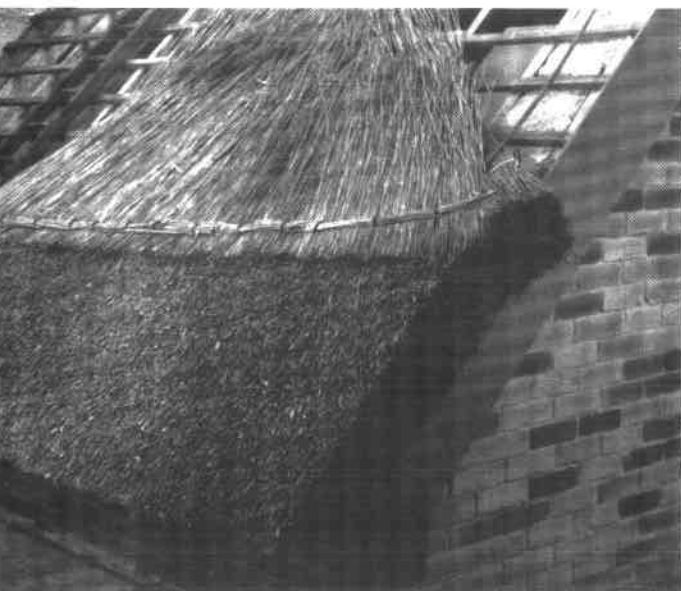




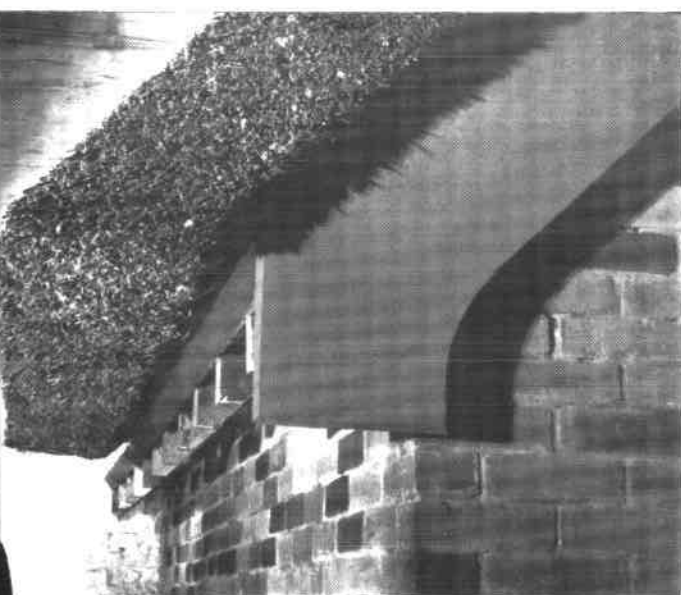
Brow-course fixed with hazel sway. Hooks are driven into every rafter and the portion of temporary reed sway is removed in preparation for laying the next course.

The first full course is started in the gable and is lightly dressed into position with the hand.

A full course showing the straight line to the gable emerging, which is procured by dressing with the leggett. The position of the reeding-pins should be noted as these keep the new course running in the same direction as the course underneath.



A portion of a full course is shown held in with a temporary sway. The clean, square gable takes shape as the work proceeds.



Under-eaves, looking from the corner of the gable, showing open-eaves treatment in the roof timber construction. The distance from the external tip of the eaves to the wall is of great significance, as it not only ensures that water drips well clear of the walls, but provides balance and character of design. This overhang may be increased or reduced in relation to the height of the building.

An alternative and equally effective method of fixing the hazel sway by stitching is shown. One end of a length of tarred cord is secured to the sway, whilst the other end is threaded into the stitching needle.





The needle is then inserted into the reed at a suitable point, where it appears immediately above the batten. The cord is removed from the eye of the needle by the assistant who works from inside. The needle is then withdrawn to the outside.

The needle is pushed through again, this time at a point just below the same batten, whereupon it is re-threaded with the cord.

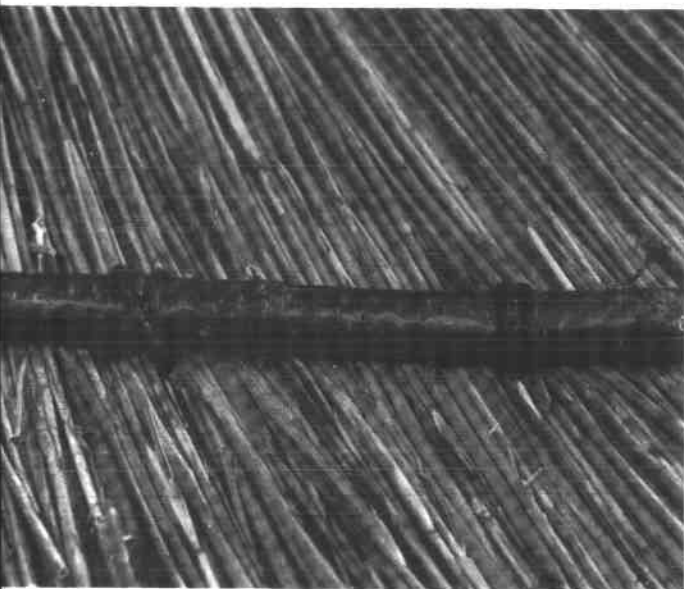
The outside operator withdraws the needle, complete with the cord which has now passed round a batten.

## Water reed

Pressure with the knees and a pull on the cord forces the hazel sway tightly into position across the course.

The cord is passed round the sway again and the knot is made as shown.

The illustration shows the tied-in eaves-bunches, the brow-course and the first full course swayed down.





If an obstruction such as an eaves-chimney is encountered, a break in the eaves-line is made and courses must be terminated. To ensure a strong finish next to the chimney, the staple and cord method can be used.

The bunch is tied down almost as previously described. It will be seen, however, that the bunch is laid at an angle, instead of straight, and the reason for this becomes apparent.

The butts of reed which overlay the angle of the chimney are dressed back square by using the leggett to obtain a uniform finish.

## Water reed



Eaves-bunches may now fill in the gap.

The same treatment is applied to the brow-course which follows, and a firm square angle is formed.

The brow-course is filled in and swayed down.





The first full course is terminated at the chimney.

Each course makes a tight junction with the chimney, and in this case a half-course is necessary, the reason for which becomes apparent from the next illustration.

Before further courses are laid, lead stepped-flashing should be fixed to the brickwork. The top end of the lead runs on to the half-course laid at a level which will carry the water from behind the chimney.



## Water reed

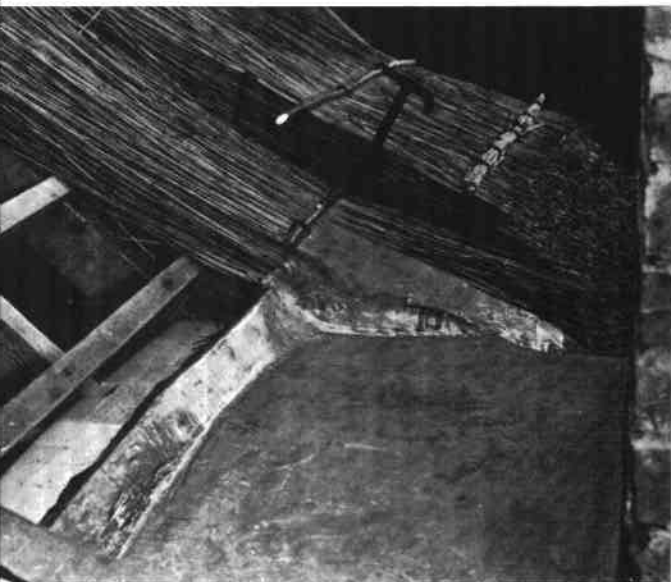
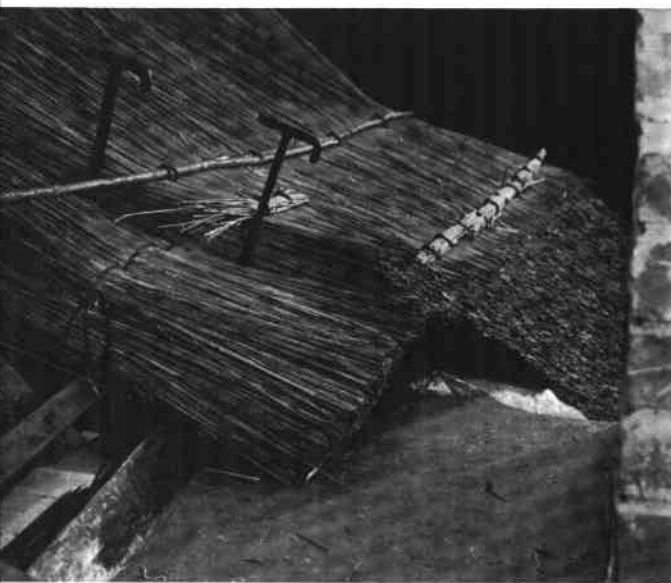


It next becomes necessary to fit the lead gutter behind the chimney. Raised in the centre, the gutter sheds the water in both directions. The sides of the lead are dressed on to the reed and the stepped-flashing on either side.

Eaves and brow-course should next be started on the other side of the chimney, where the same methods apply.

Each succeeding course is started until the required level is again reached. This is in fact the same level as the corresponding finished course on the other side. Lead stepped-flashing is then fixed to the second side.

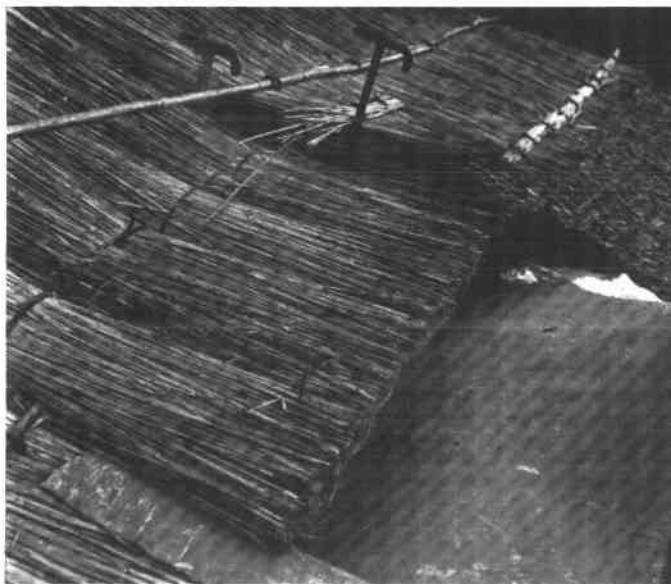




A short length of tilting fillet is fixed to take the eaves-bunches at this point. The lead is dressed over this fixture to prevent any water penetrating behind the reed.

The eaves are set by tying bunches to the first batten, as illustrated.

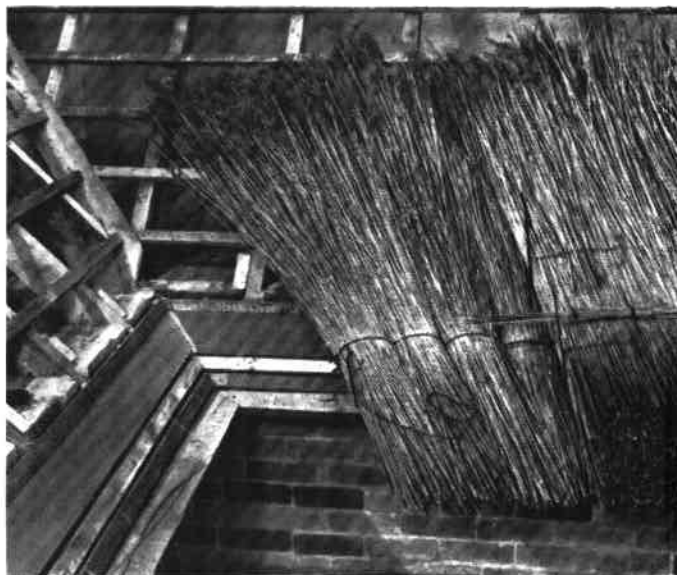
Seen from the first side of the chimney, a further half-course joins up to the eaves where it becomes the brow.

**Water reed**

The eaves-bunches are completed.

The brow-course is carried right through and swayed down.

Subsequent courses may now be carried over and normal full courses are resumed.

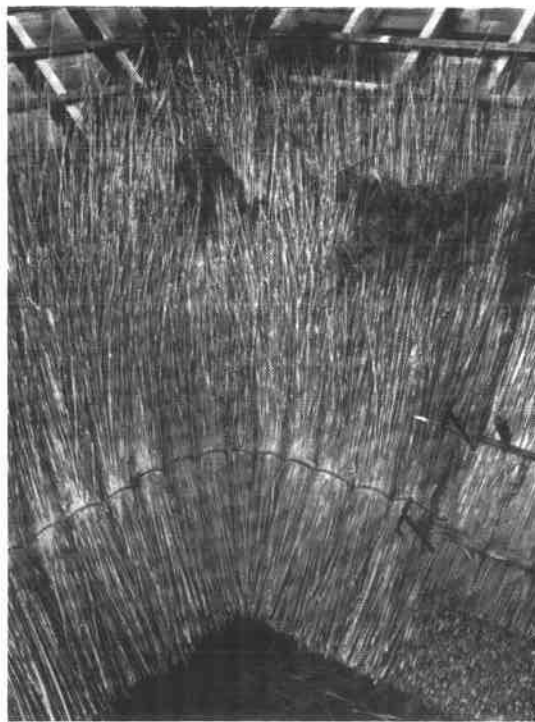


A closer view behind the chimney shows the neat, tidy finish obtained, and it is unlikely that a gutter of this construction will become blocked by falling leaves or other rubbish. There is also room for a man to stand, which in itself facilitates subsequent work on the roof.



A general view of the finished work around the chimney, presenting a practical weatherproof job.

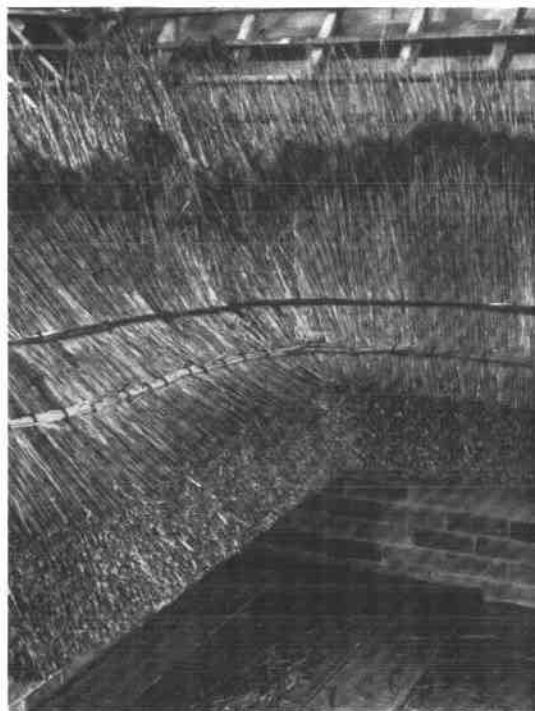
The run of straight work is again interrupted as the valley is approached. It is imperative that the reed now ceases to follow the vertical line of the common rafters, and turns towards the angle of the valley. This change of direction must begin to take place at least 6' (2 m) from the valley.



Bunches tied in the valley now follow the angle of the valley-rafter. It is here, in the valley, where the long, coarse bunches may be used to advantage. They invariably have tops and middles which are larger than the butts and thereby have a greater covering capacity where it is wanted.

Eaves-bunches are tied into the whole valley area and back-filling is applied, giving an extra thickness to the actual valley angle, to maintain the pitch of succeeding courses at this point.

The brow-course is completed in the valley and is swayed down. It is now ready for the subsequent courses to be brought round, but before this is done closer inspection of the valley will reveal how the sway turns the angle.







It will be seen that the sway is not bent round the angle of the valley, but instead is finished off by inserting the pointed end into the reed and fixing it down separately. A new sway, again with a pointed end, is then inserted immediately below the sway on the other return and is fixed down in the same way. This method obviates using a spike in the angle of the valley and also provides a far stronger fixture.

The first full course is now laid in the valley, the leggett being used to form the angle.

Care should be taken when forming the angle to ensure that it follows the line of the valley-board implicitly and should preferably be slightly swept or rounded, rather than sharp or square. There are two good reasons for this: (a) to disperse the volume of water at this point over a wider area, and (b) to reduce the possibility of falling leaves and other rubbish becoming lodged in the angle.



As previously stated the reed in the angle of the valley lies with less pitch than the reed on either side. To counteract this, and thereby to give the water equal discharge, a long coarse bunch is opened and laid with the butt-ends uppermost, and with the lower ends just covering the sway. This will be fixed with the succeeding course and may be repeated at intervals as required.

The second full course is continued round the valley. In preparation for laying the next bunch, the needle is set at the appropriate width and the temporary sway is cut through and removed.

The first bunch, representing half the course, is laid and palmed up.





The second bunch follows and the course is filled in.

By using the end of the leggett, the reed is notched up whilst still in its loose state, although it is lightly held with the left hand.

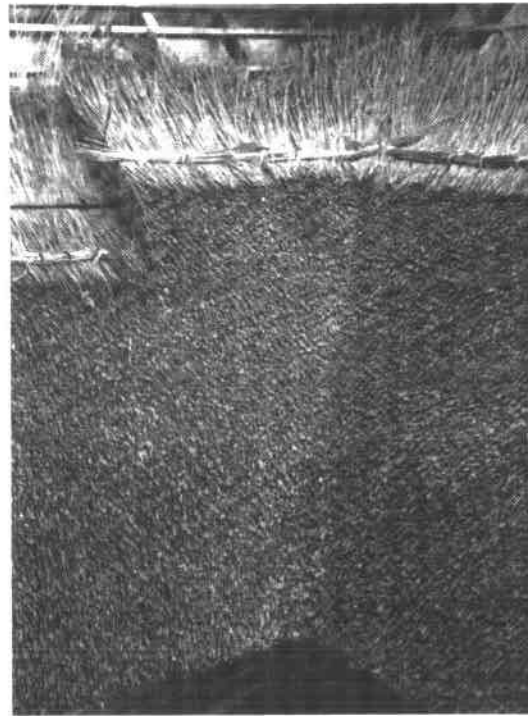
The temporary sway is fixed and the section dressed off to bring it in pitch with the coating already laid.

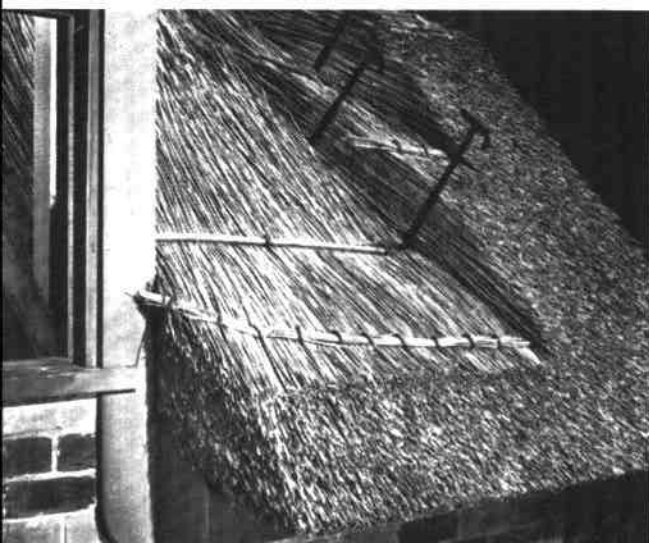


Long thatching-hooks are used to secure the temporary sway, but with certain thatchers the spar or brotch is still preferred for this purpose. The method is a survival of the days preceding the introduction of the iron hook, when stitching with grass rope or hedge briar, and later with treated cord, were the only methods of binding employed.

The valley as seen after the third course has been laid. The greater volume of water which unavoidably collects at this point sometimes gives rise to anxiety to such an extent that another material, perhaps tiles or lead, is used to turn the valley. This breaks up the thatch-line and is most unsightly. It is also unnecessary, as careful adherence to the foregoing methods will produce a durable thatched valley capable of withstanding the heaviest rainfall.

The treatment of windows, which may be located at various levels in the roof, according to design or requirement, is now described. The window illustrated is set on the wall-plate and therefore breaks up the eaves-line. Steps of the courses are shown in detail as they approach the window.





Eaves-bunches are tied in as far as the window-frame, but in order to make a stronger corner, the last two bunches are laid slightly off the vertical line, with their butt-ends pointing towards the corner.

The brow-course is started next to the window and again this is laid at an angle, which when dressed back into a cheek, not only provides a strong square corner, but is much neater in appearance.

The brow-course is filled in and the hazel sway, which finishes just inside the window-frame, is fixed.