Turning to the gable (or barge) the bottles are laid in the same way, each one overhanging the barge-board by half its length. The sway is started by forcing the large end, which has been tapered for the purpose, behind the sway holding the eaves.

Continuing to lay the bottles in the barge, the sway is hooked down as the work proceeds.

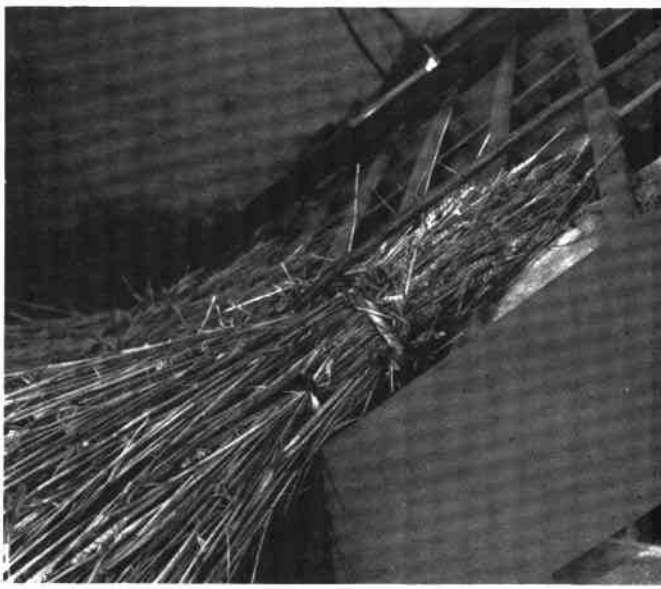
In order to tighten up the bottles as much as possible, the same method is used in the barge as in the eaves, whereby a spar is driven in a downward direction, through the first bottle and into the next.

The position of the spar is indicated in relation to the barge-board which is seen immediately below.

With the spar driven home, the bottle is drawn tightly into position. This procedure is repeated with each bottle, and it may even be an advantage to drive in occasionally two spars spaced evenly side by side, care being taken to ensure that each one is inside the barge-board and in no way protrudes.

Laying eaves- and barge-bottles can be done in stages, as it may be imperative to thatch-in a certain section of the roof.

It is very noticeable at this point that the pitch of the bottles already fixed in the eaves and barge, is less steep than that of the rafters. This is caused by fixing the bottle large end downward and by the tilting-board which is fixed to the eave and barge. It is most essential to retain this hollow effect throughout the whole roof area, as the purpose is to cause the lower ends of all courses to bristle outwards towards the weather, thereby giving greater durability.



Long straw

Before any courses are laid, a thin layer of straw is spread as a lining course over the battens. Although it is not a necessary requirement, it does have the effect of making the roof neat and tidy when seen from the inside. It should not however be confused with back-filling as used with other materials.

An extra yealm is laid on the corner to give added strength and thickness.

This extra yealm is fixed by means of a row of short spars driven into the firm portion immediately below the sway.

These spars are not driven in at right-angles to the slope of the roof, but with sufficient slope to eliminate the possibility of turning water inwards.

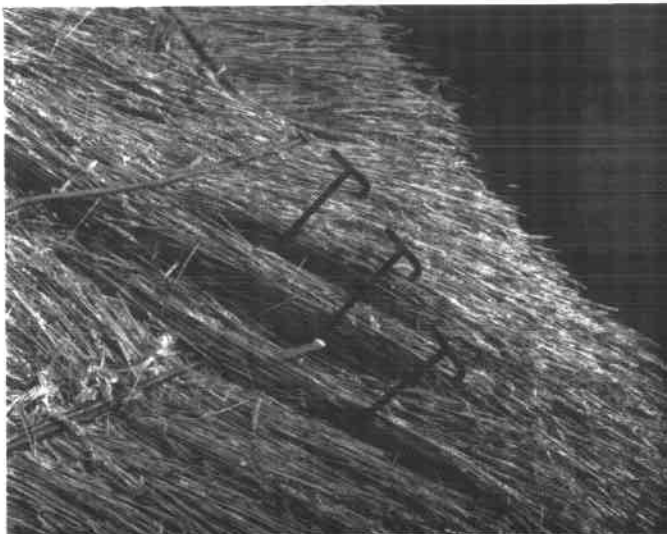
The first course proper is now laid. This is a single course – i.e. one yealm thick, which starting right on the angle of the corner, is placed almost as low as the eaves-bottles, with the large end of the yealm downward. One or two needles are used to force each yealm tight and the course brings the eave up to the required thickness from the eave-board.

Similarly this course is fastened with a row of evenly spaced spars, which are driven in just below the first sway.

There is, however, an alternative method by which a course can be secured. This is by twisting a straw 'bond' or 'scud' which is sparred down in the same fashion.

Working from the barge the second course is started. Of particular interest is the way in which each course is laid at the same angle as the bottles in the barge. These courses gradually turn from the diagonal position until, after about 6′ (2 m), they resume a position in line with the rafters.

Still keeping the large end downward, the third course is started in the barge, where it is placed in such a position as to overlap the previous course by two-thirds. This should provide a thickness of approximately 15″ (400 mm) through to the batten face. For the purpose of fixing, the second and third courses combine to make one double course, and the sway is hooked down, thereby securing the whole work. It becomes apparent therefore that a sway is fixed for every two courses laid.



More yealms are laid and the courses are extended. Each course is held firmly with a needle.

At the appropriate stage of the work, the sway is fixed down, and should be holding such a thickness as to require a 9″ (230 mm) hook.

The positions of the courses are clearly indicated. First the eaves-bottles and sway, followed by the single first course sparred in below the sway, then the second and third courses fastened down together.

From this angle it is possible to see the position of the sway holding the second and third courses, where it overlaps the vertical sway which holds the barge-bottles.

A good supply of yealms is contained in the loaded yoke, which for right-hand working, is situated on the left-hand side, with the large end of the yealms towards the ladder.

The cord securing the full yoke is released and lightly bound to a batten to prevent the yoke slipping down from the roof. The operator grasps the first yealm firmly with both hands.

Passing the yealm in front of him, the operator prepares to start the fourth course.

With the large end downward the yealm is placed in position in the barge, overlapping the previous course by two-thirds of its length.

The needle is used to force the yealm back tightly into line with the bottles which overhang the barge.

The fifth course is started in the same way, and in order to avoid unnecessary movement, the two courses are continued together.

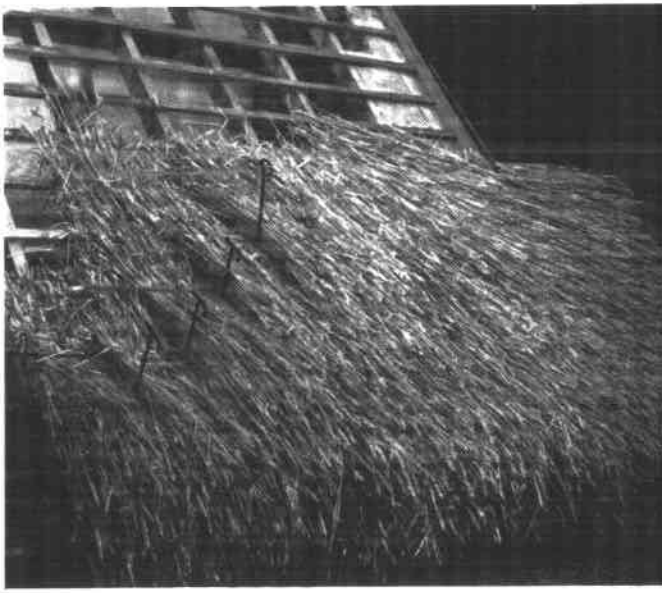
It is not sufficient merely to lay yealms against each other, since a sound joint must be made. This is done by gripping the farther side of the yealm and placing it squarely against the edge of the yealm already in position, following through by running the hands along the joint, one hand to the left, the other downwards to the right.

After lifting the remaining portion of the yealm into place, the needle is removed and the joint pressed down and completed.

The needle is now inserted in the new position which is the edge of the yealm just laid. A levering motion is used to force the work tightly together.

Pressing the left arm across the middle of the course, the free hand is used to pluck the long superfluous straws from the lower end, thus making the surface both level and tidy.

Any straws removed are retained in the hand throughout the process, after which they are placed beside the needle.



The fourth and fifth courses are shown at a more advanced stage, ready for swaying down.

The sway is fixed in position across the two courses, and it will be noted that there is an excellent hollow place where the next course will bed down.

More bottles are laid in the sloping position across the barge-board and these are swayed down as the work proceeds.

The sixth and seventh courses are now started in the barge in the same way as previously described.

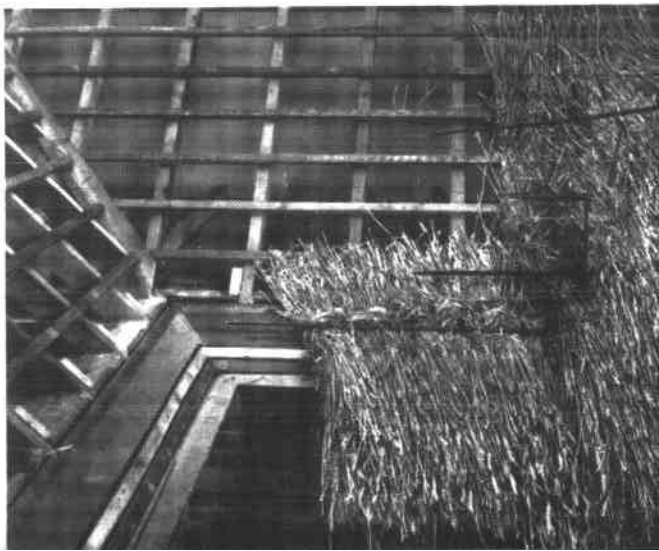
These two courses are continued, and when sufficiently advanced they are swayed down together.

The courses are shown in steps across the roof, giving the relative position of each sway.

When a section of the roof has been covered in, the side-rake is used with a combined beating and combing action.

The barge is raked in an outward direction according to the angle of the thatch, removing all short waste.

Continuing the courses along the roof, it will be noticed that the direction of the thatch begins to turn towards the angle of the valley, well before it is reached.



The eaves-bottles, as they approach the valley, are almost in line with the valley-board.

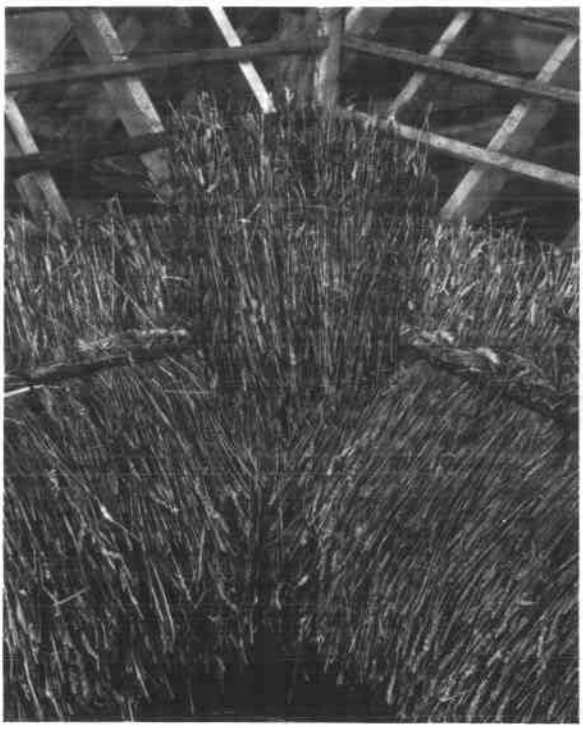
On reaching the valley the eaves-bottles come into line with the angle. The hook in the tilt-board is for the purpose of keeping the work tight.

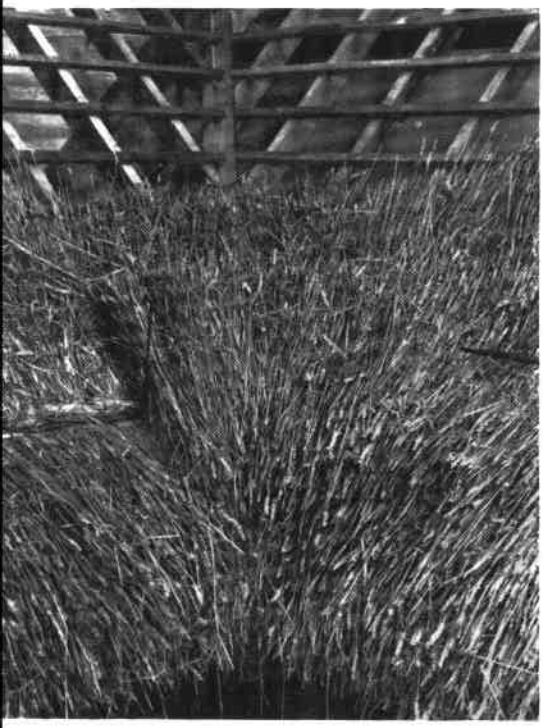
Looking straight into the valley the direction of the bottles is more clearly seen.

Once the valley is turned, a new sway is started. The pointed end of this sway is inserted just below the sway on the other return.

On leaving the valley, the eaves-bottles gradually resume the vertical position, until they are in line with the rafters.

An extra course for packing purposes is laid in the valley, with the small end just covering the sway. This also helps to give a sweep to the valley in preference to a sharp angle.

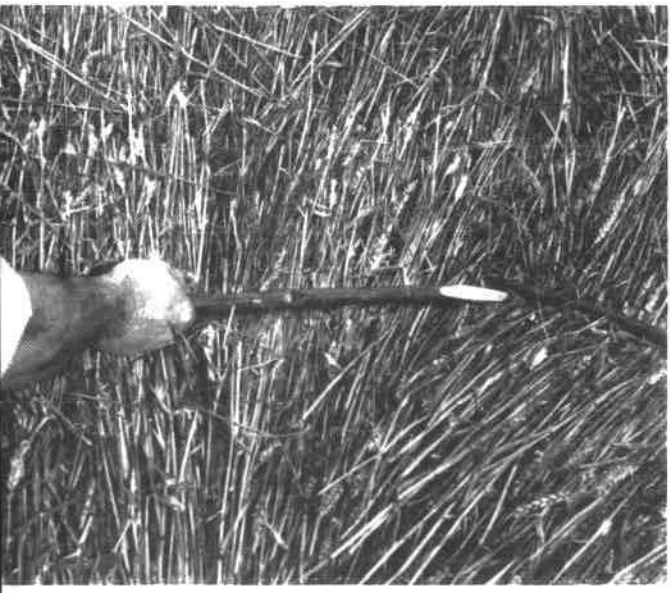


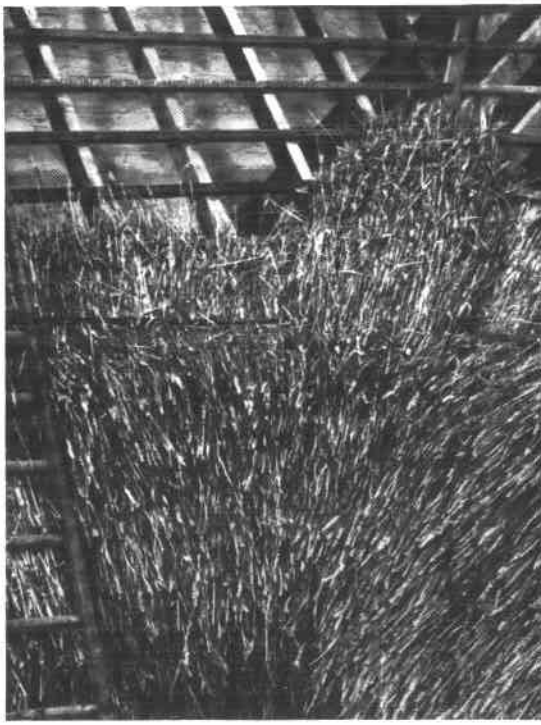


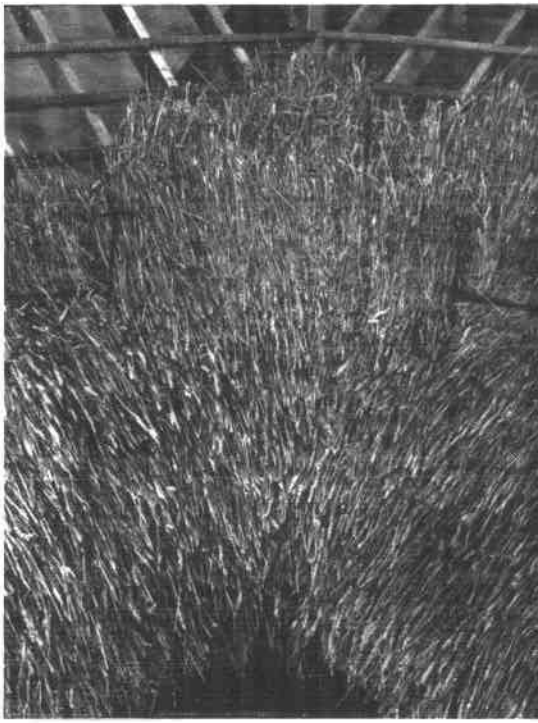
Continuing the courses round the valley, the yealms are laid large end uppermost.

This double course has been laid in the valley and is now ready for the sway.

The pointed sway on the return side is inserted below the sway already fixed.



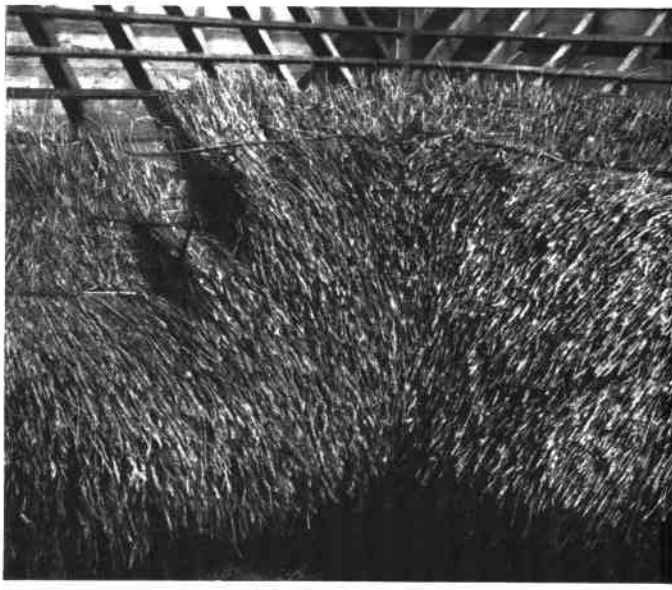




A closer view, shows the advantages of this method of joining the two sways, as it obviates driving a hook in the actual valley angle.

The next double course is continued round the valley and is swayed down. After this, a packing yealm may be laid with its small end covering the sway.

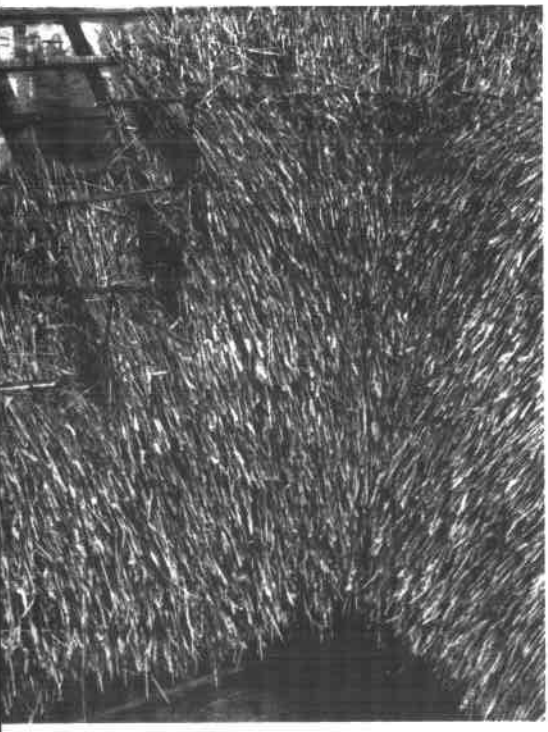
At this stage of the work, an extra course, as indicated by the two needles, is thatched very tightly over the packing yealms. This is done at intervals throughout the length of the valley, and has the effect of giving the valley the desired sweep in preference to a sharp angle.

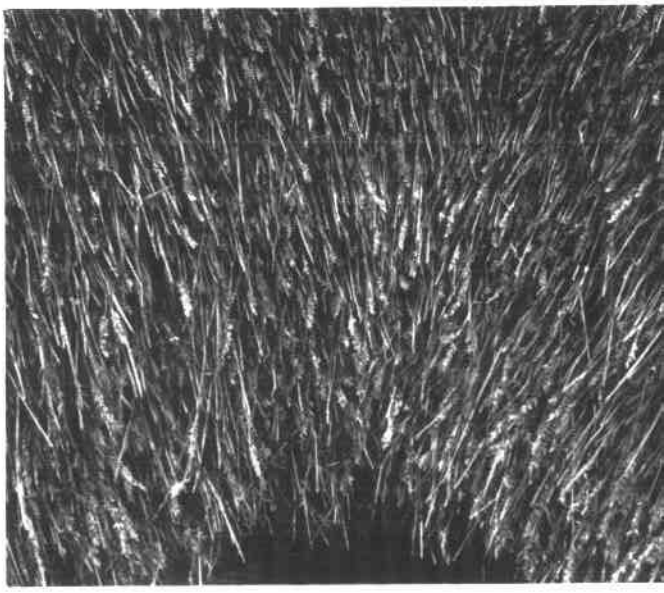


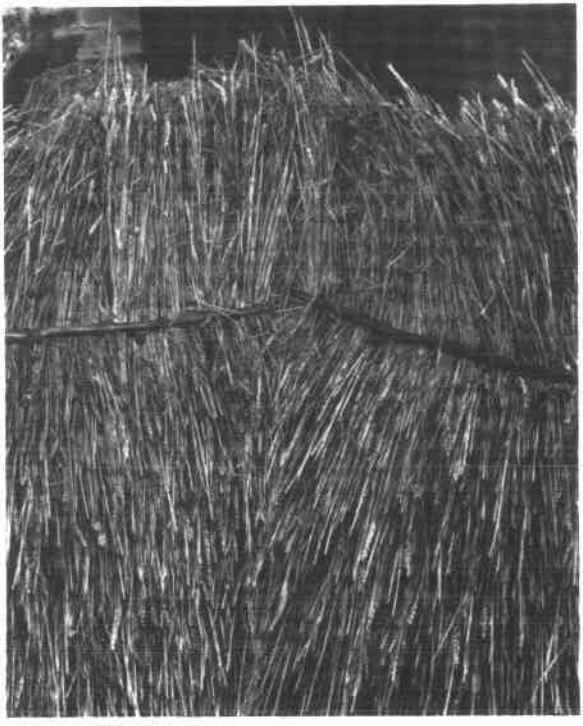
Taking a yealm from the yoke another double course is turned round the valley.

In the actual valley area, the yealms may be laid with the large end uppermost, but care should be taken to press each one tightly home.

The third course is completed in the valley and is swayed down.







A more advanced stage is shown after the fourth double course has been fixed.

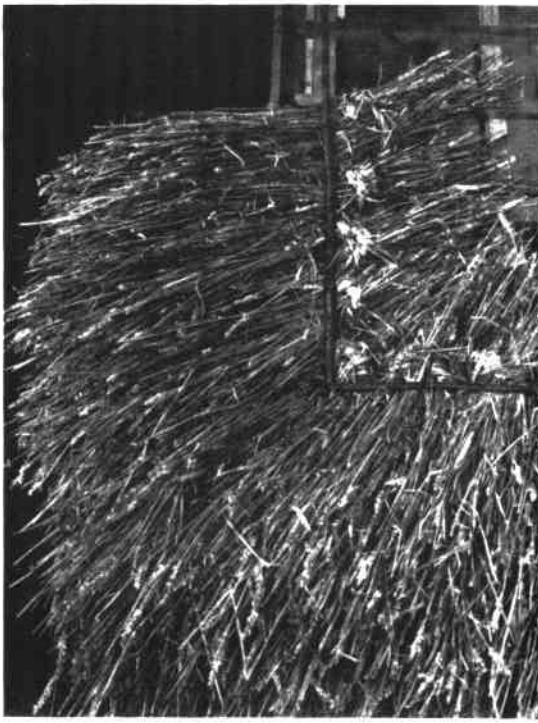
This closer view of the valley shows there is no definite angle, *but instead the area is swept round to distribute the water over a wider surface, thereby decreasing the effects of weathering.*

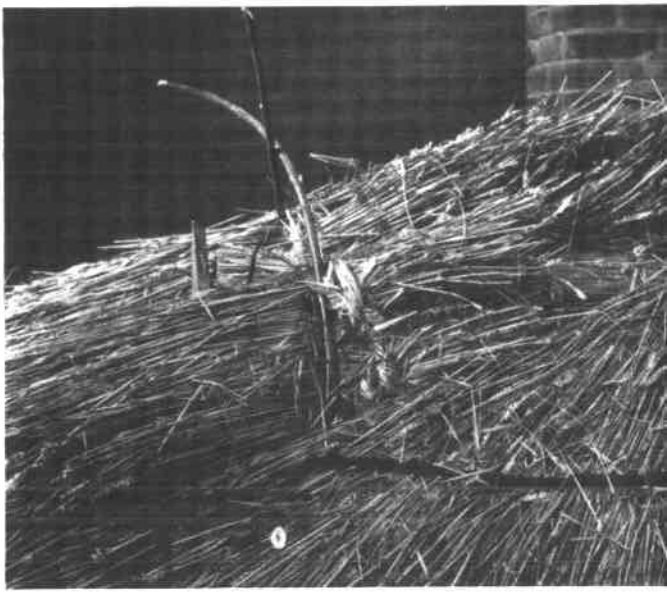
The top of the valley is reached and the sways are fixed in the normal way.

Turning to the left-hand barge, the necessity for setting the corner bottle separately, *and working inwards to join up*, is clearly illustrated.

The corner of the barge is set and the eaves join with the main work.

Setting the bottles in the barge is the next procedure. These are swayed down allowing ample overhang as previously described.

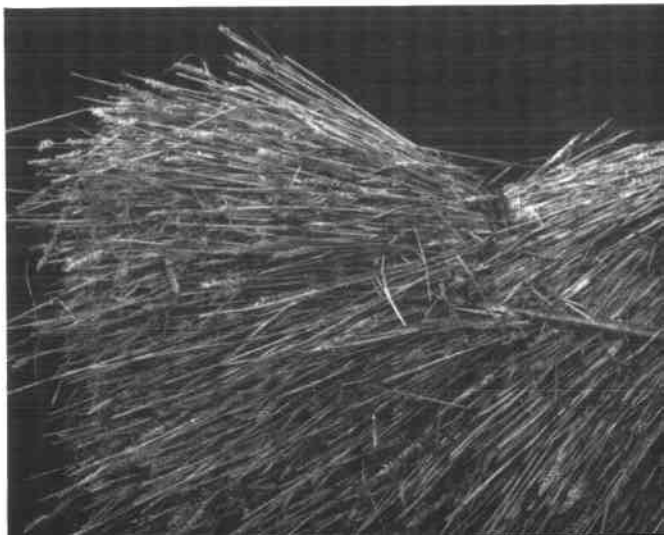


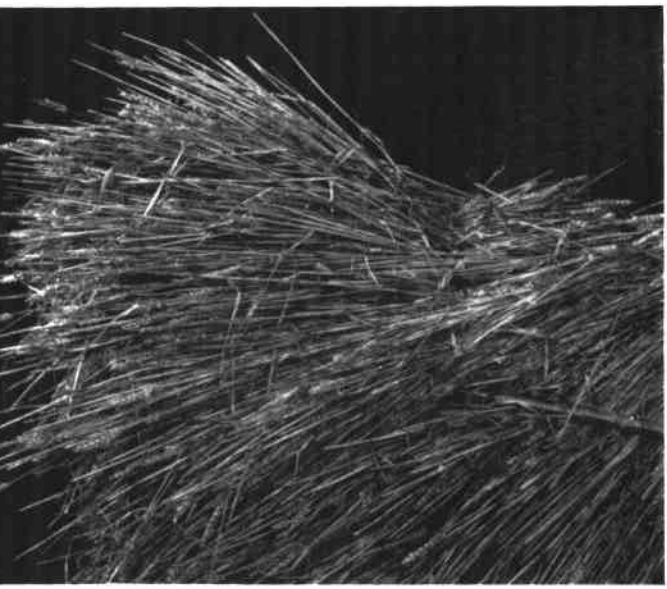


Starting on the extreme left hand and working inwards, the double course is laid and swayed down.

The remainder of the left-hand barge is repetition work until the apex is reached. This is shown before the top course is laid. A roll has been fixed to the ridge-board and the two sways which hold the barge-bottles will secure the final point.

More bottles are laid on the apex and the two sways are hooked down. The top course is also completed.

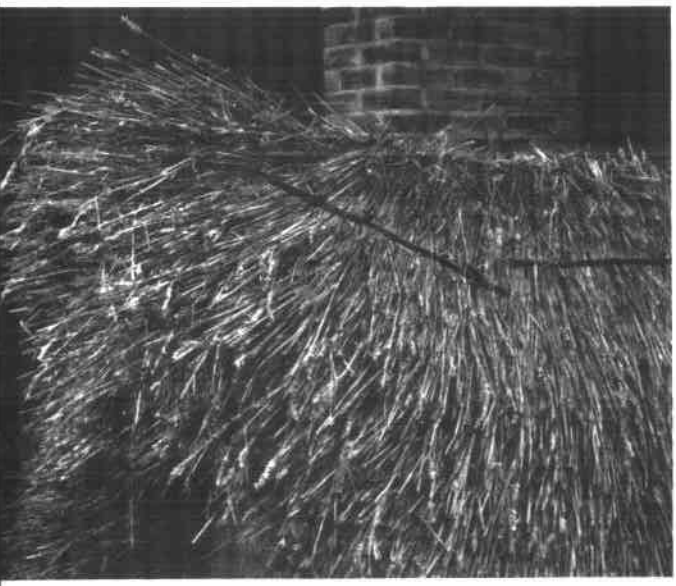




In order to provide extra thickness in the apex of the two barges, a large yealm is laid each side and is sparred down against the sway underneath.

The next procedure is to lay the side courses which go to make up the ridge, as it is intended to show a flush ridge with no cut pattern as an alternative method of finish, it is unnecessary to lap a deep course to form the thickness for cutting.

The tops of the small ends of the yealms oversailing the apex are twisted together and sparred down into the roll. This ensures a firm solid top for the ridge-course.



The side courses are laid and the tops twisted in ready for laying the ridge. The rods showing are of a temporary nature and are removed as the ridge is laid.

Turning now to the chimney in the ridge, the top course on either side is swayed down and ready for twisting in. The lower rod is a temporary fixing.

The sway in the cavity in front of the chimney is fixed as high as possible.