Grasping the yealm piece by piece, the ends are drawn out to make it longer.

Half the yealm is now gripped firmly towards the ends and bent across the ap by bringing the hands together. This is repeated with the remaining half and the ridge-course assumes a pointed shape.

The needle is inserted centrally and used as a lever to force the yealm tightly against that part of the ridge already laid This ridge-course should measure approximately 6″ (150 mm) in thickness the apex.

A further course, having the tops twisted inwards, is firmly laid in front of the chimney, and a twisted straw bond is sparred down for fixing.

**The process of laying the final ridge-course follows**

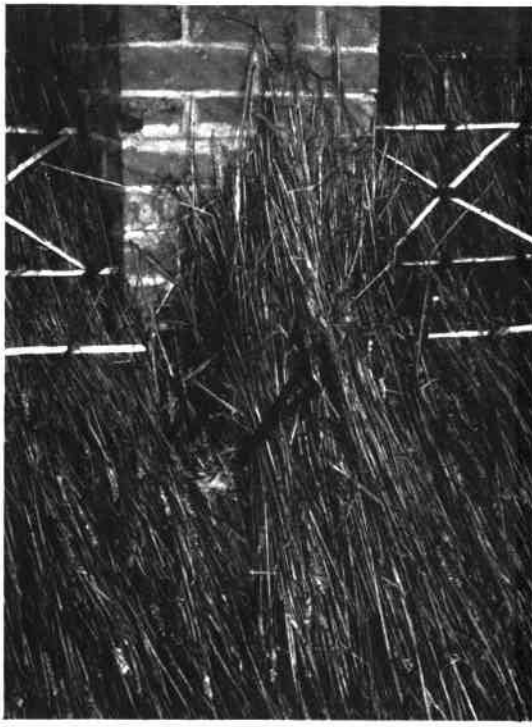
Straddling the apex, the operator takes a yealm from the loaded yoke, which is situated just behind him.

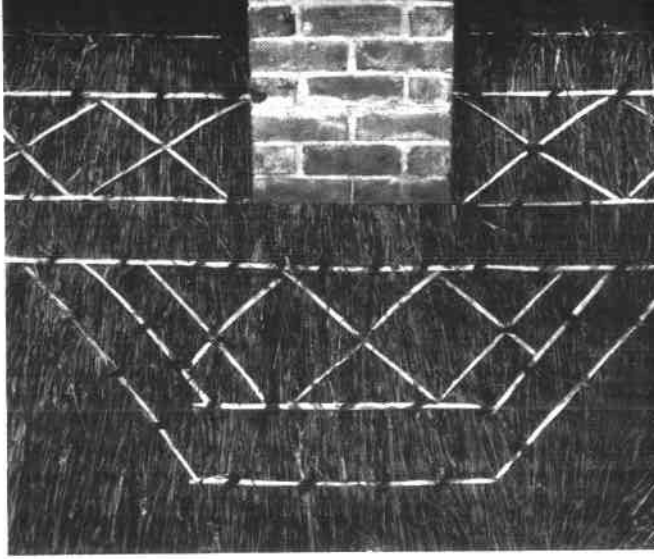
As one end is larger than the other, half the yealm is reversed to make both ends equal.

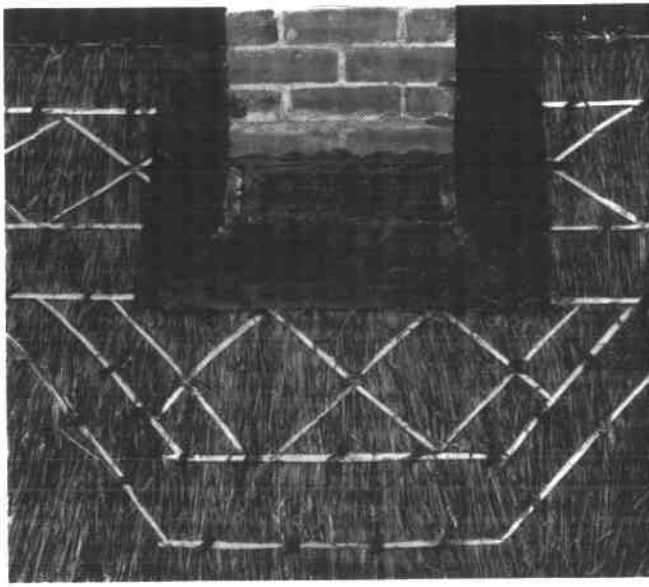
Whilst still in this position on the ridge, the thatcher is able to fix the top ligger. This has the two-fold purpose of sparring the ridge course down to the roll, which is tied to the ridge-board, and also has the effect of producing a straight horizontal line which is the hall-mark of a well-finished ridge.

After working the ends of the ridge course closely together, three liggers are sparred down and cross-rods fitted to any required pattern. The spacings between the liggers shown are 8″ (200 mm), 12″ (300 mm) and 6″ (150 mm) respectively, from the top downward.

The final course in front of the chimney is now placed in position and must be worked very firmly together.



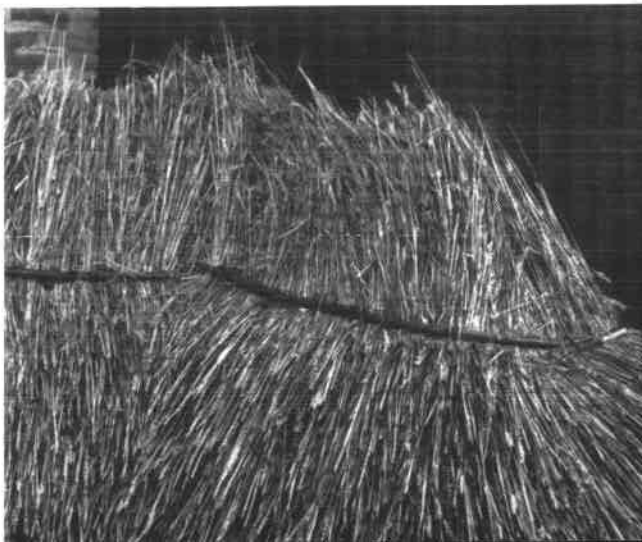




Liggers and cross-rods are now sparred down and the top of the course is cut in a straight line against the brickwork.

Lead flashings and aprons are fitted to the chimney-stack, and a completely water-tight junction with the brickwork is effected.

The hip- or cap-end now has to be finished off. The top course has been laid and is now ready for the side course and then the ridge.

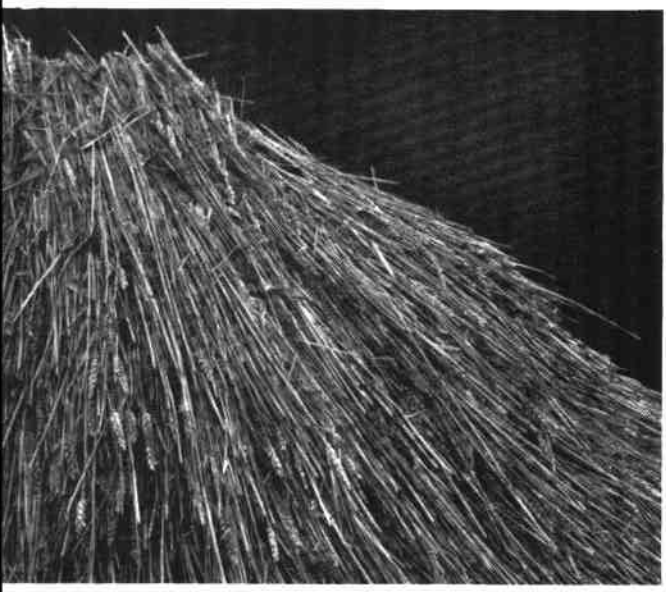


The sway is covered with a good thick side course, which is packed in tightly, with the large end of the yealm downward.

The side course is completed, the tops are twisted together and sparred down into the roll beneath. The ridge may now be laid.

To start the ridge on the cap-end the ring-topped needle is inserted centrally in the apex. A good yealm is lengthened out with both ends made equal. After bending it in the middle, it is swept forward on either side of the needle, in line with the straw in the hip-end.

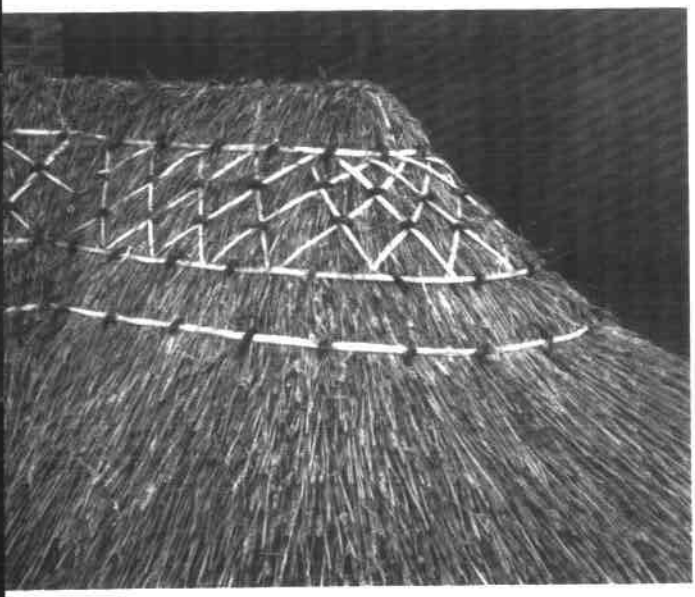
Another needle forces it tightly together and more yealms are laid to it as previously described on pages 37–39, until the whole ridge is completed.



**Long straw**

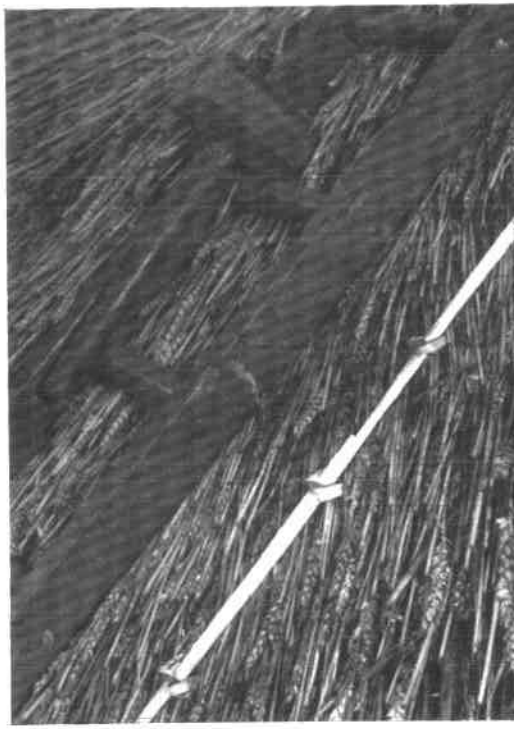
Providing a sufficient thickness of straw has been tightly laid, a firm solid ridge will result.

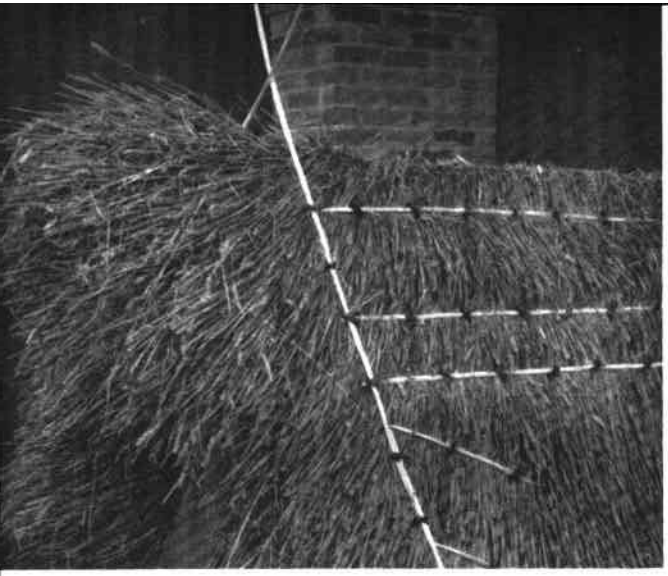
The alternative pattern shown, is one known as the 'triple diamond' pattern. Spacings between the liggers are again 8" (200 mm), 12" (300 mm) and 6" (150 mm) respectively, from the top downward. The main coating of thatch has been well combed down with the side-rake and a neat and tidy finish obtained.

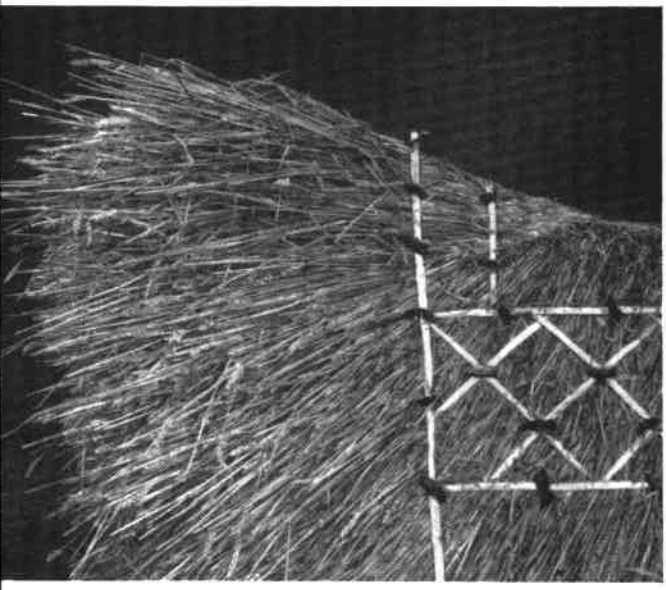


Before the barges are cut they must be sparred down with a ligger. Using the needle as a guide, the ligger is fixed immediately above and in line with the barge-board. To make a neat joint the ends of the liggers are tapered and halved together under a spar.

The spars are driven in horizontally and slightly inwards to avoid carrying the water downward into the thatch.







Now that both liggers are fixed to the two barges of the gable end, it will be seen that beneath the spot where they cross at the top, further yealms are required to complete the apex and to enhance the ridge-line as shown in the next photograph.

The two liggers are sparred down and the superfluous ends removed after the yealms have been packed in. This addition to the ridge is known as a 'pinnacle'.

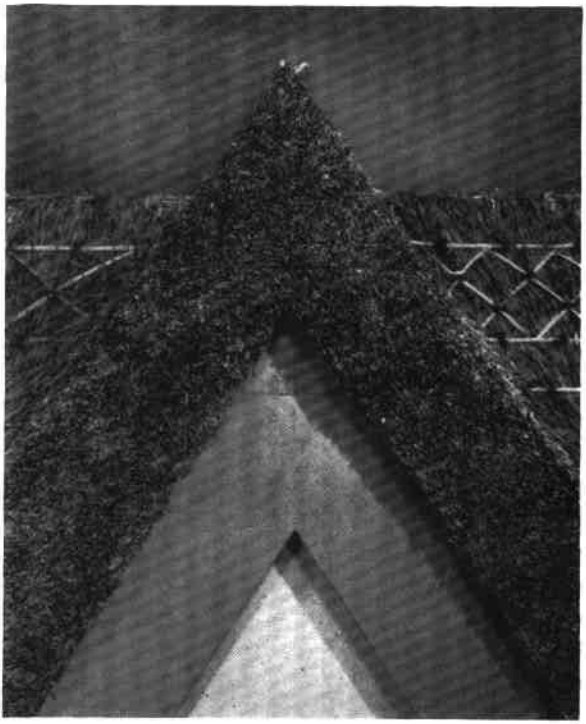
The completed barges are now ready for cutting, and although the actual method and tools employed may vary from county to county, the method shown is more generally used.

In order to simplify the cutting process, a straight-edge can be fixed accurately on each barge to act as a guide for the knife.

The knife is held with the handle leaning slightly outwards, to provide a drip on the topmost edge of the barge. The lower edge of the cut will overhang the barge-board by about 4″ (100 mm).

The barge may, of course, be cut without the use of a straight-edge, in which case needles are used as markers to ensure a straight cut.

After the main cutting with the long knife is finished, superfluous straws are removed with the shears.



By using the shears, all edges are squared and lines straightened, to ensure a neat and tidy finish. This applies to windows and eaves for which exactly the same cutting method is used.

The advantage of clean straight lines will be apparent from the completed section of the gable.

## STULCH

This method involves the thatch being laid in a strip from eaves to ridge approximately 30" (750 mm) in width, final finish to work is carried out as previously described.

## CASING OVER OLD THATCH

One of the most important features of this type of thatching is the preparation of the roof before the actual thatching begins.

All decayed and superfluous thatch should be removed, down to a thickness of about 10" (250 mm), to eliminate unnecessary weight on the roof. All barges and all decayed eaves should also be stripped out and new straw fixed in with hazel sways and iron hooks.

The new coat of thatch to the main roof may be sparred into the old thatch, using the method shown on pages 17 and 18 whichever is preferred.

The rest of the work is practically the same as that already prescribed for new work.

## RIDGING AND REPAIRS

A roof thatched in long straw can be given a new lease of life when it is re-ridged and carefully repaired.

The decayed part of the old ridge, together with any remaining liggers and spars, should be removed.

A new roll which can be sparred down centrally along the ridge will in all probability be required.

A flush or patterned ridge, according to requirement, can then be laid. This would include the appropriate side courses or skirts, using the same method as that which applies to new work.

The main body of the existing thatch can be cleaned down and all holes and worn places carefully filled with new straw. This should be fixed with short, thin spars and the new straw neatly trimmed.

New liggers should be sparred to all eaves and barges.

# 3 | Combed wheat reed

IN the preceding chapter, the laying of long straw was described in detail. There is yet another technique of thatching in straw, that known as combed wheat reed. Though these two materials and the present-day difficulties of supply are similar, there are considerable differences in their preparation and in the technique of laying them on the roof.

Thatch in combed wheat reed, though seen throughout the thatching counties, is most widely used in the south and west of England. Its name must not, however, allow it to be confused with water reed, the two materials coming from very widely separated types of plants. There is, however, a distinct similarity in the method of the application of the material to the roof, both of which are laid 'reed-wise' with the butts of the stalks exposed. It is thus easy to see how this method of thatching with straw came to be known as wheat reed thatching.

Unlike the long straw thatch which has been described as giving the appearance of having been poured over the roof, the combed wheat reed presents a neat, close-cropped finish. From a distance it could easily be mistaken for water reed, but on closer examination it will be seen that the eaves and gables of the wheat reed are cut to shape, a distinguishing point between the two techniques. The water-shedding qualities of the straw reed and the water reed are also similar. The drops of water can be seen dripping from stalk to stalk over the whole surface of the roof, rather than running down the solid surface of a roof covered with other material.

Before the days of mechanisation on the farm, combing was carried out by hand. This was tedious work and was normally undertaken by women. Now these hand methods have been superseded by a machine known as a reed comber. This machine, which is fitted on the top of an ordinary threshing drum, removes the grain and leaves from the wheat, without the straw going through the drum. The straw thus comes from the machine undamaged and with the butts all laid in one direction.

Having passed through the comber, the wheat reed as it is now called, is conveyed along moving belts to a tier, where it is tied into bundles of convenient size for handling. Each bundle is butted on to a board known as a spot-board, and after being trimmed is stacked near by to await delivery to the job. Alternatively, when a tier is not available, the reed may be hand-tied. In this instance, the reed falls into a cradle immediately it leaves the comber. It is then placed in a winch-frame which is used to draw the reed tightly together under pressure, thus facilitating tying.

**Combed wheat reed**

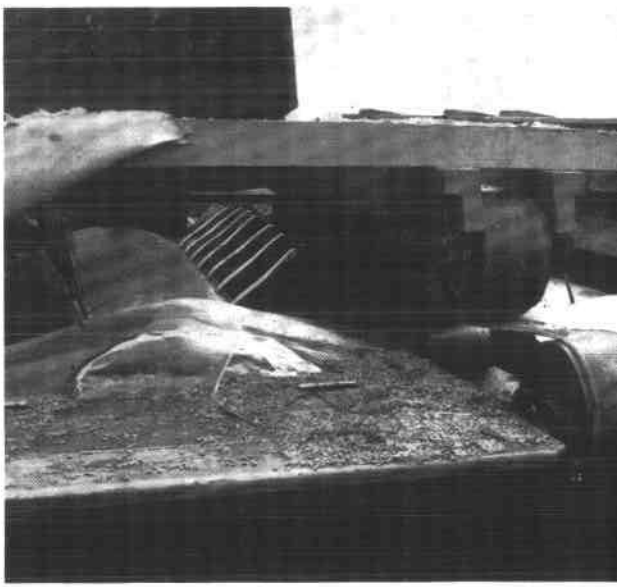
The traditional bunch of wheat reed is known as a 'NITCH' and should weigh 28 lb (13 kg). It is normally tied with binder twine. Bulk orders are quoted at 'per tonne on the farm'. Though the process of combing and tying slows down the work of thrashing, this loss of time is offset by the higher price obtainable for the straw in the form of combed wheat reed, and providing the length does not fall below 27″ (680 mm) it is still suitable for combing, although the ideal length is 36″ (1 m).

The Agricultural Development Advisory Service, Exeter, of the Ministry of Agriculture, Fisheries & Food, has in liaison with CoSIRA carried out extensive trials in the growing and testing of new varieties of wheat mainly in the best interest of agriculture but also of considerable benefit to the Thatching industry. CoSIRA's particular interest in this sphere is to ensure a plentiful supply of high-performance material for thatching.

New varieties of wheat are now presented to the farmer more frequently than hitherto and the testing and choosing of varieties has become more intensive. The continuing objective is to produce a variety of wheat to yield a satisfactory weight of grain on a straight hollow-stemmed straw, approximately 36″ (1 m) in length, with good combing properties and durability.

A dual-purpose crop of this kind involves harvesting with a binder, stooking, stacking and combing, a labour intensive activity calling for a co-operative endeavour by the farmer and thatcher alike.

*Feeding the wheat into the conveyor belts of the comber*

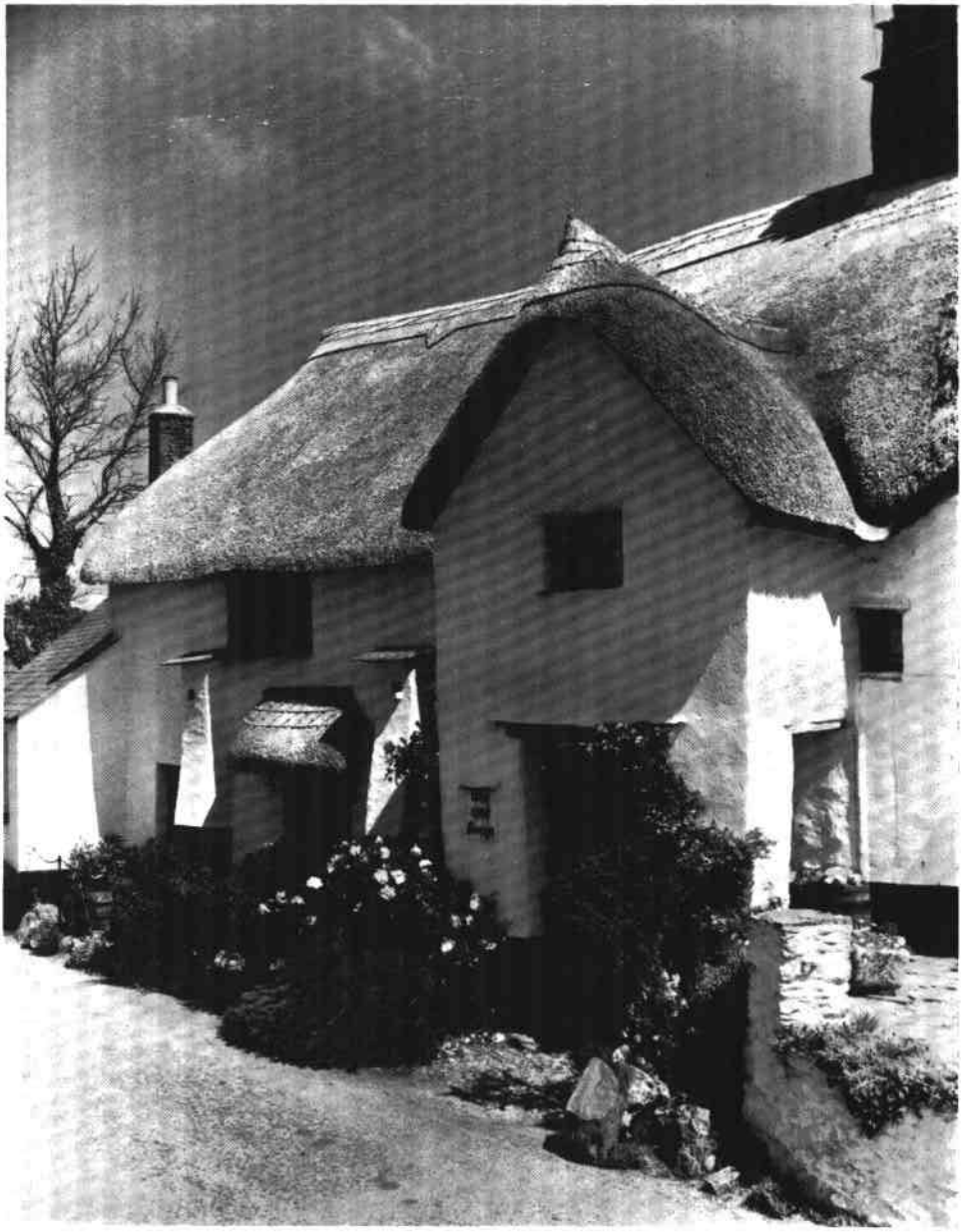


*Detail of the feed mechanism of the comber*

*Wheat reed leaving the comber*

*Butting a bundle of reed on the spot-board after it has left the tier*

*Stack of wheat reed ready for the thatcher*



Above: *The Old Forge, Kingston, near Kingsbridge, Devon*

Left, top: *Burgate Farm, Burgate, Fordingbridge, Hampshire*

Left, below: *Cottages at Little Bredy, Dorchester, Dorset*

*'Petoc', Tigley, Devon*

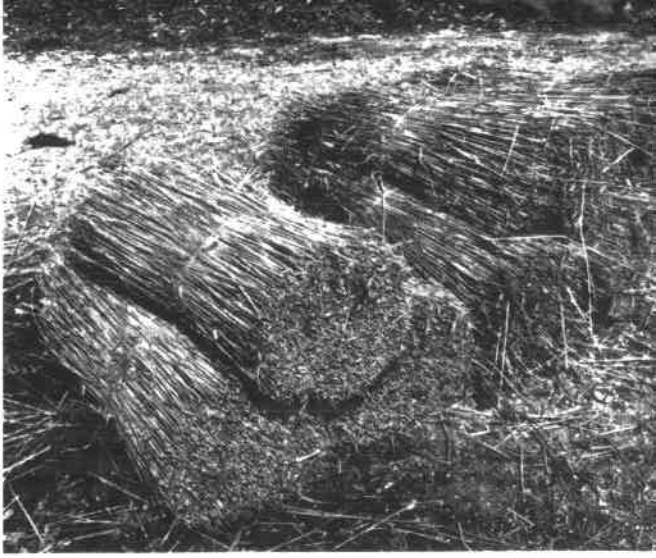
*'Oak Apples', Bradfield St. Clare, Suffolk*

A convenient place on the site is chosen to stack the reed and it is suggested that a layer of old thatch or similar waste material is used as a base, to protect the reed from rising damp. The stack should, if possible, be covered with a tarpaulin as a protection against adverse weather conditions.

One great advantage with wheat reed is the minimum of preparation required on the ground. Taking the bunches from the stack, each one is butted on the spot-board to level the butts.

Straws are removed from the butts end by clipping with shears.

**Combed wheat reed**



Dressing the reed before use is most worth while as shown in the illustration.

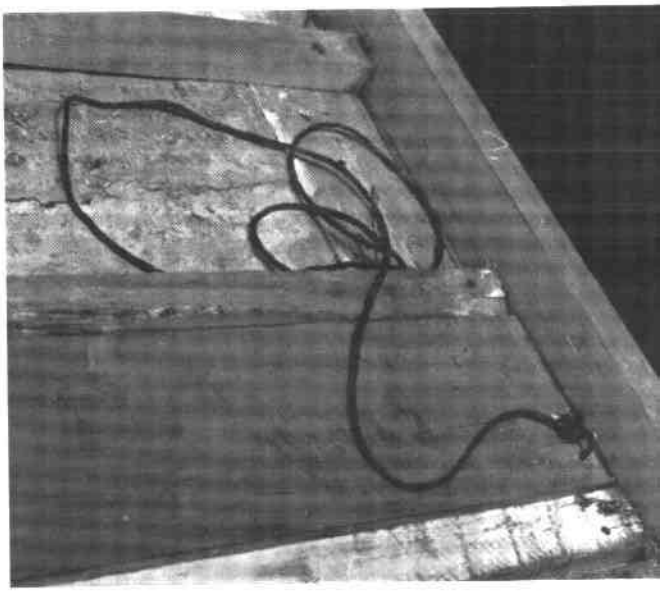
A quantity of bunches are stood closely together and water is sprinkled into the end of each bunch.

The bunches are then laid in a horizontal position and allowed to soak, after which they are ready for use.

A wadd, prepared by working a good double handful of reed together, is required for the setting of the eaves and barges.

The wadd is held lightly in the crook of the arm and butted on the spot-board.

Gripping the wadd between the knees, it is tied firmly with string or twisted reed bond.



The wadd is butted again on the board and is now ready for use. As the foregoing constitutes most of the preparation on the ground, work on the roof may now go on unhindered.

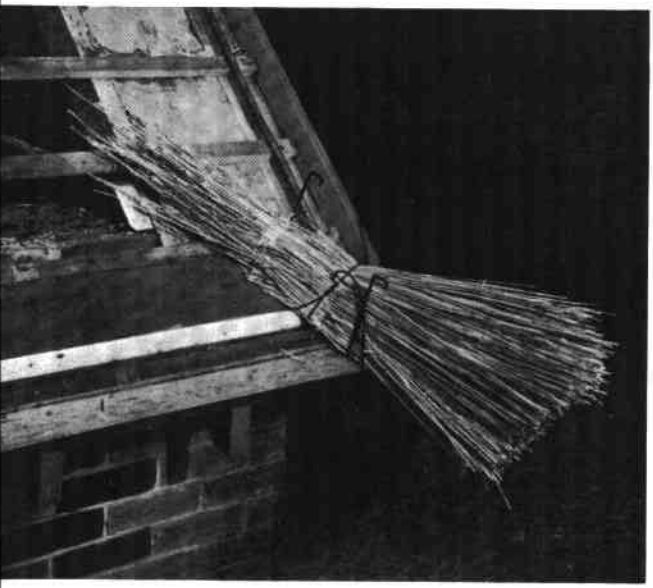
The illustrated method of fixing the eaves and barges is that whereby the wadds are laced in with tarred cord. The staple and string are fixed for tying in the corner wadd.

A straight hazel sway may be nailed on the battens, just inside the barge-board. The under-side is trimmed to enable it to lie flat.

As the barge-wadds are laid, the tarred cord passes round them, lacing them to the firmly fixed sway.

The first eaves-wadd is tied in on the corner at about 45 deg. The cord is passed round the lowest batten and pulled very tight. The action of the tilting fillet is clearly seen in the amount of upward pressure at the lower end of the wadd.

More eaves-wadds are laced in.

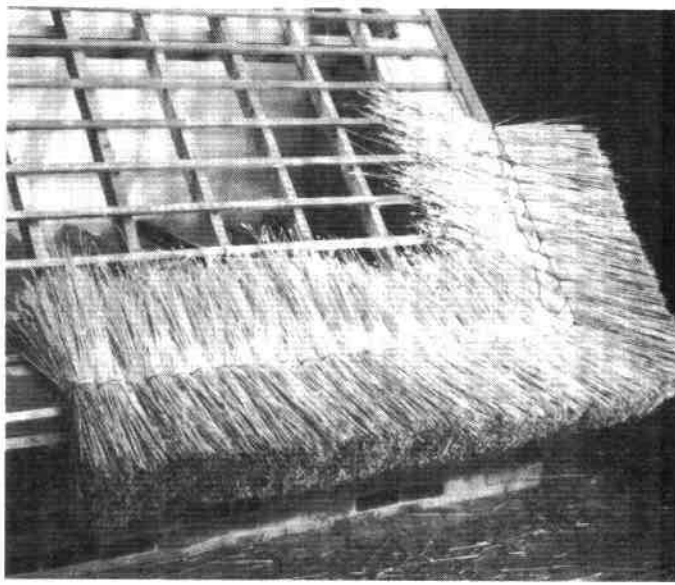


**Combed wheat reed**

The leggett is used to dress the wadds into line. This also tightens them in the cord.

Lacing the barge-wadds. The tarred cord passes over the wadd and underneath the hazel sway.

Emerging between the two wadds, the string is pulled very tightly, whilst at the same time pressure is applied to the wadd with the free hand.



The cord is tied with the appropriate knot and a further wadd is laid.

The leggett is used to dress the wadds in line as the work proceeds.

A portion of the eave and barge is now ready for the next stage.