CHAPTER XIII

SOWING

Producing Turf from Seed—Autumn Sowing—Spring Sowing—How to Sow Seed—After Treatment—Chances of Failure—Why Young Grass Sometimes Dies Off—The Selection of Seed.

Producing Turf from Seed

In order to produce a close, dense turf of the finest description within a year from the date of sowing, the seed should be sown at the minimum rate of 1 oz. or the maximum rate of 2 oz. per square yard. It goes without saying that if the seed is sown thickly the ground will be covered from the start with a thick mat composed of a multitude of little grass plants, which, being mutually protective, will daily increase in strength and form a close turf. See Fig. " A." If, on the other hand, the seed is sown thinly, a thin crop is produced, see Fig. " B," which may be damaged or destroyed by a short burst of hot sun or cold wind, and in any case the development of the turf is naturally slower and more uncertain.

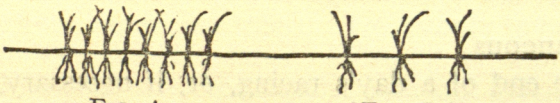


FIG. A. FIG. B.

The cost of the seed is relatively insignificant when compared with the cost of making a lawn, and it is infinitely cheaper than even the cheapest and roughest turf, the only disadvantage being that it must be given time to develop before it is taken into play, possibly a year for such a vigorous game as tennis, consequently it is false economy to sow less than two ounces to the square yard.

Autumn Sowing

The safest and best results are undoubtedly obtained from Autumn-sown seed, say mid-August to mid-September. The soil is warm at the end of the Summer, and an abundance of rain and dew may be expected, which

causes rapid and even germination, and the young grass has ample time to become well established before the cold weather sets in. Weeds are far more in evidence in the Spring than they are in the Autumn, so it follows that the long start given to the Autumn-sown grass should make it better able to withstand the onslaughts of those weeds that may be lying dormant in the soil when they appear in the Spring. It can be sown later, up to the middle of October if the season is favourable, but every day it is delayed slows up the germination and greatly adds to the risk of failure.

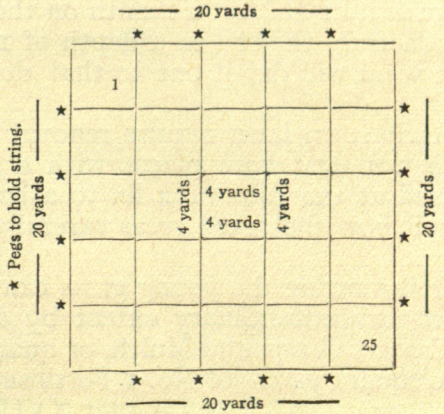
Spring Sowing

Equally good and certainly faster results can be obtained in the Spring, provided that it is open and genial, sowing the seed from March to May according to the season.

If the weather is favourable, with sunshine and showers and warm still nights, the young grass will simply jump out of the ground and quickly form a turf.

As, however, we periodically experience a month to six weeks of cold parching winds at this time of the year, there is always a chance of trouble, because seed cannot germinate or young grass thrive under such conditions. In any case, unless the Spring is open and genial, the soil temperature will be low, so a slow, patchy germination may be expected and weeds may be troublesome.

A SIMPLE GROUND PLAN.



How to Sow Seed

When the ground is finally prepared with a dead true, firm surface, divide it up into strips or squares of equal area

by means of pegs and string, and the seed into as many portions as there are strips or squares. Sow the seed by hand, taking care to spread it as evenly as possible over the surface. Remove the strings, and rake and cross-rake the ground to a depth of about $\frac{1}{4}$ inch in order to cover the seed as much as possible, and finish off by rolling with a light roller. The whole of the work should be done on a dry day, when the soil will not stick to one's boots or pick up on the roller.

After Treatment

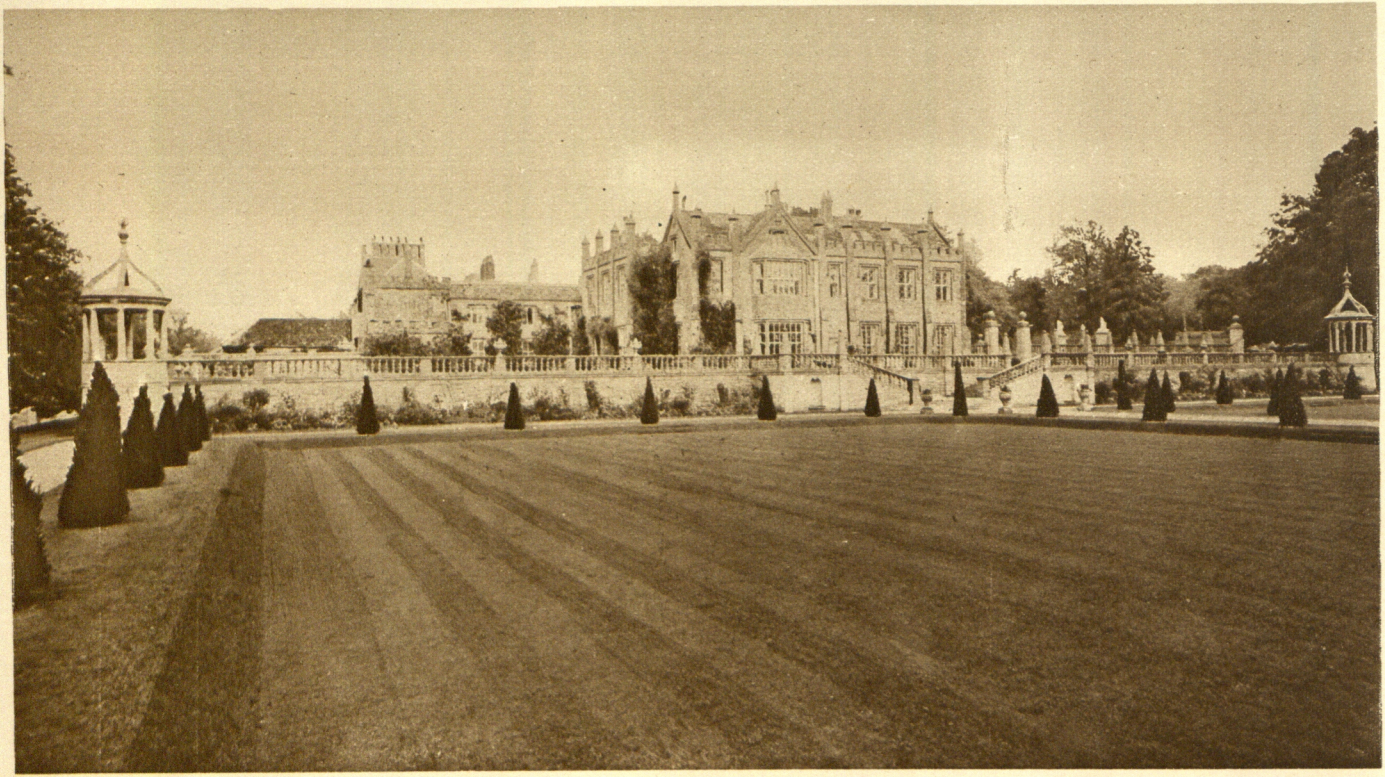
The young grass should appear above the ground in about 5 to 10 days if Autumn-sown, and 14 to 21 days if Spring-sown, according to the weather.

When it is about 1 inch high cut with a sharp, free-acting machine, set rather high, but if a skilled man is available it is better to make the first cutting with a sharp scythe. Weeds in more or less abundance are certain to come up, particularly if Spring-sown, and more particularly if the season is cold and the germination slow and patchy. These must be removed before they get firmly established. See "Weeding," Chapter XV. If the season is unfavourable and the seed rots in the ground or germinates patchily and is then killed by the surface drying out before the roots have penetrated the soil to a sufficient depth to be safe, as may easily happen, particularly if Spring-sown, it will be necessary to renovate it, or possibly destroy it, and re-sow. Remember it will take at least a month on the average for the roots to penetrate the soil to a depth of 1 inch, and a scorching east wind will dry it out to that depth in a day or two.

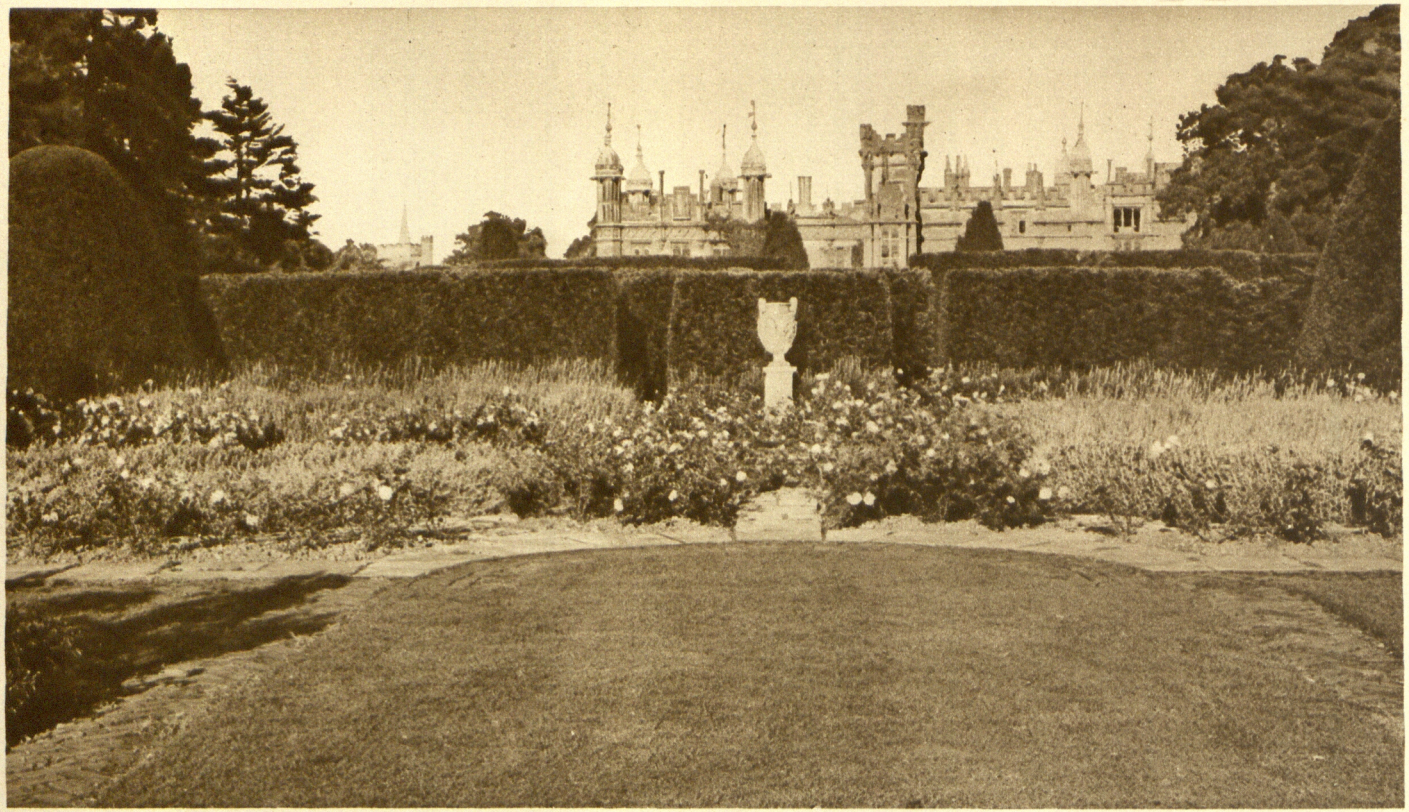
Should a newly sown lawn require renovating, carefully loosen up the thin and bare places with a rake, mix a quantity of seed at the rate of 4 lb. to a barrow-load of finely sifted soil, sow the raked areas carefully, rake again and roll.

After the first mowing the young grass can be hastened into growth to an extraordinary extent by dressing with Malt Culms, Carters Compound Mulch, or quarter-dressings —$\frac{1}{2}$ oz. to the square yard—of No. 1 Fertiliser mixed with finely sifted soil or compost, see Chapter XVII.

If the ground is plagued with worms they must be destroyed as soon as it can be done without damage to the surface, see Chapter XX, otherwise they will destroy



LAWNS AT PARNHAM.
PRODUCED FROM CARTERS TESTED GRASS SEEDS IN FIVE MONTHS.



FLOWERS AND LAWNS AT KNEBWORTH.

much of the young grass by keeping the soil loose and in a turmoil, smothering it with their casts, interfering with the rolling and mowing, and generally making it difficult to get a good result.

As the young grass closes up and gains strength set the knives of the machine lower, mow and roll regularly, and generally keep it in playing condition until it is strong enough to be taken into play.

Although the construction of the lawn may be considered at an end when the turf is laid or the seed is sown, it is plainly obvious that it requires very careful attention from that time until it is taken into play, and, in fact, so long as it is used as a lawn. No matter how well the work may be done in the first instance, its success will be gravely jeopardised if any item in connection with it is omitted or even carried out slackly.

Chances of Failure

If the germination of the seed is retarded or damaged by adverse weather and weeds appear, as they certainly will, it is unfair to blame the seed merchants, who know exactly its percentage of purity and germination, and they are not likely to commit commercial suicide by sending out rubbish after spending tens of thousands on advertising. I have explained that the seed may perish in the ground, or germinate and be destroyed by the weather, in exactly the same way as any other crop, and it is common knowledge that every yard of the earth's surface contains thousands of seeds of one sort and another. We all know that many seeds are purposely designed by nature to travel and be scattered over the earth by the wind, birds and other sources, and from personal observation how profusely weeds grow on the garden paths, in the flower beds, in the vegetable gardens, in the fields, and, in fact, everywhere where they can gain a lodgment and sufficient soil and water to enable them to grow, not even excluding the gutters of houses. It is not surprising, therefore, that a lawn will fail if the soil or weather is unfavourable for its development, or if it is neglected ; neither is it surprising that weeds appear. Before leaving the subject it is necessary to point out that it frequently happens when the ground is worked to a depth for weeds to appear that are not common to the locality, the explanation being that they have been lying dormant in the soil, possibly for generations, and have germinated

when brought up to the surface within the influence of light and air.

Why Young Grass Sometimes Dies off

Sometimes everything seems favourable up to a point—the weather is open and genial, the seed germinates freely and evenly, and yet patches of the young grass suddenly stand still, turn yellow and fade away. It is not easy to explain this ; it may be because the surface drainage, in spite of the most careful preparation of the soil, is still at fault locally, and this can be proved by comparing the root penetration of healthy and unhealthy plants. If the former is deep and the latter shallow there is no need to inquire much further, and the only remedy is to spike roll or stab the bad areas with a lawn-piercing fork and fill up the holes so made with clean sand, fine breeze or charcoal.

If, however, the grass goes off as a whole and no fault can be found with the drainage, the soil is probably deficient either of lime or grass foods generally.

There is one thing in connection with the formation of a lawn that is very certain : most grasses suitable to the formation of fine turf can be grown to perfection on practically all classes of soil provided that it is neither too wet nor too dry and that it is generally fertile, but no grass will thrive if the soil does not answer to this description.

Turf will fail for the self-same reason, but, being older and stronger, it will put up a stiffer fight, but it will go in the end if the seasons or soil conditions are against it.

The Selection of Seed

Grass seed mixtures can roughly be divided into two categories—those containing a percentage of Perennial Rye Grass and those wholly composed of the Finest Dwarf Creeping varieties.

Rye grass mixtures are supposed to stand hard wear, and for this reason are largely used for such vigorous games as Football, Polo, Horse Racing and the like, but this is not so ; it is the Fine grasses that stand hard wear best, as secretaries and groundsmen are beginning to understand.

Rye grass mixtures should never be used on Putting or Bowling Greens, Croquet Lawns, or, in fact, for any purpose where the accurate run of the ball is of vital importance, or where first-class results are required.

They can, however, be used where the run of the ball is of secondary importance, or where economy is a consideration. Rye grass mixtures being composed of the more vigorous varieties are the easiest to grow ; they germinate evenly and freely, and the herbage being relatively coarse, they amalgamate with and so hide the natural grasses that the soil may contain, excepting such pests as Yorkshire Fog and Cocksfoot.

The finest mixtures, on the other hand, are considerably more difficult to cultivate ; their germination, particularly if Spring-sown, is relatively slow, and the natural grasses, should any be present in the soil, show up badly.

Before choosing your mixtures make up your mind firmly in regard to the quality of the turf that is required. If the very best results are aimed at, and it is intended to lavish every care and attention on the production of the turf, choose the finest mixtures ; if, on the other hand, the lawn is of secondary importance, or the necessary labour or the will to get the best results is absent, use Rye grass mixtures.

In any case do not commit the fault of expecting perfection from imperfect methods, and remember that it is more difficult to produce perfect turf than it is to raise any other crop, so leave nothing to chance.

When ordering grass seeds send a small sample of the soil, and explain the purpose for which the lawn is required, or, if it is a question of renovating, a small sample of the turf, and in all cases give the exact measurements or area of the ground to be sown.