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H R. Powell

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THE PRUNING OF FRUIT TREES

By H. R. POWELL, B.Sc. Agric., Superintendent of Horticulture

PART 2—FRAMEWORK PRUNING OF DECIDUOUS TREES

THE early prunings are very important for the reason that they determine the height of the trunk, and the number and spacing of the main and secondary arms and leaders. Mistakes made then are difficult to rectify later on.

The objective is a sturdy orchard tree set on a trunk 9in. to 18in. high, with branches trained into the form of an open inverted cone or a broad-based wine glass. The centre of the tree is to be kept open except in hot dry districts where severe damage can be caused by sun-burning and more foliage inside the tree should be retained.

PLANTING

The young fruit tree consists of two parts, the stock or root portion, and the scion or top portion. Taking the apple tree as an example—the roots and the basal part of the trunk are usually of the variety Northern Spy or of seedling origin; the top portion can be a Granny Smith, Jonathan or any other apple variety. Peaches are often on seedling peach stock, and loquats are on seedling loquat stock or quince stock and so on. The bulge on the base of the trunk shows where the stock was budded, and the original stem piece removed.

After growing in the nursery the young tree is uprooted and perhaps transported several thousand miles before it is planted. Its rooting system is greatly reduced in lifting and further damage can be done by rough handling. It may be pointed out that the older the tree is, the more severe will be the damage and for this reason it is advisable to plant "whips"—that is, one-year-old unbranched trees. If one-year-old trees cannot be secured the next preference should be for two-year-old trees.

At planting time all broken roots and all jagged ends should be cut cleanly off with a sharp knife. Planting should be carefully carried out, and the hole should be well prepared beforehand. The roots should be well spaced and any fertiliser used should be thoroughly incorporated with the soil before the hole is filled in. The soil around the roots should be well trampled down and it should be further settled by a good watering, even if the weather at planting time is wet. The pruning of the young tree should be done after it has been planted.

THE FIRST WINTER PRUNING

One-year-old Trees or "Whips."

The term "whips" applies to one-year-old unbranched trees and as mentioned earlier it is preferable to use them for the reason that their rooting system, being smaller, suffers less damage when the trees are lifted.
The height of the trunk should be decided upon before the tree is pruned. Under Western Australian conditions it should not exceed 18in. in height, and should be shorter in districts where strong winds are prevalent. If a trunk 9in. in height is decided upon the whip should be headed to approximately 15in. In other words the heading back should be done approximately 6in. above the height required for the trunk. During the following growing season shoots from the topmost buds will make active growth and the result at the end of the season will approximate to Fig. 9.

Attention to the young trees during their growing period is well worthwhile as by judicious pinching back of the growing points of unwanted or ill-placed shoots, much can be done to reduce the severity of the second winter pruning.

The future main arms should not be bunched together at the top of the stem as is shown in Figs. 7 and 15. There is always a permanent weakness in such trees in that a considerable part can be lost should overcropping cause splitting. If the spacing of main arms is spread over at least six inches, each limb should have a separate and firm attachment to the trunk.

This can be encouraged by pinching back or removing altogether some of the crowded growth.

The growth from the topmost bud of the whip is usually the strongest and most upright. Should this be so, the growth should be checked by pinching back the growing point several times during the summer. In Fig. 9 it will be noticed that when the young tree was pruned the growth from the topmost bud was removed altogether. By checking this growth, the other shoots are encouraged to become stronger and consequently when the young tree receives its next winter pruning, a better selection of stronger shoots to form the main arms can be made. Similar action could be taken with any other strong growing shoot which is threatening to outgrow other shoots on the tree.

Two-year-old Trees.

The objective in pruning two-year-old trees is to form the main arms, two to four in number, which should be as evenly spaced from each other as possible. The main and secondary arms form the base of the tree which should be broad. This often means the removal of strong growing upright branches in the centre of the tree (see Fig. 9).

Fig. 9 shows a better type of two-year-old tree that is supplied by nurserymen. The prun-
Fig. 12.—Two-year-old peach tree shown in Fig. 11, pruned. An attempt has been made to counteract the favourable position for growth of the upright shoot by cutting the other to a weak lateral with its terminal bud higher than the topmost bud on the other shoot. A lateral on the upright shoot could not be used as it was in an unfavourable position. It has however been shortened back to promote growth during the growing season, from which at the next pruning a better selection may be made should extensions from the parent shoot prove unsuitable. A lateral has been used to form the third main arm. The terminal bud has been retained and it is as high as the top buds on the other pruned shoots.

When the selected shoots are all weak they should be shortened to one or two buds. If however the tree is stronger and the rooting system sound, four to eight buds can be retained. The pruning cuts should be made as previously described. The shoots should always be cut if possible on the same level. In selecting the bud to cut to, it is well to remember that growth will usually take place in the direction the bud is pointing.

Normally, cuts are made to outside buds but sometimes it is preferable when the future main arms are well spread to cut above the topmost of two sidebuds that are opposite to each other, to facilitate doubling up at the next pruning.

Fig. 13.—Young pear tree planted as a whip the previous season. At this pruning it will be necessary to broaden the base of the tree, otherwise growth will approximate to that shown in Fig. 35. Fig. 14 shows the pruned tree.

When the selected shoots are all weak they should be shortened to one or two buds. If however the tree is stronger and the rooting system sound, four to eight buds can be retained. The pruning cuts should be made as previously described. The shoots should always be cut if possible on the same level. In selecting the bud to cut to, it is well to remember that growth will usually take place in the direction the bud is pointing.
Fig. 14.—Young pear tree shown in Fig. 13, pruned. The two strong shoots have been pruned to outside buds and they have been widened by a spreader. The weaker shoot has been pruned much higher also to an outside bud. Being placed in a superior position this shoot should strengthen up sufficiently to balance this side of the tree. Two basal buds on each of the two strong shoots pointing outwards and between the main arms will be cinctured in late August to promote strong lateral growth, to balance this side of the tree at the next pruning. (See text section on Wickens system of pruning.)

the following season from which possibly suitable shoots can be utilised at the next pruning should lateral growths and/or extensions from the parent shoot prove unsuitable.

It will be noticed that the retention of the lateral arising from the trunk forms the third main arm. The terminal bud is not pruned and though not obvious from the photograph it is as high as the pruning cuts on the other two shoots.

The young pear tree shown in Fig. 13 is also an unsatisfactory type, in that the two main shoots are erect and there is only one other on the left-hand side to balance the tree. An attempt has been made in Fig. 14 to form the basis of a satisfactory framework. The two strong shoots pruned to outside buds have been greatly reduced and spread by means of a piece of strong pear wood pointed at each end by two cuts of the secateurs. Before growth commences in the spring one or more buds pointing outwards on each of the arms will be cinctured by the removal of a small piece of bark over each bud by means of a sharp knife. Cincturing is often used to stimulate growth from buds in favourable positions.

By checking the strong growth from the topmost buds of the strong shoots by pinching back when necessary, favourable growth can be expected from the cinctured buds which should at the next pruning even up this side of the tree. The weaker shoot, forming the third main arm, has been pruned lightly and its topmost bud pointing outwards has been placed much higher than the other two main arms. Being placed in a superior position this shoot should strengthen up sufficiently to balance this side of the tree.

**THE SECOND WINTER PRUNING**

**Whips.**

In the spring, growth will take place from the topmost buds on the whip. Any strong growing shoot can be checked by pinching out the growing points whenever necessary to enable a weaker shoot to catch up. Growth may also take place from the buds lower down on the trunk. They should be pinched back sufficiently often to keep them from making anything but weak growth. This growth serves a useful pur-
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pose in protecting the young trunk from sun burning. The winter pruning of these trees will be similar to the first pruning received by the two-year old trees.

Two-year-old Trees.

If the rooting system was sound and evenly developed, the growth from the two-year-old tree should develop fairly evenly. Sometimes strong-growing shoots will arise in the centre of the tree and from buds on the trunk. This type of growth not required for the permanent framework should be pinched back consistently during the growing season in order to afford protection from sunburning. Very often the growth from the topmost buds on one main arm may be stronger than the growth from similar buds on the other arms. If this is so, the stronger growth should likewise be pinched back several times during the growing season until a balance is secured.

Fig. 16 shows the second winter pruning of a Cleopatra apple tree shown in Fig. 15. It will be noticed that a doubling-up of the first main framework branches from four to eight has been obtained. If further doubling-up takes place, these branches will be known as secondary arms but on the other hand if they are not further divided, as would normally be the case with peaches, nectarines and upright growing types of trees such as the Cleopatra apple, they will be known as leaders.

The ideal number of secondary arms ranges from six to eight. In the illustration, Fig. 16, it has been possible to secure eight evenly-developed secondary arms but as the tree is too narrow the branches have to be better spaced by the use of spreaders.

In actual practice, the trees do not often make such uniform growth, due to such reasons as uneven nursery trees and careless pruning when the young trees were planted. However it should nearly always be possible to frame the trees satisfactorily by not doubling-up the weaker growths and perhaps utilising three secondary arms from a main arm on the strong growing side (see Fig. 17). Attention during the growing season is all-important, in that by checking the growth of the strong growing shoots on uneven trees the weaker ones are encouraged to catch up.

The second pruning like the first one is severe; the shoots selected as the secondary arms should be shortened to half their length when they are vigorous, and to one-third their}

Fig. 16.—Young Cleopatra apple tree after the second winter pruning. Each main arm has been doubled giving eight secondary arms. Such even development is seldom obtained. (See Figs. 17, 19, 22, 24 and 27.) Pruning cuts have been made to outside buds and the tree has been broadened by spreaders.

Fig. 17.—Seven-year-old Spinks peach tree on the orchard of Mr. R. C. Owen, Carmel, pruned, showing the skill of the pruner in balancing what was originally a difficult tree. It will be noticed that on the strong growing side on the left, the main arm has been doubled into two secondary arms and at each subsequent pruning further doubling up has taken place, giving six leaders. On the weak sides one leader arises directly from the trunk (centre) and on the right hand side two secondary arms have been continued as leaders. The result is a balanced tree consisting of nine evenly spaced leaders. It will be noticed that much of the lateral growth has been retained for fruit production.
length when they are weaker. The terminal pruning cuts should be made as previously described, but in some instances with very well spread trees, the cuts are made to inside buds. All growths arising from the main arms should be removed, as no fruit should be carried on the short main arms of the orchard tree.

Later on it will be explained that much of the strong growth removed at this pruning, can be retained by using the “Wickens System”. This system requires more skill on the part of the pruner and the trees will need more attention when they commence bearing.

**THE THIRD WINTER PRUNING**

During the spring and summer, strong growth can be expected to take place. The strongest growth will come from the topmost buds on each of the secondary arms; the buds lower down should produce weaker growth. At the same time, water shoots will arise on the main arms from the bases of branches removed during the previous pruning.

It will again be necessary to pinch out the growing points of the strongest-growing shoots on unbalanced trees and to check all strong growths, particularly in the centre of the tree. If the growth is too dense some of the shoots can be thinned out with advantage.

At the third winter pruning the number of branches could theoretically again be doubled providing 12-16 leaders but in actual practice relatively few trees make such uniform growth to make this possible or expedient. With such heavy-foliaged trees as peaches and nectarines, six to ten leaders are usually sufficient for the mature tree (see Fig. 17) and with most other kinds, usually 12 but up to 16 when they are well spread.

Some of the stronger branches can be doubled at this pruning, but others that are weaker should be continued unbranched. Fig. 17, a picture of a pruned seven year old Spinks peach tree, illustrates this point very well. It will be noticed that the strong branch on the left-hand side has been doubled up during the second, third and fourth prunings, providing six leaders out of the total of nine. The skill of the pruner in this instance has balanced the tree particularly well.

![Fig. 18.—Poor type Granny Smith apple tree prior to the third winter pruning. The pruned tree is shown in Fig. 19.](image)

![Fig. 19.—Granny Smith apple tree shown in Fig. 18 after the third winter pruning. At the previous pruning it will be noticed that the strong branch on the right was pruned to an inside bud, which emphasised its upright nature. An attempt has been made to widen the tree by the use of a spreader and pruning the more upright shoots to outside laterals which have been shortened. This is an abbreviated version of elbow pruning illustrated in Fig. 20. It will be noticed that only one secondary arm has been doubled (right centre) and that the number of leaders is seven.](image)

Fig. 18 shows a somewhat poor type of a young Granny Smith tree prior to its third winter pruning. As the base is very narrow there would be very little room for doubling up the secondary arms, even if adequate shoots were available for the purpose.

The pruned tree is illustrated in Fig. 19. Only two secondary arms have been doubled, making a total of seven leaders. An attempt has been made to broaden the tree by the use of a spreader...
and by pruning the topmost buds on the leaders to small lateral growths pointing outwards. This latter is an abbreviated version of elbow pruning which is illustrated in Fig. 20 and which, under certain circumstances and if not carried too far, is a very helpful means of spreading narrow-based trees.

Severe, unintelligent pruning of young trees can have serious consequences on the future life of the tree. It can cause stunting, the early appearance of “die-back” and reduced cropping. An instance of a young Granny Smith tree due for its third winter pruning is shown in Fig. 21. Strong growth has been forced from dormant buds and what original form the tree possessed has been lost. An attempt has been made to rectify some of the mistakes and this is illustrated in Fig. 22. The tree has been reformed with six leaders, better spaced by the use of two spreaders. Considerable attention will be necessary to this tree during the next growing season, as strong wood shoots will arise from the base of shoots removed at this pruning. If this essential work is carried out, there is every chance that a satisfactory orchard tree will eventually be produced.

Fig. 20.—An old Granny Smith apple tree, on the orchard of Mr. Geo. Parke, Donnybrook, showing the effect of elbow pruning to widen a narrow based tree and to spread the leaders (see text).

Fig. 21.—A young Granny Smith apple tree due for the third winter pruning showing the effect of too severe pruning the previous year. The pruned tree is shown in Fig. 22.

Fig. 23 shows a young Ruby Red peach in need of attention. The tree is due for its third winter pruning. The pruned tree is illustrated in Figs. 24 and 25. Six leaders have been chosen and better spacing has been achieved by pulling two leaders together on the left hand side, with a piece of cord, and the utilisation of two spreaders. In addition, the topmost cuts on some of the leaders have been made to lateral growths pointing outwards, to further spread the tree.

The length the leaders are shortened will depend upon the vigour and development of the individual tree. Generally they are reduced by half on moderately vigorous trees and more severely on weaker ones. All the cuts should be made as far as possible on the same horizontal level, giving each leader the same opportunity for development.
Fig. 22.—Young Granny Smith apple tree shown in Fig. 21, pruned. The tree has been reformed with six leaders, better spaced by the use of two spreaders. Considerable attention will be necessary during the growing season to check strong growth of wood shoots which will arise from the base of shoots removed at this pruning.

Fig. 23.—A young Ruby Red peach tree due for the third winter pruning. The pruned tree is illustrated in Figs. 24 and 25.

Any weak leaders on unevenly developed trees should be left untipped and care taken that the terminal buds are higher than the pruned terminals of the other leaders. Should the trees be evenly developed and very vigorous all the leaders could be left untipped (see Fig. 29).

Fig. 24.—A young Ruby Red peach tree shown in Fig. 23, pruned. The leaders have been defined and spaced by means of spreaders and a piece of cord.

The purpose of shortening leader growth, apart from framework development, is to force the topmost buds into strong growth, and the majority of the remainder into much weaker growth. The relatively few strong growths or wood shoots on each leader are desirable for the reason that use is made of those selected to strengthen and extend the framework. The weaker shoots or laterals are required for future fruit production.

Should the pruning be too severe, the resultant growth would be mostly wood shoots, useless for fruit production and most would have to be removed at the next pruning (see Figs. 21 and 28). If too little was removed at this and other prunings, many buds would not be forced into growth and consequently there would be extensive areas on the leaders devoid of fruiting wood. Much better results are obtained on vigorous trees by leaving the leaders untipped as a bigger proportion of their buds develop into laterals and spurs than if they were lightly pruned.

All strong shoots interfering with the leaders should be suppressed entirely and not merely cut back. The treatment of laterals will be given in another section but generally they should be retained when they are inclined to the horizontal and do not exceed 12in. to 18in. in length. When they exceed this length they should be shortened to approximately this length. Care however should be taken that the terminal buds of these weak shoots are not above or approximating to the same height as the
terminal buds on the leaders. Under these circumstances the laterals can make strong growth, and compete very effectively with the terminal growth from the leaders.

The main consideration at this pruning is still the framework and fruit production is a secondary consideration.

**THE FOURTH WINTER PRUNING**

As was the case during the previous growing season, unwanted shoots are either removed or checked by pinching out the growing points. The interior of the tree should be kept reasonably open to air and sunlight. The stronger growth from the leaders on uneven trees should be periodically checked.

The fourth winter pruning is still concerned with ensuring a sound framework and the leaders should be selected carefully with regard to their vigour and position.

With well-pruned trees, the extensions will continue from the leader growths retained at the previous pruning. Suitable wood shoots and/or water shoots are used to increase the number of leaders where space permits. The shortening back is not now required to be as severe as it was formerly. Approximately two-thirds of their length are retained on moderately vigorous trees, but less is desirable when the growth is weaker. Should growth be very vigorous and there is a large proportion of wood-shoots, it would be again wise to “let the leaders run” or in other words, leave them untipped.

The same general recommendations given for previous prunings again apply. Wood shoots and water shoots not required for framework purposes should be suppressed entirely. Generally, but excepting peaches and nectarines, to which special conditions apply, the laterals should be retained when they are inclined to the horizontal or when tied down (see Figs. 17, 27 and 28).

The treatment of laterals on peaches and nectarines will be described in another section.

**THE FIFTH AND SUBSEQUENT PRUNINGS**

It was stated earlier that the leaders should be pruned to approximately the same horizontal level. This still generally applies to the later prunings but care should be exercised to prevent subsidiary leaders utilised from wood shoots or water shoots from the older wood from growing too strongly and competing with the existing leader growth. A saying commonly met in this connection is that “the shoot has
Fig. 27.—A five-year-old Granny Smith apple tree shown in Fig. 26, pruned. Action has been taken at this and previous prunings to balance the right-hand side of the tree. Four subsidiary leaders have been formed, but they have been pruned at a lower height than the leaders. This is done to prevent any of these shoots making strong growth and "robbing the leader" from which they arise. See text. Though not clearly shown in the illustration, long laterals are either twisted together or bent downwards to discourage strong growth and to promote the formation of fruit spurs.

Fig. 28.—A six-year-old Yates apple tree which had previously been pruned too severely, causing a strong growth of wood shoots and a more or less complete absence of weaker laterals necessary for fruit production. The pruned tree is illustrated in Fig. 29.

Fig. 29.—Six-year-old Yates apple tree shown in Fig. 28, pruned. All strong wood shoots competing with the leaders have been suppressed and the leaders will be retained untipped. Strong lateral growths have been bent or tied down to discourage strong growth and to promote the formation of fruit spurs. The terminal buds have been removed from the strongest. This action should distribute growth more evenly over the tree and not force it through a restricted number of buds as was done in previous prunings. At the next pruning, the extensions from the leaders will be pruned in the normal way.

Fig. 30.—The appearance of pruning die-back on a Granny Smith leader. Pruning cuts on apple leaders should never be made to weak buds as the subsequent growth may be as illustrated. It is always preferable to leave the leader extensions untipped in such instances. See Fig. 31.

Fig. 31.
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robbed the leader. To prevent these strong growing shoots from "robbing the leader" they should be kept in an inferior position by pruning them at a lower level than the leaders on that part of the tree from which they arise (see Fig. 27). In this illustration of a pruned five-year Granny Smith apple tree, it will be noticed that subsidiary leaders consisting of the previous season's growth, have been utilised to balance the tree. These laterals have been pruned at a lower level than the topmost buds of the leaders. The unpruned tree is shown in Fig. 26.

At all future prunings, efforts should be made to preserve the balance of the trees. This can be done to a large extent by more severe pruning on the stronger sides and leaving the weaker leaders untipped. It will be necessary however to remove any fruit that may set on the extremities of unpruned leaders, as breakages and stunting can easily occur.

Often the trees will continue to make strong vigorous growth and, should there be an abundance of strong wood shoots, it is certain that the trees were pruned too severely the previous winter (see Fig. 28). Letting the leaders run should correct the disability, particularly so if the lateral growth is treated leniently (see Fig. 29).

Should signs of die-back appear on apple trees as the trees become older, it is better to let the leaders run untipped. Cuts made to weak buds on affected shoots often fail to make anything beyond a spindly outgrowth or spur (see Fig. 30). The terminal buds are often healthy and if retained, some healthy growth can be expected (see Fig. 31). As opportunity offers the leaders can be shortened back to a healthy lateral which should again be left unpruned.

THE WICKENS SYSTEM

This system was introduced in 1939 for apples by the late Mr. Geo. Wickens when Superintendent of Horticulture and is based on keeping the leaders untipped, after the normal pruning when the two-year-old tree is planted. Fig. 32 shows a Granny Smith tree which was pruned by Mr. Wickens since it was planted as a whip in 1930 on Mr. G. Parke's orchard at Donnybrook, until he retired in 1939.

The system is an excellent one on land which will grow strong trees, but strict attention is required to remove any
Fig. 33.—A row of fourteen-year-old Dunn trees on the orchard of Mr. M. Hoops, Kendenup, adapted at an early age to the Wickens system. The trees are very uniform in growth and have produced good crops.

Fig. 34.—The cost of neglect. The removal of fruit from the top portions of the leaders of this apple tree and "may-poling" would have preserved this tree (see Figs. 32 and 36).
fruit setting on the upper thirds of the leaders. Unless the fruit is removed breakages will occur (see Fig. 34).

At the second winter pruning, three to four shoots are retained in the same manner as for normal pruning, but the leaders are not shortened. During the following late August or early September, several buds on the lower portion of each leader, pointing outwards and towards the leaders on either side, are cinctured, that is to say, a small piece of bark is removed just above each of the buds. This treatment should stimulate lateral growth from these buds during the growing season.

At the next pruning suitable shoots are retained giving an inner ring of say three leaders, and an outer ring of six
Fig. 38.—The system of "may-poling" shown in Figs. 36 and 37, indicating the way the tie-wires are attached to the limbs. In this instance the wire is threaded through and at the back of pieces of rubber stripings from retreads. Old car tyres would serve just as well.

Fig. 39.—A mechanical means of collecting prunings devised by B. V. Cross and Sons, Bedfordale. An old hay-rake, mounted on an old car axle and wheels, is drawn by an Oliver Caterpillar tractor.
subsidiary leaders. The sub-leaders are between the primary leaders. Growth competing with the leaders, or growth that is badly placed is removed. The leaders are kept unpruned and further sub-leaders are added as desired as the tree grows.

Fig. 33 shows a row of very even fourteen-year old Dunn trees, that though not trained from the start on this system were adapted to it at an early age.

As mentioned earlier, all fruit must be removed from the tops of the leaders as soon as possible after it has set otherwise breakages will occur (see Fig. 34).

The commonest mistake made by growers when adopting this system was the failure to make provision for the outer ring of subsidiary leaders. The result was a tall narrow tree, requiring constant attention to prevent breakages when cropping. Such a tree is illustrated in Fig. 35.

Another factor which must be considered by anyone adopting this system is that as the trees grow larger, longer planting distances are necessary. During dry summers big trees on average land without irrigation show the effects of dryness more than smaller trees, planted at the same distances apart.

SUPPORT
Most trees require support when they are carrying heavy crops, to prevent breakages of limbs. With smaller trees, wooden props are utilised to a large extent. These are of a temporary nature being used during the cropping period and stored away until the next one. Some growers use twine to tie branches and others encircle the leaders with wire. The most satisfactory method however is "may-poling" (see Fig. 36). A stout pole is placed a foot or so in the ground and strapped securely to the trunk. At its extremity wires radiate to all the main branches as illustrated in Figs. 37 and 38.

COLLECTION OF PRUNINGS
It is common for pruners to place the prunings in heaps under each tree and they are subsequently gathered and burnt outside the orchard. A method adopted by B. V. Cross & Sons, Bedfordale, is the utilisation of an old hay rake suitably mounted on an old car axle and wheels which is drawn by tractor down the rows of trees. With this system the prunings can be expeditiously collected, saving the labour involved in placing them in heaps by hand (see Fig. 39.

(To be Continued)

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This photograph, taken in February last, shows our Onion Seed Crop just before harvesting. The seed produced is of excellent quality, and the plants during the whole growing period showed no signs of disease. We offer this seed to Home Gardeners and Commercial Growers, confident that the resultant crop will be true to type.

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SPEARWOOD BROWN GLOBE, 8d. per Packet. — 1 ounce 3/6, ½ lb. 12/6, 1 lb. 42/6
SPEARWOOD WHITE GLOBE, 8d. per Packet. — 1 ounce 3/6, ½ lb. 12/6, 1 lb. 42/6
SPRINGFIELD LONG KEEPING BROWN, 8d. per Packet — 1 ounce 4/-, ½ lb. 13/-, 1 lb. 45/-
BARLETTO EARLY FLAT WHITE, 8d. per Packet. — 1 ounce 3/6, ½ lb. 12/6, 1 lb. 42/6

We make special mention of the type "SPRINGFIELD LONG KEEPING BROWN." This variety was originally Victorian grown Brown Spanish which as everyone knows is not adaptable to our local sandy conditions. By dint of careful selection a type has now been produced which will grow in our light soils, and whilst we do not claim that it will keep as well as Brown Spanish, it is of much thicker and firmer texture than the Spearwood types.

We strongly recommend growers to make a trial sowing of this variety.

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