Hybrid Perpetuals.—Annie Laxton, Abel Grand, Alfred Colomb, Anna Alexieff, Anna de Diesbach, Antoine Ducher, Baroness Louise Uxkull, Beauty of Waltham, Bessie Johnson, Centifolia rosea, Charles Lefebvre, Charles Rouillard, Coquette de Blanches, Dr. Andry, Duchess of Sutherland, Duke of Edinburgh, Etienne Levet, Francoise Fontaine, General Jacqueminot, Gloire de Ducher, Horace Vernet, Julie Touvais, Leopold Hausberg, Madame Alice Dureau, Madame Caillat, Madame Clemence Joigneaux, Madame Clert, Madame Fillion, Madame Lacharme, Madame Victor Verdier, Madlle. Thérèse Levet, Marguerite de St. Arnaud, Marquise de Castellane, Monsieur Boncenne, Monsieur Paul Neron, Monsieur Noman, Paul Verdier, Perle Blanche, Prince Camille de Rohan, Princess Christian, Princess Mary of Cambridge, Reine du Midi, Senateur Vaisse, Victor Verdier.

Tea-scented.—Alba Rosea, Belle Lyonnaise, Gloire de Dijon, Madame Celine Berthod, Madame Damaizin, Madame de St. Joseph, Madame Falcot, Madame Jules Margottin, Madame Hippolyte Jamain, Madame Villermoz, Marie Ducher, Marie Sisley, Monsieur Furtado, Perle de Lyon, President, Rubens, Souvenir d'un Ami, Souvenir d'Elise Vardon, Vicomtesse des Cazes.

Bourbons.—Baronne Gonella, Coupe de Hebe, Madlle. Favart, Model of Perfection, Rev. H. Dombrain, Sir Joseph Paxton, Souvenir de la Malmaison.

Hybrid China.—Charles Lawson, Juno, Miss Ingram, Paul Ricaut.

Noisettes.—Celine Forestier, Jaune Desprez, Lamarque, Marechal Niel, Solfaterre, Triomphe de Rennes.

It may not in every case be desirable to purchase all the varieties mentioned above; but as all are so thoroughly good it is of no real consequence which are selected. It is preferable to grow a large number of varieties rather than a few, and several plants of each.

WINTER SALADING.

BY GEORGE GRAY,

Head Gardener, Ewell Castle.

FOR the information of those readers who desire a well-filled salad bowl at all seasons of the year, it is my intention to offer a few remarks upon the production of winter salading, which, if acted upon, cannot prove otherwise than useful. More trouble is, of course, incurred in the production of salading for winter use than for any other season of the year; but after upwards of twenty years' experience, I have found that it is not such a very difficult task to keep the salad bowl well filled, provided proper attention is paid to the matter, and the work done at the proper moment.

In discussing a matter of this kind it is necessary to consider first of all which are the best things to grow, and then the best

means of sheltering them at certain periods ; and at the commencement it may be said that without the assistance of frames of some kind or other it will be difficult, if not impossible, to carry the supply far into the winter. Protection from damp is one of the main essentials, and of more importance than protection from frost, as such things as lettuce and endive are capable of resisting the effects of severe frost, provided they are quite dry. Very frequently the most rough-and-ready contrivance will suffice, but speaking generally, a good frame—whether fixed or portable is of little consequence—is in every way desirable.

To render the remarks more intelligible, the several subjects will be considered under distinct heads, and we will commence with—

Lettuce.—For securing a supply from the middle of October until Christmas, select strong plants from a sowing made about a fortnight since, and plant in beds about nine inches apart each way; if no sowing was made, sow at once where the plants are to remain, and thin to the proper distance apart. By sowing in the beds a considerable saving of time will be effected, which just now is of considerable importance; and a second sowing must be made about the middle of August for maintaining the supply from the early part of December until March ; and for use from the early part of the last-mentioned month until the spring-sown crops are ready for use, sow in September. For the first sowing select the *Paris Green Cos* and *Berlin White Summer Cabbage*, and for the second and third sowings *Brown Bath Cos* and *Hammersmith Hardy Green Cabbage* will be found the most desirable. As the plants from the first sowing will be full grown by the beginning of October, they must be protected from damp and frost, and a considerable number, especially those to be used first, might be lifted and replanted in an unoccupied fruit-house or vinery ; the remaining portion should be removed to a frame. It is desirable to lift them with as much soil adhering to the roots as possible, to avoid damaging the leaves, and to replant them just far enough apart to prevent their touching. When taken to the fruit-houses or frames, it will suffice to stand them upon the surface, and fill the space between the balls of soil with rather moist and fine soil. The plants raised in the middle of August will of course be much smaller, and may be planted in the frame in the usual way, but without disturbing the soil about the roots more than can be helped. The plants from the last sowing can be put rather close together in frames, or at the foot of south walls, or in sheltered corners. It is always advisable to put out a portion of the latter on a warm border, because if they survive the winter they will be found of immense value in the spring to supplement those wintered in the frames.

Endive.—The two best for winter use are the *Green Curled* and *Broad-leaved Batavian*. Sowings should be made at the same time as advised for the lettuce. The cultural details generally are very similar, and it is therefore unnecessary to enter into details. There are, however, a few points to which it is desirable to allude. Endive is much hardier in constitution than lettuce, and large hearts, beautifully white and crisp, may be had, when to have lettuce

in the same condition is quite impossible. To blanch the plants from the first and second sowing more readily than would otherwise be practicable, plant them in trenches about four or five inches in depth, and when they have made considerable progress, fill up the trenches by carefully drawing the soil up to the plants. The strong-growing Batavian, which makes a most excellent substitute for lettuce during the winter, may also be earthed up slightly in a similar manner to celery about ten days or a fortnight after the trenches are filled in. The soil will afford material protection from the frost whilst keeping the leaves together, and assisting to blanch the hearts. In tying up endive in the autumn it is most essential to take advantage of dry weather. In putting it into frames, the plants can be packed much closer together than would be desirable for lettuce, provided it is done when they are comparatively dry.

The portable frames, of which there are a considerable number before the public, are most valuable in protecting salading during the winter. When there is a supply of these, both lettuce and endive should be planted in beds of the proper width to receive the frames, so that protection can be afforded at the proper moment without the necessity of lifting the plants; indeed, it will be simply necessary to level the sides of the bed and then fix the frame. In planting them with a view to their being covered without removal, the two outside rows should be about six inches inside of the line of the sides of the frame. During dry weather air should be admitted freely, but care must be taken not to expose the plants to rain or heavy dews, for when they once become wet there is no telling what mischief may be done.

Chicory and Dandelions.—The blanched leaves of both the chicory and dandelion are most useful during the winter; the seed of these must, however, be sown in the spring. The latter, when cultivated, will produce a very large supply of tender, delicately-flavoured leaves throughout the winter, by providing three sets of roots. The cultivation of both is the same: the seed requires to be sown in March or April, in drills fifteen inches apart, and the plants to be thinned to a distance of nine inches apart in the rows. In November the roots can be taken up and laid in by their heels, where they can remain until required for use. The roots do not exactly require forcing, as they will commence to grow freely in an ordinary cellar; and where there is no mushroom-house, it will be a most excellent plan to pack the roots close together in boxes about twelve inches deep, with a little fine and moist soil between them, and then place them in a cellar. In the mushroom house they can be packed up together in one corner. To keep up a supply throughout the winter, three lots of roots will be required; the first lot to be started when lifted in the autumn, the second as soon as the first lot begins to decline, and the third as soon as the second commences to show signs of exhaustion. Dandelion roots may be obtained from pasture and other land, but they will be small and by no means so profitable as those properly cultivated. Moreover, there is an improved form known as the *Thick-leaved*, which is much better than the ordinary wild form.

SMALL SALADING, such as mustard and cress, can only be raised in the depth of the winter with the assistance of more warmth than that afforded by the greenhouse. With such assistance it is so easily raised that it is not necessary to enter into details. After February it may be raised in cool structures. The American cress sown on a warm sheltered border, about the middle of the month, and after the second week in October protected with one of the portable frames alluded to, will be most useful far into the winter.

QUICK METHOD OF PREPARING SKELETON LEAVES.

PROCURE *perfect* leaves. Let there be no flaw or sign of decay. Then get six ounces of washing-soda, and pour it into two quarts of boiling water. Slack three ounces of quick-lime, and then pour this also into the boiling water. Let all boil together for fifteen minutes. Then remove it from the fire. Let it settle, and pour off the clear fluid. Pour this into a second clean vessel, and set it on the fire again. When it boils, put in the leaves; let them boil for one hour; then take up one and throw it into a basin of cold water—rain water is best. If the epidermis comes off freely by rubbing the leaf between the finger and thumb, *under the water*, then all the leaves may be removed from the solution. When they have all been carefully freed from the epidermis, put them in a mixture of chloride of lime and water; about a wineglass of chloride to a quart of water. Some leaves will take only ten minutes to bleach, others an hour, or more. Let them be watched, therefore, for they may burn into shreds if steeped too long. When pure white, throw them (carefully) into a basin of cold water, and from that float them out on slips of paper. When almost dry, put them in a book, to become *quite* dry and stiff. Then they are complete. The best for a beginner to try on at this season is the smooth holly, or the golden-edged holly, or large-leaved ivy, or common poplar, if they can be had *perfect*, especially the aspen variety. KATE SEYMOUR.

PROTECTION OF THE POLLEN OF PLANTS. — Dr. A. Kerner reprints from the "Proceedings of the Scientific Society of Innsbrück," an interesting Paper "On the means of the Protection of the Pollen of Plants against premature Displacement or Damp." As the vitality of pollen is immediately destroyed by exposure to the action of either rain or dew, he finds in nature a variety of contrivances to protect it against these injurious influences during the interval between its escape from the anther and its being carried away by insects, these contrivances being generally absent in those plants where fertilization is affected by the pollen being conveyed at once to the stigma by the wind. In plants with coherent pollen, fertilized by English agency, where some of the anthers are so placed as to be necessarily exposed to the weather, these are generally found to be barren, or destitute of pollen, and where they would interfere with the entrance of insects into the flower, they are altogether abortive or rudimentary. Plants with coherent pollen, which require insect agency for their fertilization, Dr. Kerner believes to be of more recent geological occurrence than those with powdery pollen, which require only the wind to convey it to the stigma.