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# IN-DOOR GARDENING

FOR

**EVERY WEEK IN THE YEAR:**

SHOWING

THE MOST SUCCESSFUL TREATMENT FOR ALL PLANTS

CULTIVATED IN THE

GREENHOUSE, CONSERVATORY, STOVE, PIT,  
ORCHID, AND FORCING-HOUSE.

BY WILLIAM KEANE.



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1865.

# IN-DOOR GARDENING FOR THE MANY.

## JANUARY.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

CINERARIAS.—The plants intended for large specimens must receive their final shift, and be allowed sufficient space to expand their foliage without interfering with or injuring each other. The side-shoots to be tied out.

EPACRISSES.—As some of them will be preparing to burst into flower, a little arrangement may be necessary in tying them out to display their spikes of bloom more advantageously.

FUCHSIAS.—If wanted early, the plants that were first put to rest should be selected, and be fresh potted, cutting back the roots, beginning with a small-sized pot; to be shifted into larger when the roots have extended to the outside of the ball. Place them in a nice moist temperature of 50° by day and 40° by night.

HEATHS.—To be looked over, and the dead and decaying leaves removed. The most forward in bud—such as the *Vestitas*, *Vernix*, *Vasciflora*, *Aristata*, *Beaumontia*, and many others, to be tied out, and arranged for the season.

PELARGONIUMS.—When large specimens are wanted, tie out the branches at equal distances, and down as near to the rim of the pot as possible. Air to be given at all favourable opportunities. Water to be given but sparingly, and not overhead.

#### STOVE AND ORCHID-HOUSE.

Be careful that the night temperature is not raised too high: if kept at 50° in severe weather no ill consequences will result. The atmosphere to be kept rather moist, especially if the weather is bright; and all plants indicating an appearance of starting into bloom to be removed to the warmest part of the house.

CLERODENDRONS.—To be shaken out of their pots; their roots reduced and repotted into small pots in a light sandy loamy compost. Sow seeds, and also of any hard-wooded stove plants.

Water to be given very cautiously to the Orchids, merely sufficient to prevent the plants from shrivelling; and to do this effectually it is necessary to look over them every day. The air of the house to be kept moist by sprinkling the pathways, floors, tables, &c., daily. If any plant is found not to have ripened off its bulbs it should be placed in the warmest part of the house, and the ripening process encouraged. The Brassias, Cyanoches, Cœlogynes, Miltonias, and other such plants, when they are beginning to grow, to be repotted. The compost to consist of turfy peat mixed with a portion of charcoal or broken potsherds, and the pots to be at least half full of very open drainage.

#### FORCING-HOUSES.

CHERRIES.—Very gentle excitement to be given by fire or artificial heat, with kindly humidity, and abundance of air.

FIGS.—Although they will bear a higher degree of temperature without injury than either Cherries or Peaches, it is advisable to begin cautiously, as it frequently happens that the more haste with fire the less speed with fruit, and that favourable opportunities of sun and light must be embraced for making sure progress with them.

PEACHES.—Where the trees are coming into bloom it is necessary to be cautious in the application of humidity, and when they have expanded their flowers to withhold it altogether for a time. Fire or other artificial heat to be applied moderately—that is, from 45° by night to 55° by day, particularly when dark and gloomy weather prevails. The houses now commencing to force to be kept moderately moist, and in a sweet healthy state, syringing the trees pretty freely once or twice a-day with tepid water. Shut up early on sunny days, and sprinkle the paths, floors, flues, or pipes frequently.

VINES.—When they have all broken, the superfluous buds must be rubbed off, and the young shoots stopped as soon as they are long enough to admit the points of the shoots at one bud

above the bunch being broken out. In vineries now commencing to force, adopt the practice of producing, where it can be applied, a kindly humidity by means of dung and leaves, or other such fermenting materials. If they are to be broken principally by fire heat, either by flues or hot-water pipes, copious syringings must be resorted to with tepid water once or twice a-day. Fire heat to be applied principally by day, with air at the same time, and very moderately at night.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

The plants will now require particular attention and a nice discrimination in the application of water: it may be comprehended by all persons interested in gardening operations, that when the soil on the surface of the pot looks damp it will not require water until it gets thoroughly dry at this season, and then it is to be given before the plant droops or flags for want of it. But when the plant droops and the soil on the surface appears damp, the cause is then to be discovered by turning the ball out of the pot, when it will be seen whether the whole or only a portion of the soil is wet; as it sometimes happens, when fresh potted with light soil, it shrinks from the sides of the pot when dry, and when water is given it runs down and moistens the outside, without penetrating the ball. The evil is corrected by holding it for a short space of time in a tub of water of the same temperature as the house. If the soil of any plant is sodden with water it should be turned out of the pot, and the drainage examined, and no water to be given until it becomes thoroughly dry.

VERBENAS.—They require to be kept tolerably dry, as they are more susceptible of injury from damp than from cold; a top shelf near the glass in the greenhouse is a very suitable place for them. If mildew appears, to be dusted with flowers of sulphur.

### STOVE AND ORCHID-HOUSE.

Although all plants now at rest should be kept comparatively dry, they will require to be looked over daily to see that they do not suffer for want of water. The temperature not to exceed 60° by fire heat, and a fall of 10° may be allowed at night in very cold weather. Many of the stove plants—such as Aphelandras, Justicias, Poinsettias, &c.—may now be cut down altogether, and kept dry for a few weeks, which will cause them to make an early growth, and to come into flower a few weeks sooner next winter.

GESNERAS.—Select a few roots of them and a few of the Gloxinias to start into growth to produce a succession of flowers.

### FORCING-HOUSES.

ASPARAGUS.—If the soil in the bed is dry, give it a liberal supply of water, so that it may descend to the roots, as unproductiveness is sometimes caused by the soil at the roots being very dry when the top is kept moist by gentle waterings.

BEANS (Dwarf Kidney).—Sow every three weeks, if a constant supply is wanted. Keep the early crops well supplied with water, and give them frequent sprinklings overhead, to prevent the attacks of red spider.

MUSHROOMS.—An abundance of water to be thrown about the floors. If the beds are dry, to be syringed with lukewarm water, applying it like dew at intervals for a few hours. Temperature from 50° to 60°, with air occasionally in favourable weather.

PEACHES.—Continue previous directions. The trees in bloom to be artificially impregnated, and the foreright shoots to be rubbed off a few at a time before they become too large. Currents of air to be carefully avoided, especially when the trees are in bloom, as they have been sometimes observed to sustain injury from the two end doors being left open for a short time. Air to be given at the top daily in favourable weather.

PINES.—As the days lengthen and the light increases the plants that are swelling their fruit should be supplied with a gradual increase of heat (from 65° at night to 75° or 80° in the middle of the day in clear weather), water, and atmospheric moisture; while others that are in bloom and starting into fruit require more air or more moderate temperature, care in watering and less atmospheric humidity. Some of the strongest succession plants that are grown in pots to receive their final shift, that they may make their growth for fruiting in May or June. In old-fashioned pits or houses, where the flues run near the tan-bed, the plants should be closely examined, as they are apt to be injured by fire heat in such a situation.

STRAWBERRIES.—A few dozens more pots may be placed in a frame where there is a gentle heat and an atmosphere more congenial to their healthy growth than in a house.

VINES.—When they have made shoots two or three inches long, the night temperature to range

from 60° to 65°, with an increase of from 5° to 10° during the day.

#### PITS AND FRAMES.

Keep the plants in these structures as hardy as possible by fully exposing them in mild weather, but do not give any more water than is absolutely necessary. Remove all decayed and decaying leaves, and keep the atmosphere in as healthy a state as possible.

Make small hotbeds for sowing Cucumbers and Melons, Radishes and *Early Horn* Carrots, Cauliflower and *Walcheren* Broccoli, Lettuce, and various other things, which will be found useful where the late severe weather, or other cause, may have diminished the autumn sowings.

#### THIRD WEEK.

##### GREENHOUSE AND CONSERVATORY.

VENTILATION is requisite in mild weather, as stagnant air is always unfavourable, especially to the plants blooming in the conservatory. Water sparingly, and damp the house as moderately as possible, as water settling on the flowers will soon destroy them. When the plants, bulbs, or shrubs in the forcing-pit have developed their blossoms, let them be removed to the conservatory, where they can be preserved much longer in perfection. The plants to be looked over every morning, and every dead or decaying leaf and flower to be removed.

HEATHS.—Fire heat should only be given when mats or other such coverings are not sufficient to exclude frost, as nothing so much injures the constitution of the Cape Heaths as a close, damp atmosphere. Air should be allowed to circulate freely amongst them at all opportunities.

PELARGONIUMS.—The plants intended for specimens should be finally shifted. Air to be admitted at all favourable opportunities, and a slight increase of temperature given. To be kept near the glass, and free from green fly. If they have made no winter growth they will now be the better prepared to progress in a robust, healthy state.

##### STOVE AND ORCHID-HOUSE.

AMARYLLIS.—Attend to the shifting of them as soon as they show signs of growth. Let them be placed in the stove, and give a little water, increasing it gradually as the leaves unfold.

ORCHIDS.—If other departments of gardening are likely to occupy more time than can be very well spared as spring operations accumulate very fast, it is advisable to proceed with the potting of Orchids from this time forward, beginning with those that are showing signs of growth. Peat cut into from one to two-inch cubes, fresh sphagnum to be soaked in boiling water, to destroy insects, and charcoal lumps, with an abundance of crocks, are the materials to be used. Any plants that had become very dry should be immersed in tepid water for an hour the day previous to shifting. The climate of the countries and the localities from whence the species come are the best guides to their successful cultivation; as the treatment required for *Oncidium Carthaginense* would kill *O. bifolium*, and *Cattleya Forbesii* will thrive where *C. Skinneri* will die, and in like manner with many others.

##### FORCING-HOUSES.

CAPSICUM.—Sow seeds of the large sort in pans or pots, to be placed in heat. When the seedlings are an inch or two high pot them singly into small pots, and replace them in heat; to be afterwards shifted when necessary until the end of May, when they may be planted out on a south border.

CHERRIES.—Plenty of air, atmospheric moisture, and a very moderate temperature, are the requisites for them. If the buds are beginning to swell, 45° will be enough to maintain by fire heat, lowering the temperature down to 40° at night, with a moist atmosphere.

CUCUMBERS.—The plants in bearing to get a top dressing of fresh, rich soil. Keep a sharp look out for the destruction of insects. When the plants in the seed-bed have made one rough leaf pinch off the leading shoot above it, so as to cause the plants to throw out two shoots from the axil of the leaves. Cuttings put in and struck in the seed-bed will come into bearing quicker than seedling plants.

PEACHES.—If the weather is very dull and unfavourable for giving air where the trees are in bloom, it is advisable to shake the trellis towards noon for dispersing the pollen.

PINES.—Proceed with the routine as advised in last Calendar.

STRAWBERRIES.—Keep them close to the glass, and remember that they are impatient of heat: let 45° be about the maximum, with a very free circulation of air. If they are plunged in a pit or

dung-bed, let the bottom heat be about 70° maximum, with an atmospheric warmth of 55° to 60°. In such a situation they will want scarcely any water until they begin to throw up their blossom-spikes.

TOMATOES.—Sow seed of the large. To be treated as advised for Capsicums.

VINES.—To be looked over carefully, and as soon as they are sufficiently forward to distinguish the embryo fruit all useless shoots to be removed—that is, all that do not show fruit, and are not required for wood next season. It may also be necessary to take off some of the shoots that show fruit where they are very thick. If two shoots grow from one joint one of them should be removed.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

The compost intended for the plants in these houses should be prepared and sweetened by several turnings; and a sufficient supply for immediate use should be stored in an open shed.

CALCEOLARIAS (Herbaceous).—To be potted into larger pots as they require them; compost equal parts of turfy loam, peat, and leaf mould, with a sprinkling of silver sand. To be kept in a moderately-moist atmospheric temperature of from 45° at night to 55° in the day. To be slightly syringed with tepid water on sunny days, and to be kept free from insects.

FUCHSIAS.—After the old plants are shaken out of their pots, and their roots reduced and fresh potted in a compost of turfy loam and peat, with a little leaf mould and some sand added, to be introduced to a temperature of 60°. When some of the young shoots are an inch long they may be taken off, and inserted in pans of sand kept damp, where they will soon take root, and will require to be pushed on in heat to make fine large specimens for the conservatory or flower garden.

NEW HOLLAND PLANTS.—Water them with care and moderation. Air to be given freely night and day in mild weather. Fire heat to be applied only, and then merely sufficiently, to exclude frost. The strong shoots of the vigorous young stock to be stopped in due time as the best foundation for future good specimens.

Sow seeds of Thunbergias, *Phlox Drummondii*, Mignonette, *Ten-week* and other Stocks, in pots, to be placed upon a slight hotbed.

### STOVE AND ORCHID-HOUSE.

ACHIMENES.—Place the tubers thickly in pans, to be potted singly as they appear, in equal portions of leaf mould and sandy loam; to be started into growth in a moderate bottom heat.

GLOXINIAS.—Select a few varieties. To be shaken out, and fresh potted in equal parts of turfy loam and heath soil and a little sand. To be excited in bottom heat.

GESNERA ZEBRINA.—Those which were first in flower should be dried off for early work next season. This is to be done by withholding water gradually, and by keeping their foliage still exposed to the light.

Sow seeds of Egg Plants, Cockscombs, Amaranths, and other such tender annuals in heat, to grow them in good time into fine specimens for the adornment of the conservatory in summer.

### FORCING-HOUSES.

CUCUMBERS.—The plants preparing for ridging out early in February will require attention in airing, and watering with tepid water occasionally when dry, and to be kept close to the glass to produce sturdy growth. The plants on dung-beds require great attention at this season. To be kept within eight or nine inches of the glass; to be stopped regularly; and to maintain a heat of not less than 70° by day; to be able to give air to dry the plants. The fermenting materials to be always prepared ready to receive the linings when the heat declines. For those who are fortunate enough to be provided with pits heated by hot-water pipes, such constant labour and attention will not be necessary.

MELONS.—To be treated as advised for Cucumbers.

PEACHES.—When the blossoms are beginning to expand, discontinue syringing, but sprinkle the pathways, to produce a moist, but not too damp, and consequently a healthy, state of the atmosphere. Fresh air is indispensable and should be admitted at every favourable opportunity; and if the cold external air could be made to pass over the flues, or hot-water pipes, so as to get warmed before coming in contact with the blossoms, a gentle circulation would be constantly kept up until the fruit is fairly set.

PINES.—Great care is necessary when syringing, more especially those that are about throwing up their flower-stems, that no more water may lodge in the hearts of the plants than will evaporate during the day. But if, from any cause, a portion remain until evening, it should be drawn away by means of a syringe having a long and narrow tube at the end of it, or by a piece of sponge tied to the point of a small stick.

STRAWBERRIES.—When these are throwing up their blossom-spikes a little liquid manure may be given, but it should be very weak, and perfectly clear. A succession of plants to be introduced where there is a gentle heat. The decayed leaves to be trimmed off, the surface of the soil to be stirred, and the pots to be placed on shelves near the glass.

VINES.—Continue the treatment as advised last week.

Keep up a succession of Kidney Beans, Asparagus, Sea-kale, and Rhubarb.

#### PITS AND FRAMES.

Cuttings of Anagallis, Heliotropes, Geraniums, Lobelias, Salvias, and Verbenas may now be struck in a gentle bottom heat, and pushed forward to make good sized plants for bedding out when all danger from frost is over.

## FEBRUARY.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

Proceed with the potting of the young plants in the greenhouse, and the small specimens of all kinds, using the soil tolerably rough, with a liberal sprinkling of sand, and good drainage. To be kept rather close until they make fresh roots.

AZALEAS (Indian).—Introduce a few into heat; to be fresh potted before starting them, giving a rather liberal shift into good peat and sand, with thorough drainage. A moist-growing temperature between 60° and 70° to be maintained, with plenty of air in favourable weather. Sow seed, as likewise Rhododendron, in a gentle bottom heat.

KALOSANTHES.—To be started into growth, potting them in a compost of half turfy loam, one-fourth turfy peat, and one-fourth decomposed leaf mould, with plenty of coarse gritty sand, and an admixture of charcoal and pebbles or potsherds broken small. A liberal shift to be given, and to be kept in a temperature of from 45° to 50°.

NEW HOLLAND PLANTS.—Select young plants of the Boronias and other such families, and give them a liberal shift; they delight in good fibrous heath soil, with a good portion of sharp sand, and plenty of drainage. It is advisable to pick off the flowers, and to pinch off the tops of the young shoots during their growth, to form handsome specimens.

ORANGE TREES.—Be vigilant that scale and all insects are removed from them and from Neriums, and other such plants before they begin to grow, as young wood and foliage are more difficult to clean without injury.

#### STOVE AND ORCHID-HOUSE.

Stove plants in general will now require an increase in the amount of atmospheric moisture, and a slight advance in heat; such an advance to be made, more especially on bright afternoons, when solar heat can be enclosed in good time, and with it a moist and congenial atmosphere.

CRINUMS.—Pot them if they require it, but without disturbing the ball of earth about their roots; to be favoured with an increase of heat to start them afresh, and during their active growth to be liberally supplied with water.

GLORIOSA SUPERBA.—Shake out the roots, and repot in good fibrous loam, with a sprinkling of sand, and place them in bottom heat. No water to be applied to the tubers until they have commenced their growth.

#### FORCING-PIT.

Continue to introduce for succession bulbs, Lilacs, Roses, Sweet Brier, and the many other plants previously recommended as suitable and useful for that purpose. A temperature of from 65° to 70° to be maintained, with plenty of moisture in clear weather.

## FORCING-HOUSES.

FIGS.—Trees in pots to have their shoots stopped when they have made three or four joints, and to be supplied occasionally with liquid manure.

MELONS.—The fruiting-beds to be prepared and in readiness for the reception of the young plants as soon as they have nearly filled their pots with roots.

PEACHES.—If a house were started, as advised at the beginning of the year, a second should now be set to work. Syringe the trees several times a-day in clear weather, and once or twice in all weathers until the flowers begin to expand. Attention to be given to the early house, when the fruit is set, to thin it partially, but to leave one-third more on the trees than will be required to ripen off. If Peaches are intended to be grown in pots for next season, the maiden plants should now be procured, and potted in nine or ten inch pots. The *Royal George* Peach and *Violette Hâtive* Nectarine are the most eligible for that purpose.

PINES.—If any indications of the presence of worms appear on the surface of the pots a watering with clear lime water will remove them. The same steady temperature to be kept up in the fruiting-house or pit as lately advised. Although it is sometimes recommended we would not advise to withhold water at the roots for the purpose of starting them into fruit; for if, by proper management, they are good, healthy plants, they will have formed their fructiferous parts before this time, and therefore should not be allowed to get dry, but be watered when they require it with tepid water.

VINES.—The successional houses to be treated nearly in all respects the same as the early houses; the temperature may now be increased in accordance with the increase of light rather more rapidly at an early stage of their growth than that of the house in which forcing was commenced in December. When Vines for the early crops are grown in pots, put the eyes in 60-sized pots, and plunge them in a dung-frame or pit, with a bottom heat between 70° and 80°. The *Hamburgs*, *Black Prince*, *Muscadine*, and *Sweetwater* are the kinds to be preferred for that purpose.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

As plants naturally, after their season of rest during the winter, now begin to grow, it is advisable to shift the young stock, and all others that require it, into fresh soil, by which they will be the better enabled to progress to a healthy-blooming state without check or hindrance. Although from this time to the middle of March is to be considered the most favourable season for a general shift, nevertheless it may be necessary to shift some plants more than once or twice during their season of growth.

CLIMBERS.—To be attended to, removing weak and dead wood, and cutting back to three or four eyes where an increase of young shoots is desirable. To be frequently syringed, to keep down red spider, as they are more liable than other plants to be infested by them.

### STOVE AND ORCHID-HOUSE.

The advice given for the shifting of the general stock of greenhouse plants will also be applicable to the fresh potting of the stove plants.

BEGONIAS.—Being of free growth they delight in fresh soil, consisting of equal parts of sandy loam and leaf mould. As a general rule they are repotted in February and August; but exceptions are sometimes made, and a shift is given whenever the roots become cramped or matted in the pot. The knife to be used cautiously, unless with the tall-growing sorts.

GLOXINIAS.—To be now started, if not done as advised a fortnight ago. When planted press the roots gently on the surface of the soil, and give them no water for some time; as the moisture in the soil will be sufficient at first until they begin to grow, when a little may be given, and the supply to be gradually increased as they advance in growth. When potted to be removed to a frame or pit where the temperature is about 60°.

LUCULIA GRATISSIMA.—To be potted in a compost consisting of half turfy loam, one-fourth turfy peat, and one-fourth leaf mould, with good drainage.

MUSA CAVENDISHII.—To be repotted in a compost of turfy loam, vegetable soil, or well-rotted manure, and a small portion of sand, with plenty of drainage. To be plunged in a brisk heat in a bark-bed, and to keep the roots moist.

Many of the ORCHIDS may now be potted, and then placed in the warmest part of the house. The plants that are not shifted to be supplied with a little fresh material, taking care that the embryo buds are not covered. Look over the fastenings of all that are on blocks, or in baskets, and renew the wires where necessary. The temperature to be about 65° by day, allowing it to range to 70° or 75° by sun-heat.

#### FORCING-HOUSES.

CHERRIES.—Keep up the temperature from 50° to 55° while the trees are in bloom, with as little variation as possible. The trees not in flower to be frequently syringed.

CUCUMBERS.—The greatest attention should be paid to the state of the bed for the first fortnight after the plants are turned out; the heat-stick (a stick stuck into the bed) should be examined, being, as it is, a much better criterion to judge by than a thermometer, which is generally used to indicate the heat of the atmosphere in the frame; cover up according to the heat of the bed. If it will allow it, a small portion of air should be left on every night, which may be given in the evening after the frame has been closed for two or three hours. Keep up the heat by stirring, renewing, or topping-up the linings; and attend to the stopping of the plants, and the earthing-up of the hills, as the roots make their appearance on the surface.

MELONS.—Pot off the plants when the seed-leaves are fully expanded.

PEACHES.—When the trees have set their fruit, give the roots, if growing inside the house, a good watering with liquid manure, mixed with soft hot water, so as to be of the temperature of the house, or a little above it. The syringe to be used several times a-day in clear, mild weather as soon as the fruit is set.

PINES.—Pot the succession plants. If the pots are full of strong, healthy roots, pick out the crocks carefully without injuring them, leaving the ball entire, and giving them a good shift. But if unfortunately many of the roots are dead, shake the ball entirely away, and cut out all that are dead, preserving such as are alive and healthy, and potting them in fresh soil.

STRAWBERRIES.—Keep up a succession by placing a few dozen pots in a gentle heat once every fortnight or three weeks.

VINES.—All laterals to be stopped in due time, and all useless buds and branches to be removed; the leading shoots to be tied in regularly, and the bunches to be thinned. No more bunches to be left on each Vine than it is likely to bring to perfect maturity. About one dozen bunches are a good average crop for each rod. The temperature to range from 55° to 60° at night, with an increase of 5° to 10° during the day, and even higher during sunshine.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

The plants occupying the beds in the conservatory to be arranged, cleaned, and pruned. If the health or habit of a plant, or other considerations, should render it desirable to prolong the season of blooming, the pruning may be postponed for a week or two longer. Continue to pot Cinerarias, Calceolarias, Pelargoniums, and all other such plants when they fill their pots with roots. To be then kept close for some days until fresh root-action begins. Green fly to be kept down.

VERBENAS.—Put them in heat, to get cuttings; as also Heliotropes, and all other such plants, of which there is a scarcity, for bedding-out purposes.

#### STOVE AND ORCHID-HOUSE.

Increase the moisture and temperature gradually as the days lengthen. Start old and young plants of Clerodendrons, Dipladenias, and Stephanotis, in a sweet bottom heat. Rondeletias to be cut in, and started in the same manner.

Shift all Orchids that are starting into growth. As a high temperature causes a premature and unhealthy growth it is advisable to keep up a healthy atmosphere of from 55° to 65°, with an increase of a few degrees in sunshiny weather, when a little air, if only for a very short time, should be admitted; but be careful to avoid draughts at this early period of the year. All growing plants to be watered at the roots only, being careful not to allow any water to lodge in the axils of the leaves to cause decay. To preserve the roots of some Orchids in a healthy state it is necessary to grow them on blocks of wood; the blocks to be made proportionate to the specimens they are intended to bear; and the heel of the plant to be placed close to the end of the log, to give as much space as possible for the plant to grow upon. The following thrive well on blocks without moss:—*Barkeria spectabilis*, *Leptotes bicolor*, *Phalænopsis amabilis*, and *Sophranitis cernua*, the Brassavolas, the Cattleyas, nearly all the dwarf Epidendrams, all the Lælias, and nearly all the dwarf Maxillarias and Oncidiums, and all the Schombergias.



## FORCING-HOUSES.

CUCUMBERS.—Attend to the thinning and stopping, and impregnate the fruit blossom when open.

FIGS.—Care to be taken that cold currents and sudden changes of air are excluded from the trees. The roots to be well supplied with water, and the trees to be occasionally syringed overhead.

PEACHES.—When set, thin the fruit and shoots as required; to be done gradually, a little at one time, to prevent any sudden and injurious change in the system of the tree. A liberal supply of moisture to be kept up, with a temperature ranging from 55° to 65° and 70° by sunheat. A drier atmosphere is advised for trees in bloom; the bloom to be thinned if the trees are weak; and if shy setters, to be artificially impregnated, using a camel-hair pencil for that purpose.

PINES.—Be watchful about the bottom heat, and lose no time in raising the pots nearer to the surface if an approach to a burning temperature is apprehended. To be thoroughly watered when they require it, and to be syringed overhead in the morning and evening of every clear day unless the plants are in bloom, or ripening their fruit. Any crowns, suckers, or small plants not well established will do well in a pit or frame on a bed of leaves, or well sweetened dung, where they will make a rapid and vigorous growth during the summer.

VINES.—Attend to last week's instructions as to stopping all laterals, &c., and thinning the bunches in good time; and tie up all the principal shoulders with soft strands of matting. Never allow the head or hand to touch the berries. Give them plenty of air-moisture during their swelling season; to be discontinued when they begin to colour. Shy-setting sorts—such as the *Black Damascus*, *Cannon Hall Muscat*, &c.—will set better by thinning the blossom-buds before expansion, by which a more regular and compact bunch will be produced. Late Vines should be pruned and dressed; and if not frosty the lights to be removed, which will retard their breaking, and benefit the trees.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

During continued frosty weather fires must be kept up in these houses, and then particular attention must be given to the New Holland plants, Heaths, and such like, which are impatient of heat, that they do not suffer from want of water. Be sure that the ball is thoroughly moistened at least once a-week.

### PITS AND FRAMES.

Amongst climbers, Calampelises, Cobœas, Lophospermums, Maurandyas, Rodochitons, and Tropæolums, deserve attention at this time, increasing them by cuttings or by seeds. Some annuals are also worthy of attention, such as Brachycomas, Phloxes, Portulaccas, Schizanthuses, with others which may all be forwarded in heat. Whoever has not yet attended to the propagation of plants for bedding out, should now begin, without further delay, to put in cuttings of Fuchsias, Verbenas, Heliotropes, Petunias, Salvias, Scarlet Geraniums, &c., to have good plants in May and June. All straggling and weak shoots to be topped back to form robust, bushy plants.

### STOVE AND ORCHID-HOUSE.

Some of the stove plants that have done blooming should be cut back, such as the *Eranthemum pulchellum*, *Euphorbia jacquiniæflora*, *Geissomeria longiflora*, *Gesnera lateritia*, Justicias, *Linum trigynum*, *Poinsettia pulcherrima*, and others. A bottom heat will be necessary when they are repotted, which may be done in about three weeks or a month. Such of the most forward plants, as they require shifting, to be attended to. The condition or fitness for this must, in a great measure, be determined by the progress the shoots and roots have made.

### FORCING-PIT.

Continue to introduce plants of Azaleas, Hyacinths, Heliotropes, Hydrangeas, Kalmias, Sedums, Lilacs, Narcissus, Pelargoniums, Pinks, Rhododendrons, and Roses in varieties. A batch of last year's young Fuchsias, Erythras, and *Salvia patens*, to be shaken out, repotted, and placed in bottom heat. Sow Balsams, Cockscombs, Globe Amaranths, &c.

## FORCING-HOUSES.

CUCUMBERS.—Attend as previously advised to thinning and stopping, set the fruit blossom when open, keep the inside of the frames watered with warm water, and apply some occasionally to the roots. Water overhead on fine days, shutting up with 75° or 80° of heat.

CHERRIES.—They will be benefited by frequent syringings at all times except when in bloom. Air to be given on all favourable occasions, shutting up with as much solar heat as possible. Keep down the green fly and look well after caterpillars.

FIGS.—Maintain a kindly humidity, but do not syringe overhead, except on very fine days, as too much moisture is apt to cause the fruit to drop off or to turn yellow.

PEACHES.—Tie in the forwardest shoots in the early-house as they advance; gradually disbud and thin out all the shoots that are not wanted; thin the fruit but not too much at once, and, with water of the temperature of the house, syringe the trees that have set their fruit. Remove large shoots cautiously, and reserve, in tying and disbudding, merely sufficient wood for next spring.

PINES.—The atmospheric heat to be gradually increased in the fruiting-house, and the plants to be frequently syringed, taking care that no water is allowed to lodge in the hearts of the plants. The plants swelling their fruit to be watered occasionally with clean soot water, air to be admitted on every favourable opportunity, but cold draughts to be avoided. A good heat to be kept up in succession-pits worked with linings.

STRAWBERRIES.—To be placed near the glass with plenty of air, and in favourable weather to be liberally supplied with warm manure water, and the surface of the pots to be frequently stirred.

VINES.—As soon as the first swelling is completed, and the stoning process commences, allow a little more liberty to the laterals to induce a corresponding increase of root action. All shoots to be properly trained up; but none to be allowed to touch the glass. All small bunches to be removed when in flower. When the fruit is set, the heat by day may be allowed to rise from 70° to 80°. See to the border coverings, if out-doors, as also border waterings, if in-doors. Be careful when admitting air to the early Vines, to avoid cold currents and changes, for in the space of an hour we have sometimes strong sunshine, sleet or snow, and cutting winds. Vines in pots to be supplied with plenty of manure water in all stages of growth, but especially when swelling off their fruit.

## MARCH.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

Frequent attention is now necessary in the giving and taking away of air as the alternations of bright sunshine and clouds occur, and also to temper cold winds by the admission of air on the south side. If severe weather has been now experienced, and extra fire heat used in consequence, many plants that may appear all right may, nevertheless, be very dry, and if they are not examined, and when very dry, well soaked with water, they will soon show unmistakable signs of approaching death.

AZALEAS (Indian).—Young plants that have commenced their growth to be repotted. Shift Achimenes, Begonias, Gesneras, &c., and keep them in a warm, moist situation.

BULBS.—Pot Cape and other bulbs in a compost of loam, leaf mould, with a good sprinkling of sand, as soon as they begin to make growth in foliage.

HEATHS.—Continue to shift as they may require, using sandy heath-soil full of fibres, with an abundance of drainage. Be sure that the ball is thoroughly moist before shifting; for if perfectly dry when that operation is performed the waterings afterwards given will pass freely through the fresh soil without penetrating the old ball. Give them all the air possible, avoiding north or north-east winds.

POTTING must be in progress, and include a good proportion of the occupants of these houses.

#### STOVE AND ORCHID-HOUSE.

Push Allamandas, Clerodendrons, Stephanotises, &c., forward as briskly as possible; but be in no hurry to train them, as freedom in growth is advantageous to a certain extent. Use all means to check the increase of insects.

ORCHIDS.—The general collection to be favoured with a good steaming every clear morning for about half an hour: this to be done by sprinkling the flues or pipes when warm. Plants in a growing state to be slightly shaded, to prevent flagging from too copious a perspiration during a sudden mid-day bright sunshine. Orchids are generally increased by passing a sharp knife

between the pseudo-bulbs (taking care to leave at least two or three undisturbed next the growing shoots) so as to sever one or more of the dormant bulbs from the parent plant, which should remain until it shows signs of growth, when it may be taken off and potted.

## FORCING-HOUSES.

**CHERRIES.**—The syringe to be used freely except when in bloom, plenty of air to be given, and the green fly kept down; shutting up with a little extra solar heat in the afternoons of bright days.

**FIGS.**—Abundance of syringing and good waterings with liquid manure may now be given them. Sudden changes in their treatment will cause the fruit to drop, all the shoots when six or eight inches long to be stopped to encourage the formation of a second crop.

**MELONS.**—Use strongish maiden loam by itself to grow them. See to the linings, attend well to setting, and maintain an airy and dry atmosphere when in blossom. Keep the shoots at all times thin.

**PEACHES.**—Frequent attention to be given in arranging the young shoots, disbudding and thinning. A knowledge of the state of the border is necessary, whether retentive or porous, that no serious errors may be made by withholding a sufficient supply of water, or by giving too much. The temperature of the early house to be from 55° to 60° by night, ranging from 75° to 80° by sun heat, and allowing 65° by artificial heat, on dull days.

**PINES.**—A day temperature of 75° to 80° to be maintained during the progress of the fruit to maturity, accompanied by atmospheric moisture. Succession plants to be supplied with a steady moist heat, and to be carefully sustained after potting, to induce a healthy action of the roots. Shading is sometimes necessary during bright sunshine.

**VINES.**—As the lower parts of the stems are generally close to the heating apparatus, it is advisable to bind them up with moss or haybands, neatly clipped, as far as the parching heat extends. The moss or haybands being damped morning and evening with the syringe, will keep the bark and stems in a healthy state, and will frequently induce a mass of roots to be produced there. That by watering occasionally with liquid manure will contribute to sustain the vigour of the trees.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

As the boisterous gales and violent showers that frequently occur at this season, succeeded by intervals of mild weather and brilliant sunshine, are frequently difficult to deal with, constant attention is necessary that a free admission of air, when in a genial state, may be given, and the cold, cutting east or north-east winds excluded. Frequent watering will also be necessary, and fires to be dispensed with, or only used occasionally, merely to ward off the rigour of sharp nights. The plants in good health, and well rooted, to receive a liberal shift. All plants when shifted to be accommodated with a little extra heat and moisture in the atmosphere until they begin to make fresh roots, when they will require to be more freely exposed, to produce a sturdy, vigorous growth.

**CAMELLIAS.**—The plants that have finished flowering to be removed to a higher temperature, where a moist atmosphere is kept up by frequent syringings.

**CINERARIAS.**—Tie out the principal shoots of the most forward, to form handsome plants. Manure water of the temperature of the house to be given occasionally. The more backward to be shifted into larger pots as they may require them, and all to receive plenty of air, light, and room.

**FUCHSIAS.**—They require to be accommodated with a warm, moist temperature, both at top and bottom, and the free use of the syringe, to make them large pyramidal specimens.

**PELARGONIUMS.**—Attention to be paid to their training, to watering, and to the admission of air. Shift on young plants, and stop all that may be wanted for late blooming.

### STOVE AND ORCHID-HOUSE.

Finish the shifting of all specimen plants in the stove as soon as possible. A brisk, growing, moist temperature to be kept up during the day, and to shut up early. They delight in a tan-bed where the bottom heat ranges from 70° to 80°.

**ORCHIDS** will now require a regular looking over. Those on blocks of wood with moss should have the moss renewed, and fresh turf to be supplied to those in pots in a growing state.

## FORCING-HOUSES.

The general routine in these structures will comprise disbudding, tying-in advancing shoots, thinning the fruit, watering, syringing morning and evening, airing, and shutting up early with plenty of solar heat; and to be each and all attended to in good time to obtain satisfactory results.

CHERRIES.—Caution in the application of water is now necessary, as either too much or too little will cause the fruit to drop.

CUCUMBERS.—The heat of the beds, which will be found to decline rapidly during cold winds, should be kept up by fresh linings; and air to be given daily, to allow the superfluous moisture to escape, taking care to prevent the wind from entering the frames by placing a mat or canvass before the openings.

FIGS.—A free supply of water, with liquid manure occasionally, to be given to the most forward crop. Where there is the convenience, the trees in pots are generally placed in a pit of rotten leaves into which they root, and where they are allowed to remain until they have borne their crops and ripened their wood, when the roots are cut back to the pot. Trees planted out succeed best when confined in brick pits, where short-jointed fruitful wood is produced without root pruning, which is necessary when the roots are allowed to ramble without control.

MELONS.—This is a good time to ridge-out plants, as the sun will have a powerful and beneficial influence at the time when it will be most wanted to ripen off the fruit. Pot off young plants, and sow seed for a succession.

PINES.—Continue to keep up a regular and moist heat; to be supplied with soot or other manure water occasionally during the whole time they are swelling the fruit until they attain their full size; watering and syringing overhead should be withheld when they begin to change colour, to give flavour to the fruit. The succession-plants recently potted to be very moderately supplied with manure water, and in a very diluted state until their roots reach the sides of the pots.

STRAWBERRIES.—Introduce succession-plants under glass, according to the demand. Keep the atmosphere dry when the plants are in bloom and near the glass; admitting at all opportunities a good supply of fresh air without currents.

VINES.—Persevere in thinning the bunches, as it is a mistake to leave more on the Vine than it is likely to finish off to perfection. The borders to be examined that a gentle warmth may be maintained at the roots. When the Vines are planted inside, apply good soakings of manure water occasionally. Thin the shoots of the late Vines as soon as the bunches are perceptible.

## THIRD WEEK.

### GREENHOUSE AND CONSERVATORY.

Proceed as diligently as possible with the repotting of such of the hardwooded greenhouse plants as require it, so as to start them in good time to acquire a vigorous growth.

CACTI.—The chief point in managing these plants is to allow them an alternate period of rest and growth. To be grown in a mixture of lime rubbish and loam, with a little cowdung, and in well-drained pots. In summer to be fully exposed to the sun, and well watered; and from October to March to be kept perfectly dry.

CALCEOLARIAS (Herbaceous).—To be shifted into larger pots in a compost of equal quantities of decayed turf, leaf mould, good sandy peat, old cowdung, and silver sand, with plenty of drainage and moss on the crocks. To be kept close for a week, after which air may be freely given, avoiding currents of cold air.

HEATHS.—Every vigorous shoot that is taking the lead to be stopped, to produce a more uniform and compact plant.

LILIUM LANCIFOLIUM.—To be potted either in a good peat, with a little silver sand, or in a light sandy loam, using also some silver sand. The bulb to be placed two or three inches deep from the top of the pot to allow room for the stem-fibres to penetrate the soil.

PELARGONIUMS.—The plants potted last month to be stopped back. The house to be kept rather close for a week or ten days, to assist them to push out their eyes. Those intended to bloom in May, that have not been stopped since cutting down, will be putting up their trusses, on sunny days syringe them lightly, and shut the house up warm, with the sun upon it, about three or four o'clock in the afternoon.

### STOVE AND ORCHID-HOUSE.

Keep a lively growing temperature here during the day, with a plentiful supply of moisture.

Syringe, and shut up early, with 80° or more, allowing a fall of 20° during the night. Shake out and repot in succession the stove plants that have been previously recommended to be headed back, and encourage a free growth by plunging them, if possible, in bottom heat. Smaller pots to be used until they have filled them with roots, they may then receive one bold shift that might probably be sufficient for the season.

#### FORCING-HOUSES.

CHERRIES.—These may now want thinning if too thickly set; but the operation must be influenced by the energies of the tree and the action of the roots. Endeavour to keep the atmosphere like fine mild weather in May. During the period of the stoning of the fruit, give the trees no water at the roots, as this is generally one of the chief causes of so much of it falling off at that time.

FIGS.—When the fruit is swelling off, the trees to be liberally supplied with water. The young shoots to be stopped to four or five eyes, with the exception of those that are required to fill up vacancies.

MELONS.—Continue the thinning, stopping, training, &c., as required. Set the early crops when in blossom, keeping a dry and lively atmosphere during that period. Air to be given freely in favourable weather, but cautiously, with some contrivance to break cold winds. Do not allow a plant to swell a fruit until sufficiently strong to sustain it.

PEACHES.—Be moderate in the application of fire heat to those that are stoning (they make little or no progress in swelling during the period)—say 65° by day and 60° by night; but when they commence their second swell increase the heat moderately. Stop all luxuriant shoots, and thin out in the second house all clusters of fruit when about the size of Peas.

PINES.—The fruiting plants will be benefited by a watering with manure water as soon as the bloom is set. Succession plants, if recently shifted, to be shaded in the middle of the day if the sun is powerful; to be kept rather close and dry, except slight sprinklings over the tops, until they have taken root, when they may be watered freely, and will generally require no more to be given for a week or ten days.

VINES.—The atmosphere in the early house, where the bunches have been thinned, to be kept pure by a gradual increase of air and moisture. The night temperature to be kept up to 65°, with an increase of 10° by day, and even more in bright sunshine. The second house may now be in bloom, and will require attention in tying the shoots and keeping up the necessary amount of heat, with less moisture. Where the fruit is set, give the Vines a good syringing, to wash off the flowers; after which the leaves and fruit should not be again wetted, but to be supplied with atmospheric moisture by watering the floor of the house, and sprinkling the flues or pipes, or from evaporating-troughs or pans. Give plenty of tepid manure water to the Vines fruiting in pots.

#### FOURTH WEEK.

##### GREENHOUSE AND CONSERVATORY.

As the great proportion of greenhouse plants are now commencing, or are in active growth, constant attention will be required for the judicious regulation of temperature, and for the admission of fresh air during fickle and ungenial weather, and in the supply of water to the roots, and atmospheric moisture.

When settled fine spring weather has arrived, every plant which inhabits a pot should be brought at once under review, and put in proper condition for the growing season. No fear need then be apprehended from potting. Keep up a moist atmosphere by sprinkling, &c., and admit plenty of air, bearing in mind former directions as to draughts, &c. If the plants in the borders, or any of the climbers, are dry, give them a good soaking of weak, tepid manure water. Trellis climbers to be frequently attended to—stopping, training, and arranging their shoots.

BALSAMS.—Encourage the growth of them and other such tender annuals by potting them when the roots begin to cluster round the side of the pot.

CALCEOLARIAS (Herbaceous).—Shift on the young stock, keeping the plants well down in the pots, so as to bring the earth in the pots up to the lowermost leaves, to induce the plants to throw out fresh rootlets from the stem. Keep a sharp look out for green fly.

CLIMBERS.—Prune off superfluous shoots; stop or pinch out the tops of gross leaders, and keep them neatly tied and trained.

COCKSCOMBS.—To remain in small pots until they begin to show flower.

DAHLIAS.—Pot off cuttings as soon as struck.

FUCHSIAS.—Continue to shift young plants into larger-sized pots, according to their height and strength; to be kept growing by placing them in a brisk, moist heat. Cuttings to be potted off as soon as they are sufficiently rooted; to be placed in a temperature similar to that in which they were struck.

Sow in heat seeds of stove and greenhouse plants.

#### STOVE AND ORCHID-HOUSE.

Attend to regular shifting, watering, and a free and healthy circulation of air, without draught, early in the morning to stove plants. Continue to cut down, disroot, and repot, as advised last week, those which have been flowering through the winter. To be then favoured with a bottom heat of from 75° to 80°, and slightly shaded during bright sunshine.

Some of the young plants in the stove which are growing on for specimens will probably require a second shift, see to them in time; and if they are in good health treat them liberally by giving a large shift, especially to plants of free growth. Give plenty of air at all favourable opportunities, and saturate the atmosphere with moisture. The surface of the tan to be stirred once or twice a-week, and sprinkle it occasionally with manure water, to produce a moist, congenial atmosphere about the plants. Shut up with plenty of sun heat. Look sharply after mealy-bug and thrips.

ACHIMENES.—The plants established in small pots may be removed into the flowering-pans, putting six plants into a pan.

ORCHIDS.—Increase the temperature, and ply the syringe among them, as they will now grow rapidly. Be careful not to throw too much water over those sending out succulent flower-stalks, for they may damp off. Ferret out and destroy cockroaches, woodlice, and snails. *Calanthe veratifolia*, *Neottia picta*, *N. elata*, Phaius of sorts, some varieties of Stanhopea, *Zygopetalum Mackayii*, and other such Orchids that are now making their growth, would be benefited by an application of clear, diluted manure water occasionally; a kindly humidity to be kept up, and the shading to be in readiness for use during bright mid-day sun.

#### PITS AND FRAMES.

Sow tender and half-hardy annuals; pot off those already up; give air daily, and never allow the plants to flag for want of water. Pot off cuttings of Dahlias, and continue the propagation of Fuchsias, Heliotropes, Petunias, Verbenas, and bedding-plants generally.

#### FORCING-HOUSES.

BEANS (French).—Give them, when in a bearing state, a liberal supply of manure water, and see to keeping up a succession of them.

CHERRIES.—When you are sure that the fruit is finally stoned, the temperature may be raised a few degrees; air and water overhead to be liberally supplied.

CUCUMBERS.—As soon as the frames are uncovered in the morning give a little air for an hour, to let the stagnant and foul air pass off, when they may be closed again till the day is further advanced. As soon as the principal shoots have reached the side of the frame, never allow any of the laterals to grow more than two joints before being stopped. Stop frequently, and thin liberally; where two fruit show at a joint pinch one away.

FIGS.—If red spider should be observed, wash the flues or the walls exposed to the sun with lime and sulphur.

MELONS.—Those lately planted out to be encouraged with a close, moist heat, to get them into free growth as quickly as possible. The plants that are fairly established to be kept cooler, admitting air at every favourable opportunity, to produce short-jointed fruitful wood. The shoots to be kept thin and regular, pinching out any that are not wanted. The night temperature not to exceed 65°, and air to be admitted as soon as the thermometer rises to 75°; but to be given very cautiously during cold winds. Prepare for raising plenty of young plants for succession crops, and endeavour to have them strong and vigorous by keeping them near the glass; to be provided, when they require it, with plenty of pot-room. Keep up the heat in the beds by renewing the linings; the coverings at night to be regulated in accordance with the heat of the beds, taking care that the mats do not hang over either the front or back of the frames.

MUSHROOMS.—Collect materials for fresh beds, and give those that have been some time in bearing good soakings of manure water; sprinkle the floor and heating apparatus occasionally. The conditions of success are to have the materials for making the beds well prepared and sweet—that is, free from rank steam, and the spawn to be put in whilst the heat keeps regular and moderate, and the beds are coated over to keep it so until the spawn is well established.

PEACHES.—Remove all superfluous shoots, and tie in neatly those that are left; thin the fruit that

is swelling off before stoning, leaving more than may be ultimately required, as, in stoning, it is liable to drop off. Syringe the trees daily in fine weather. Where it is intended to force Peaches, Cherries, &c., in pots next season, and some suitable trees have to be provided, it should be no longer postponed. It is a good plan to pot some maiden plants every year, to succeed any that may become useless.

**PINES.**—Give plants swelling their fruit plenty of manure water, and a humid atmosphere. The fruiting-house may range from 80° to 85° during the day, and as near 70° as possible at night; the succession-pits from 75° to 80° during day, and 60° to 65° at night. These particulars to be modified by the state of the weather, whether sunny or dull.

**STRAWBERRIES.**—They require plenty of light and air to set their fruit, when they may be removed without fear of injury to a stove, or any other house or pit possessing a higher temperature. The plants swelling their fruit require a liberal supply of water, and a sprinkling overhead daily. When the fruit begins to change colour the sprinkling to be dispensed with, and the supply of water at the roots to be given sparingly.

**VINES.**—If the Grapes are colouring, a free circulation of air, accompanied with a high temperature, will be advantageous. Attention to be given, where fermenting materials have been used for warming the borders, that the heat is not allowed to decline at present under the influence of the March winds. Attend to last week's advice as to tying, disbudding, &c., and proceed with the thinning the fruit in the succession-house as soon as the berries are fairly set. When thinning be as careful as possible of the bunches—neither pull them about with the hand, by which rust on the berries is frequently produced, nor with whatever the shoulders may be held up by at the time of thinning, as, by the twisting of the stalks, shanking is not unfrequently produced. Attention to be given in stopping all laterals, and breaking off all useless shoots for the more free admission of light, which is most beneficial in every stage of their growth. Look over houses where the fruit is swelling, and see if any of the bunches would be improved by tying up the shoulders. Any healthy Vines, but not of good kinds, should be inarched before the wood gets too old.

## **APRIL.**

### **FIRST WEEK.**

#### **GREENHOUSE AND CONSERVATORY.**

The shifting and repotting of all specimen plants in these houses have been completed, I hope, before this time; but if not, the sooner they are done the better. Keep up a moist atmosphere, sprinkling the plants with tepid water twice or thrice a week; and pay attention to the destruction of insects the moment you can perceive them.

**CAMELLIAS.**—As the plants go out of bloom, it is advisable to syringe them freely, shutting up early with solar heat, and maintaining a kindly humidity during the time they are making their growth.

**FUCHSIAS.**—Supply them liberally with water when in full growth, and shade slightly during bright sunshine.

**HEATHS.**—To be kept free from strong currents of dry air; rambling growth to be stopped.

**LILIUMS.**—Give them a liberal supply of water, and a top dressing of turfy peat, sand, and well-decomposed cowdung.

**NEW HOLLAND PLANTS.**—Give such plants as young Boronias, Dillwynias, Dracophyllums, Eriostemons, Leschenaultias, Pimeleas, Polygalas, &c., a tolerably-close corner of the house; stop the young growth as it may require it; keep them clean, and repot them when necessary.

**PELARGONIUMS.**—Tie and stake the larger plants neatly, without loss of time, and shift the smaller ones into larger pots. The roots will feed greedily on oyster-shells, broken very fine at the bottom of the pot. Put in cuttings for flowering in September and October.

#### **STOVE AND ORCHID-HOUSE.**

Keep up a sweet, moist atmosphere with a regular circulation of air, using an abundance of water about the floors; and syringe frequently air plants and others suspended. Shut up a solar heat, if possible, of 80° towards three or four o'clock.

ACHIMENES.—Shift them, and also *Gesneras*, and pot others for succession.

BEGONIAS.—When the flowers begin to decline, the plants may be reduced, and potted into smaller pots, and be kept close for some time afterwards. Put in cuttings of them, if not attended to before; and also cuttings of *Eranthemums*, *Euphorbias*, *Gesneras*, *Justicias*, *Linums*, &c.

CLERODENDRONS.—Give them plenty of room and encouragement to grow.

ORCHIDS.—They should have a mild, but regularly moist, atmosphere for a few weeks until they begin to grow; no water to be applied until that period, and then with moderation.

#### FORCING-PIT.

Get in Balsams, Cockscombs, Globe Amaranthuses, and other such plants from the dung-frame, that will be useful for the summer and autumn decoration of the greenhouse and conservatory.

#### FORCING-HOUSE.

CHERRIES.—If all the petals have dropped, and the fruit is set, the temperature may be raised to 60° by day and 50° by night, and syringed in the evening three or four times during the week. A sharp look out should be kept for curled leaves, and the grubs that nestle in them destroyed.

FIGS.—If the fruit is swelling off, supply the trees liberally with water; stop the young shoots at the fourth or fifth eye. Temperature, 65° by day and 55° by night.

MELONS.—The supply of air and water must be regulated by the state of the weather and the temperature of the bed. The plants sometimes show one or two fruit at an early period of their growth, which should be picked off, as they would prevent the swelling off of others. The vines, or shoots, after being frequently stopped, and when they have nearly filled the frame, or other allotted space, several fruit should be impregnated at one time. Sow for successional crop.

PEACHES and NECTARINES.—Pinch off laterals, and tie in the shoots as they advance in growth. If green fly makes its appearance, fumigate the house; but if only a few shoots are infested, dip them in tobacco water. When the fruit in the early house are stoned, thin them to the number you wish to retain, and use a pair of scissors, which is better than pulling them off.

PINE APPLES.—The plants should now be making rapid growth, and, therefore, will require a liberal supply of water. Fruiting plants may now be turned out of their pots into prepared beds, selecting those that are not very forward. The fruiting-house may range from 80° to 85° during day, and from 65° to 70° at night. The successions from 75° to 80° by day, and from 65° to 70° at night.

STRAWBERRIES.—When out of bloom, give them a liberal supply of water, syringe freely, and keep down insects by fumigation.

VINES.—If forcing were begun early in December, whether with Vines in pots or established vines, the colouring process will have now commenced. When such is the case, admit air freely on all favourable opportunities; but avoid draughts, or cutting winds, which frequently cause rust and other imperfections in the bunches. In the later houses, attend to thinning, tying, and stopping laterals. The last house to be closed early in the afternoon. As the buds, in most cases, will be considerably advanced, it is advisable to syringe frequently; to apply plenty of moisture to the floors and paths; and to postpone the application of fire-heat as long as possible.

### SECOND WEEK.

#### GREENHOUSE AND CONSERVATORY.

Some of the most hardy and woody plants may be removed from the greenhouse to a cold pit, where they can be protected from frost. It will make more room for the *Cinerarias*, *Pelargoniums*, and other such plants.

AZALEAS.—Such as have done blooming to be repotted, and their fresh growth to be gently promoted in a higher temperature for a short time.

CAMELLIAS.—Continue to keep a moist atmosphere about the plants making wood, with a temperature of about 65° by day and 55° by night. Air to be given at all opportunities, to produce sturdy, short-jointed wood. The plants in flower to be shaded during bright sunshine.

CINERARIAS.—Regular attention to be given to them, that they may not suffer by want of water.

CLIMBERS.—Regulate them as they grow, more particularly those in pots which are intended to cover a wire trellis. *Kennedias*, *Thunbergias*, *Nierembergias*, *Tropæolums*, and other such plants of a slender and tender habit, delight in a soil the greater proportion being composed of



leaf mould.

CHRYSANTHEMUMS.—Strike cuttings, and pot off rooted suckers.

HEATHS.—Any requiring repotting, should receive that attention without delay, apportioning the size of the pot to the vigour of their growth; as the free-growing kinds will require more room than the less vigorous ones.

NEW HOLLAND PLANTS.—As many of them are now either in flower, or approaching that state, they will, consequently, require a larger quantity of water,—more especially large specimens not shifted since last season. Continue to pinch off the tops of the leading shoots, to produce bushy plants.

PELARGONIUMS.—Attention to be given in tying up, watering, and fumigating, if the green fly appears.

### STOVE AND ORCHID-HOUSE.

As the soft-wooded stove plants will now be making rapid growth, the free admission of light is necessary to prevent them from drawing; using shade only during scorching sunshine. When a plant is shifted, give less water to the roots; as the fresh soil, after the first watering will be moist enough for some time. Some of the free-growing kinds of Cattleyas, Calanthes, Phaiuses, Saccolabiums, Stanhopeas, and Zygopetalums, should be encouraged to make kindly growth by frequent syringings about their pots, blocks, or baskets.

### FORCING-HOUSES.

CHERRIES.—The principal objects to be attended to are—abundance of air, with due precaution against cold draughts, a moist atmosphere, and the free application of the syringe. The temperature the same as last week. Particular attention in watering to be paid to the trees in pots,—as too much is as bad as, if not worse than, too little.

FIGS.—Continue stopping the young shoots at the fourth or fifth eye. Keep the syringe in frequent use until the fruits begin to change for ripening. Plenty of water, and occasionally a little weak tepid liquid manure, to be given at the roots, more especially when they are confined in pots or tubs.

MELONS.—As soon as a sufficient number of fruit blossoms for a crop are expanded, or are likely to expand within a day or two of each other, they should be impregnated. As prevention is better than cure, keep the plants in a healthy-growing state by frequent syringings in fine weather, and closing early; insects will but rarely, if ever, attack thriving plants.

PEACHES and NECTARINES.—As soon as the stoning of the fruit in the early house is completed, give them a good watering with clear, weak liquid manure; keep the shoots tied in regularly, and pinch off all laterals. If the fruits in the late house are set, partially thin them; as more dependence may now be placed on a crop than at an earlier period of the season.

PINE APPLES.—Fruiting plants will be greatly benefited by strong solar heat, as, under its influence, evaporation will be rapid; therefore, water must be applied to both roots and leaves. Succession plants to be shaded during sudden bright sunshine or sunbursts; and be guided in the application of water by the active or inactive state of the roots.

VINES.—Thinning the fruit is an operation of primary importance. The first thinning to be performed when the berries are the size of Peas; the second when they begin to be crowded; and the third after the berries are stoned. A piece of strong wire, eight or ten inches long, crooked at one end, is useful to draw the bunches backward and forward, as the operator may require. The Vines in the late house to be tied up as soon as they begin to break. Syringe them every fine afternoon, and close the house early. Give air early in the morning, that the leaves may become gradually dry before the sun acts powerfully upon them.

## THIRD WEEK.

### GREENHOUSE AND CONSERVATORY.

Keep the conservatory as cool by day as is consistent with the health of the plants. By such means they will remain longer in bloom, and will be more enjoyable for parties inspecting them.

CAMELLIAS.—Continue to encourage the growth of those that have done flowering by increasing the temperature, by frequent syringings, and by a liberal supply of water at the roots. If any have made their growth, and have formed their blossom-buds, they will require more light and less moisture for the future.

CINERARIAS.—To continue them in a healthy blooming state it is necessary to attend to them

carefully, that they may not droop for want of water, nor be saturated with it. When the sun is powerful, slight shading is necessary for a few hours in the middle of the day, to prevent the blooms from losing their brilliancy; and plenty of air to be given when the weather is mild.

FUCHSIAS.—Having been treated with plenty of heat and moisture, they will now be making rapid growth, and will be fit to shift into their blooming-pots, using a light, rich soil for the purpose.

NEW HOLLAND PLANTS.—Top and syringe frequently all such plants as are growing freely. Stake and tie them as they may require.

PELARGONIUMS.—Continue to stake and tie the shoots that require it in due time. Some clear liquid manure (cowdung water, for instance) may be given to plants that are well established with roots and showing their trusses of bloom; and sufficient space to be given for each plant to develop its natural beauty. We would advise shading only when there is a fear of scorching from the usual sudden sunbursts of April weather. Ply the syringe every fine evening to refresh the plants, and to keep down insects, until the flowers expand, when syringing should be discontinued.

#### STOVE AND ORCHID-HOUSE.

The stove plants recently potted will now be making fresh growth. Allow no diminution of bottom heat, and keep up a warm, moist atmosphere. Give air when the thermometer indicates 90°. Continue to shift Gesneras, Clerodendrons, and other such free-growing plants, as they require it. The Brassias, Cattleyas, some of the Dendrobiums, Gongoras, Peristerias, Phaiuses, Sobralias, Zygopetalums, and other such Orchids, will now be growing freely, and will therefore require a considerable amount of atmospheric moisture. If the roof is covered with climbers, a little management in trimming them will obviate the necessity of outside shading, and will give an additional feature of interest to the house. The plants on blocks, or suspended in baskets, will require very frequent syringings to keep them in a healthy-growing state. Plants in bloom may be removed to the conservatory, or any other house with a drier atmosphere, to prolong their period of blooming.

#### FORCING-HOUSE.

CHERRIES.—When they begin to change they will require free exposure to light, and abundance of air, to bring out their colour; and, at the same time, a diminution in the supply of water. Carefully examine all curled leaves, and destroy the grubs they contain. If the trees are very luxuriant, and are making strong foreright shoots, stop them to within a few buds of the main branch.

FIGS.—Give the trees in pots some clear liquid manure when they are swelling off. Stop the shoots at about six or eight inches, and thin out any useless shoots. Syringe and water freely.

MELONS.—Keep the vines thin, and stop regularly. Shade only in very hot weather. Water sparingly overhead. Plant out succession crops.

PEACHES and NECTARINES.—When the fruit in the early house has gone through the critical process of stoning, the final thinning should take place; the borders—if inside, or out, or both—should be copiously supplied with water; using liquid manure whenever a weak habit, from poor soil or over-exhaustion, shows it to be necessary. Syringings to be given twice a-day—early in the morning and at shutting-up time. The night temperature to be no more than 50°; but during the day it may range to 85°, if accompanied with air in liberal quantities.

PINE APPLES.—Lessen the moisture amongst the fruiting plants when they approach maturity. Shift and grow on the young stock in a moist atmosphere; admit air freely in fine weather; prepare beds, and turn out the plants, if preferred.

STRAWBERRIES.—They should be kept near the glass: temperature, 65° to 70° by day, and 55° to 60° by night; succession crops rather cooler. Reduce the water to those ripening. Support the stems, and thin the fruit where superior produce is wanted. Keep them clear of runners and decayed leaves, and give an abundance of air.

VINES.—Continue to thin the Grapes in the early houses: a few berries may require to be taken out of some of the bunches up to the time of their changing colour. Keep up a high temperature—about 75° by day and 60° by night: in later houses, where the bunches are in course of formation, it is a great object to bring them out well. In later houses, where the bunches are formed, or in bloom, let the heat be moderately increased, and admit an abundance of air at all favourable opportunities. Shift pot Vines often, and keep them near the light.

### FOURTH WEEK.

#### GREENHOUSE AND CONSERVATORY.

The plants that are introduced to the conservatory from the stove, forcing-pit, or any other such structures, merely for the blooming season, will require particular care to be taken in the application of water that they may not become sodden and diseased. Continue to stop, prune, or pinch back all rambling and luxuriant shoots in due time. Stir the surface of the bed in the conservatory, and apply fresh soil, to maintain the plants in good health.

**AZALEAS, CHINESE.**—Supply them liberally with water at their roots during their blooming season, and prevent damp and drip from injuring the bloom.

**CALCEOLARIAS.**—The herbaceous sorts that have been pushed along in a gentle heat will now be showing bloom, and will require to be grown in a cool, airy place, to prevent the flower-stems from being too much drawn. Keep down green fly. Shift on young stock, keeping the plants well down in the pots as they throw out fresh rootlets from the stem. Cuttings taken off now will root readily in a gentle bottom heat.

**CAMELLIAS.**—Apply shading the moment it is necessary, to protect the young leaves.

**FUCHSIAS.**—Grow them steadily on in a moist, warm temperature. Use the syringe freely. Stop any that have a tendency to be long-jointed, to produce uniform and bushy plants.

**HEATHS.**—Admit air liberally to them, and such other hard-wooded plants that are now in bloom, or approaching that state.

**PELARGONIUMS.**—Shift on young plants. Any that are wanted for late blooming should now be stopped.

**RHODODENDRONS, HYBRID INDIAN.**—Treat as advised for *Azaleas*.

#### STOVE AND ORCHID-HOUSE.

Continue a kindly moistness amongst the Orchids, and slightly increase the temperature. Shade with tiffany, or close-meshed netting, in bright sunny weather; removing it early in the afternoon. Water liberally all that are making free growth. Repot any that may require it as soon as they have fairly commenced their growth. Continue to give liberal shifts to the free-growing young stock of stove plants, slightly shading for a few hours in hot weather, shutting up early in the afternoon, and producing a kindly humid atmosphere by damping the walls, floors, pots, &c.

**BEGONIAS.**—Repot and propagate. This is one of the most useful tribe of plants that can be grown, both for the stove and the adornment of the conservatory.

**CLERODENDRONS.**—Encourage by a moist heat.

**CLIMBERS.**—Keep them neatly tied up, and give them liberal supplies of water, if in pots.

**GARDENIAS.**—They delight in a close atmosphere; a pit with dung linings is most congenial to them.

**GESNERA ZEBRINA.**—Pot bulbs for late flowering.

#### FORCING-HOUSES.

**CHERRIES.**—Thin out the fruit where in large clusters; admit plenty of air at favourable opportunities, and never allow the trees in tubs, or pots, to become dry.

**FIGS.**—The same as last week.

**PEACHES and NECTARINES.**—Keep the leading shoots regularly tied in, and pinch out the points of some of the stronger ones.

**PINE APPLES.**—It is advisable to keep all that are starting, or have already started, into fruit, at one end of the house, or pit, that more air may be admitted to them than to the others more advanced, to produce a more robust growth, and to avoid the necessity of using stakes to support the fruit. Air to be admitted freely to the succession plants at every favourable opportunity.

**STRAWBERRIES (in pots).**—Where fruit are colouring, keep a rather dry atmosphere, with a liberal supply of air, in order to secure flavour. When the plants are in bloom, keep them near the glass, and the atmosphere dry, with a good supply of fresh air; but avoid currents of frosty air. Introduce succession plants under glass according to the demand. Do not expose those from which fruit has been picked to the open air till well hardened off. Give them the protection of a cold pit for a time, as they are invaluable in open-air plantations.

**VINES.**—Where the fruit is on the change to colouring admit air on every favourable opportunity, not forgetting to give it in the morning before the sun shines on the house, to prevent the condensed vapour, which would affect them injuriously, from settling on the bunches. Attend to stopping the laterals, thinning the young shoots, tying in leaders, &c., in the later houses.

Remove the top dressing from the outside border, to allow the increasing power of the sun to act beneficially upon it.

## MAY.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

Attend in due time to all plants that require potting into larger pots; and pinch off the tops of all that are of a rambling or loose habit of growth, to make them compact and bushy.

AZALEAS.—As soon as they are out of bloom, take them into heat to make their growth, syringing them frequently and supplying them occasionally with manure water, and shade for a short time in the middle of the day when the sun is powerful.

CALCEOLARIAS.—Give them weak liquid manure occasionally, and shade those in bloom.

CINERARIAS.—When done flowering, cut the stems down, to favour the development of suckers, and remove them to a cold pit or frame.

CLIMBERS.—Keep all neatly trained.

HEATHS and NEW HOLLAND PLANTS.—The late-flowering sorts, or such as have already flowered, and the young stock intended for another season, may be removed to cold pits or frames. Such plants as require it must be shifted, stopped, and shaded; particular attention being paid that they do not get dry at the root.

PELARGONIUMS.—Shade such as are in flower; and shift and stop such as are wanted to flower late.

#### STOVE AND ORCHID-HOUSE.

Keep up a kind humidity and a gradual increase of temperature in correspondence with the increase of solar light, and shut up early in the afternoon with sun heat. Continue to propagate the choice stove plants, and keep all free from insects.

ACHIMENES.—Pot off.

BEGONIAS.—Continue to repot as they go out of bloom, pruning in any straggling shoots, and propagate as advised last week. Keep them close, and syringe frequently, when they will soon commence growing. Keep them some distance apart, to allow their fine foliage to expand. The following are good sorts:—Prestoniensis, Cinnabarina, Fuchsioides, Martiana, Zebrina, Barkeri, Rubra, and Argyrostigma.

GLOXINIAS.—Repot where necessary.

SUCCULENTS.—Opuntias, Melocacti, and Epiphyllum, to be excited into vigorous growth by intense light and abundance of heat and moisture.

#### FORCING-HOUSE.

CHERRIES.—Temperature 65° to 70° by day and 50° at night, and give plenty of air; but guard against wet and cold.

FIGS.—Stop and thin the shoots. Keep a damp atmosphere, and use the syringe over the foliage, when the house, or pit, is shut up in the afternoon, to keep down red spider. When the fruit is ripening, the syringe must be dispensed with, and the atmosphere kept drier; but, as there is generally a succession of fruit on the trees, water must not be wholly withheld at the time of the first crop ripening, as it would endanger the succeeding one; but it may be given more sparingly.

MELONS.—Stop and keep the shoots very thin. When the crop is safely set, give the soil a good soaking of clear, tepid manure water. Let swelling fruit be exposed as much as possible to the light.

PEACHES.—Continue to stop all gross shoots, which will both increase the size of the fruit and the smaller shoots at the bottom of the tree. The syringe, when used frequently, is useful for the

same purpose, and to keep down insects. Air and light to be admitted, to give flavour and colouring to the ripening fruit.

PINES.—The fruiting plants now swelling, and in pots, may be treated with a little clear liquid manure. Guano water, or soot water, or both combined, will produce a perceptible improvement in foliage and growth, with the caution that it be given in a warm, clear state, and not too strong. Ply the syringe freely on warm afternoons, and close up with a temperature of 85° or 90°; giving air again towards evening. When indications of ripening by changing colour appear, desist from the use of the syringe, and give them no further supplies at the root.

STRAWBERRIES.—When ripening their fruit they may be placed in a frame where a free admission of air can be given.

VINES.—Encourage the young stock intended for growing in pots next year, to make healthy, luxuriant growth, by giving them plenty of pot room and manure water, to set them in a light situation in some of the forcing-houses, and to pay early attention to the leaders as they advance in growth. Where Muscats are growing with Hamburgs and other such free-setting varieties, it is advisable to keep up a brisk day-temperature for the Muscats during their season of blooming, and until their berries are fairly set, with a reduction to a night-temperature of 65° or 68°, to suit the other varieties.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

A free ventilation is of importance, and by closing with a humid atmosphere early in the evening a vigorous growth will be promoted. Liberal shifts to be given to such plants as may now require them, before their roots become matted. Remove all plants intended for bedding out, and let them remain for a short time under the protection of a cold frame, or in beds hooped over, and covered at night with mats, or other such protecting materials. This gradually-hardening-off will better enable them to withstand unfavourable weather, if it should occur after they are planted out.

AZALEAS.—All irregularities of growth should be corrected by pruning. We have lately seen the beneficial effects of close pruning on such plants; they had been cut in severely last season by removing strong, straggling branches of old wood, to give some a spherical and others a pyramidal form. When pruned, the ball was reduced, the plant fresh potted in a smaller-sized pot, and the peat soil rammed as hard as it was possible to make it; then watered, and introduced to heat. The plants treated in that manner are now covered with bloom, and in a high state of vigour.

HEATHS.—Keep the tops pinched off, to form bushy plants.

NEW HOLLAND PLANTS.—Some of them of weak growth, and which naturally make long, straggling shoots, are much improved by bending down the branches, and fixing them to a wire hoop, or string attached to the rim of the pot. By such means the nakedness of the plant at its base is hidden, and the check imposed on the ascent of the sap will induce an increased supply of shoots. Pick off the seed-pods as the plants go out of bloom. Cut back and arrange the shoots in the best manner, to produce compact growth.

PELARGONIUMS.—All that are showing bloom, unless of very gross habit, will receive benefit from a supply of a little weak manure water. For that purpose put cow, horse, or sheepdung into a tub, and to one peck add five gallons of rain or other soft water. When taking it for use draw it off clear, and give the plants a watering twice a week. Give air freely, shut up early, and syringe the plants overhead till the flowers expand, when syringing should be discontinued. As the petals are apt to drop very soon in hot weather, it is recommended to touch the centre of the flower with a camel-hair pencil, or small feather, dipped in gum water, which will stick the petals together and prolong the blooming. Such is the general practice at our metropolitan exhibitions.

### STOVE AND ORCHID-HOUSE.

As the stove plants grow, allow them more space, especially such plants as are prized for the beauty of their foliage. Give frequent attention to stopping and training. Look to the climbers frequently, to regulate their growth and to prevent entanglement, and a world of trouble and confusion. Put in cuttings of such plants as Brugmansias, Clerodendrons, Eranthemums, Erythras, Poinsettias, and those winter-flowering plants *Euphorbia jaquiniflora* and the *Gesnera bulbosa*. Where there is only one house in which to grow Orchids, a compromise as to temperature must be made to suit the natives of the hot and moist valleys or shady woods of the East, and those which inhabit high and airy regions in the Western hemisphere. To accomplish this it is advisable to allow a free circulation of air during the early part of the day, with an abundance of atmospheric moisture, and to shut up early in the afternoon with a high degree of temperature.

ACHIMENES.—They delight in a moist heat, and a partially-shaded situation. More air to be given as they advance in growth. The shoots to be staked out neatly.

GESNERAS to be treated similarly, with the addition of more light.

GLOXINIAS.—The same as *Achimenes*.

#### FORCING-HOUSES.

CHERRIES.—Give more air, and keep a drier atmosphere when the fruit is ripening. Give plenty of water to the trees swelling their fruit. Keep them free from insects, or the fruit will be of little value.

FIGS.—Air freely, to give flavour to the fruit now ripening. Avoid wetting the fruit when it begins to soften.

MELONS.—Keep up the heat of the beds by renewing or turning the linings. Slightly shade the plants when the sun is powerful, to keep the foliage in a healthy state, without which good fruit cannot be produced. When the frames are at liberty, Melons may be grown in them with a little assistance from dung heat at bottom.

PEACHES.—Give a liberal supply of air, with less water, to trees, the fruit of which are ripening.

PINES.—Continue the previous instructions in the management of the plants in the different stages of growth.

VINES.—Thin and stop the shoots, and thin the berries in good time. Attend to the late crops, and set, by hand, the blossoms of *Muscats*, *West's St. Peter's*, and other shy setters. Be sure that inside borders are properly supplied with water, giving sufficient quantities to thoroughly moisten the whole mass of soil.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

Attend carefully to the stock of plants for summer and autumn decoration, and do not allow them to suffer for want of pot room and water.

AZALEAS.—Continue to encourage all that have flowered by timely potting, syringings, and applications of weak liquid manure.

CAMELLIAS.—Introduce a gradual declension of artificial heat amongst all that have completed their growth. A curtailment in the supply of water, giving merely sufficient to keep them from flagging, will induce the production of blossom-buds.

EPACRIS.—Repot with a pretty large shift the early-flowering sorts that have freely commenced their growth. Use good fibrous heath soil, rejecting any of a spongy or greasy nature. Such plants, for some time after being newly shifted, require particular attention in watering, that the soil may not become soddened. Let the plants be placed in a cold pit, and be slightly shaded during bright sunshine. The stopping or pinching out the points of strong shoots must be regularly attended to during their growing season, to establish a uniformity of sturdy growth.

HEATHS and NEW HOLLAND PLANTS.—All that have flowered, and have made their season's growth, may be removed to cold pits, or frames, to allow those that remain, and are promising to flower, more air, sun and light.

#### STOVE AND ORCHID-HOUSE.

Keep up a liberal supply of humidity, with ventilation, at favourable opportunities. The plants here should now be growing very freely, and should, therefore, receive frequent attention as to stopping, training, &c. Keep them properly accommodated with pot room, and allow them all the sunshine they will bear without scorching; also, allow them sufficient space for the development of their foliage. Plenty of moisture is now requisite to encourage a free growth in Orchids, to get their pseudo-bulbs firm, well nourished, and ripened in good time. Free ventilation in favourable weather and a slight shading in bright sunshine are also requisites for their healthy growth.

#### FORCING-HOUSES.

CHERRIES.—When the fruit is ripening, air to be given freely, even to the drawing the lights off completely in favourable weather. Fires may be discontinued altogether, unless the nights are very cold.

FIGS.—Give them plenty of water in all their stages of growth; discontinue the use of the syringe during the ripening process. They frequently require attention in stopping all long young shoots.

MELONS.—If there is a sufficient depth of soil for the plants, they will not require any large supplies of water after the fruit is swelling off; but it will be necessary to sprinkle the plants overhead, and to shut up early every fine afternoon with a good heat. Lay the fruit on a tile or piece of slate.

PEACHES.—When the fruit is swelling off, or beginning to ripen, admit air freely in favourable weather, even to the drawing off the lights entirely, so as to admit a free circulation and the direct influence of the sun, by which flavour and colour are best attained. Continue to stop all very-luxuriant shoots, and thin out the young wood. Some persons lay in plenty of young wood to select from in winter pruning; but fruit-bearing wood, regularly disposed all over the tree, is best attained by the judicious and successive thinning of useless shoots during their growing season. Continue to tie in the shoots of the late houses.

PINERIES.—When the repotting of the plants has recently taken place it will be necessary to shade for several hours, during bright sunshine, for a few days; but for the general stock shading should be dispensed with as much as possible—as short, stiff leaves and sturdy growth are best attained by judicious airings and humidity. Do not water much at the root immediately after repotting. Maintain a brisk bottom heat to the succession plants. Admit plenty of air during favourable weather.

VINERIES.—As the fruit in the early houses become coloured, it is advisable to remove all superfluous or rambling shoots; but to retain and to preserve with the greatest care the principal leaves—as the good quality of the fruit and the healthy condition of the tree for the ensuing season will depend upon the number and healthy state of the principal leaves.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

As most plants here are now in active growth, they will require a liberal supply of water. If the sun shines very brightly, a slight shading would be of benefit for a few hours on very hot days.

AZALEAS, CHINESE.—When done blooming, they succeed best in a close pit, kept moderately moist and slightly shaded in the middle of the day. If they are too large for a pit, they will do well in a vinery, or in any other large house where they can stand at a distance from the glass without shading.

BALSAMS and COCKSCOMBS.—Promote their growth by shifting them into larger pots, in rich soil, with an abundance of light near the glass, and heat.

CAMELLIAS to be treated as advised for *Azaleas*.

GERANIUMS.—If any remain after the flower-garden masses are furnished, they should be potted and treated with every attention as to watering, &c. When they have made fresh roots, and begin to grow freely, to be stopped, to make bushy plants. *Calceolarias*, *Fuchsias*, *Petunias*, *Verbenas*, &c., treated in a similar manner, will be useful as a reserve to succeed the greenhouse plants that are now in bloom, and to fill up vacancies as they occur in the beds and borders.

HEATHS and NEW HOLLAND PLANTS.—Many being now in full growth will require an abundance of water, more especially in bright weather. Many fine specimens are frequently lost through imperfect watering; for if the ball is once allowed to get thoroughly dry, all endeavours to restore the plant to health and vigour are generally unsuccessful.

### STOVE AND ORCHID-HOUSE.

Ornamental stove plants—such as *Brugmansias*, *Centradenias*, *Clerodendrons*, *Eranthemums*, *Euphorbias*, *Geissomerias*, *Gesneras*, *Justicias*, *Poinsettias*, &c., to be supplied with clear liquid manure, and to have their rambling shoots stopped. Many of the free-growing plants will require shifting occasionally. The great object should be to get rapid growth when light abounds, and thus to secure luxuriant foliage at the right season, when there will be more time for the wood to be properly matured for winter. The syringings to be given early in the afternoon, that the plants may get dry before night.

ACHIMENES.—When grown in large seed-pans they produce a fine effect.

### FORCING-HOUSE.

CHERRIES.—Give more air, and keep a drier atmosphere when the fruit is ripening. Give plenty of

water to the trees now swelling their fruit. Syringe frequently, and keep the foliage and fruit free from insects.

CHRYSANTHEMUMS.—Pot off as soon as rooted. If not already struck, the cuttings should be put in at once.

CUCUMBERS.—Stop them, and water freely. All that are intended for ridges, if hardened off, should now be planted out. See that the ball of earth is well soaked with water before planting.

FIGS.—Give them plenty of air during the day in fine weather, with abundance of water. Use the syringe freely, except when fruit is ripening.

PEACHES.—Although a dry atmosphere is necessary to give flavour to the ripening fruit, it is not advisable to withhold water altogether from the roots while the trees are making their growth. Water the inside borders in the morning in clear weather, so that any vapour that arises may pass off during the day. The outside borders, if dry, should also be watered as far as the roots extend, and then mulched, to prevent evaporation during hot, dry weather. If the early-forced trees have naked branches, some of the earliest-made wood may be taken from the trees, and buds inserted from it in the barren parts. Buds inserted now may start into growth in July, and be stopped when about six inches long, to get the wood well ripened.

PINES.—A bottom heat from 80° to 85° must be kept up to the plants intended for fruiting in the autumn. It is advisable, where practicable, to allow the stools from which fruit has been cut to remain in the house for some time; to supply them liberally with water, and occasionally with liquid manure; to encourage the growth of the suckers.

VINES.—In the houses where Grapes are ripening, the temperature may be allowed to rise to 90°, with sun heat, and to decline to 60° at night. In the succession-houses thin the bunches, and do not be covetous to over-crop the Vines, as it is the cause of many bad effects. Stop laterals, and use the syringe freely in the afternoons.

## JUNE.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

AZALEA INDICA.—Encourage free growth, as soon as possible after they have done blooming, by placing them in heat, supplying an abundance of water, and syringing freely.

CALCEOLARIAS.—Water carefully; cut down when out of bloom, and remove them to a cold frame.

HEATHS and NEW HOLLAND PLANTS.—The young stock will now succeed best in a pit, or frame, placing the lights to the north. The glass to be well washed, and the pots to be placed on tiles, or ashes, above the ground level.

PELARGONIUMS.—Give air freely, avoid cold draughts, and shade from scorching sun. Shift and stop the succession stock for late flowering.

PETUNIAS.—Do not neglect to pot off from the store propagating pots some of those, as advised last week, as also Scarlet Geraniums, Verbenas, Heliotropes, &c., to afford a variety of sorts and colours for the conservatory.

#### STOVE AND ORCHID-HOUSE.

Let rambling shoots of ordinary stove plants have frequent stopping. The *Aërides*, *Dendrobiums*, *Phalænopses*, *Saccolabiums*, *Sarcantuses*, *Sobralias*, *Vandas*, and others of the eastern genera of Orchids, will now require most liberal and frequent waterings and syringings. *Gongoras*, *Peristerias*, *Stanhopeas*, &c., when full of roots in baskets, require a thorough soaking. Now is a good time to pot *Cymbidiums*, *Peristerias*, &c., starting into growth. *Aërides*, *Vandas*, and plants of a similar habit, do best when shifted after they have done blooming.

ACHIMENES.—Continue to shift them, as also *Begonias*, *Clerodendrons*, *Gesneras*, &c., as requisite. Remove those in bloom to the greenhouse or conservatory.

CLIMBERS.—Keep them thin and tied in, so as not to shade the rest of the plants to an injurious extent.



SUCCULENTS.—Shift *Melocacti*, &c., and keep them growing, and near the glass.

## FORCING-HOUSES.

CHERRIES.—The trees in large pots or tubs, from which the crop has been lately gathered, should have abundance of air, and an occasional supply of liquid manure. Give them, also, a good washing overhead with the syringe, or engine, dashing it on with considerable force. They will also require to have their wood matured early.

FIGS.—Continue the practice of stopping when the shoots are four or five eyes long. Give a liberal supply of water, and thin out the second crop where too thick.

MELONS.—Keep the shoots thin, and remove all useless laterals. When the fruit is swelling, the soil should be kept in a properly moist state, and the foliage in a healthy condition. The bottom heat should not be allowed to sink below 75°.

PEACHES.—Keep up a growing temperature with plenty of air and moisture, and frequently syringe the trees, to keep them clean and healthy. The ripening fruit will require plenty of air.

PINES.—Repot as they may require; for if they are allowed to remain in a pot-bound state at this season they are very apt to start prematurely into fruit. It is also particularly requisite that the balls are thoroughly moist at the time of repotting. To give strength to the growing stock, it is advisable to admit abundance of air in the morning part of the day; and in the afternoon, to encourage a high degree of heat with an abundance of atmospheric moisture. The plants growing in open beds to be supplied with a steady bottom heat of from 80° to 85°, and sufficient water to the roots.

VINES.—Proceed diligently with thinning the berries, as they swell rapidly at this season. The late houses in which the Vines are in bloom to be kept warmer and closer than they have been, until the fruit is set. Stop the shoots and laterals, and never allow a mass of useless wood to remain on them.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

The principal part of the greenhouse plants may now be removed to an out-of-door situation, open to the morning sun, and protected from high winds, and be placed on some hard bottom through which the worms cannot get into the pots. The specimen plants that remain should be turned round from time to time, that they may not get one-sided; and allow them to have plenty of room on all sides. Also, the young plants intended for specimens should have their flower-buds picked off, to encourage their growth.

BALSAMS.—Encourage them by frequent shifts, and keep them in bottom heat, and near the glass. The prematurely-formed flower-buds to be picked off, as the plants should attain a considerable size before they are allowed to bloom.

CALCEOLARIAS.—The most critical time is after the plants have flowered; if allowed to produce seed, they generally die off—Nature having completed her task. When the bloom begins to fall, cut the plants down, and repot into a larger size; place them in a cold frame *facing the east*, the lights on during the day, with air, and entirely off during the night, unless in rainy weather, as the night dews are highly beneficial. Treated thus the plants will soon produce new shoots, which must be taken off and pricked out into small pots in a very open soil, and placed in a very gentle bottom heat to strike. When rooted, to be shifted into pots of a larger size.

CINERARIAS.—The plants that have bloomed through the season to be cut down, turned out of their pots, and to have at least half the old soil removed from their roots. Prepare a piece of ground, in a sheltered situation, with leaf mould or rotten dung and sand, in which the Cinerarias are to be planted, one inch below the level of the soil, in rows fifteen inches apart and one foot apart in the row. When planted, to be well watered.

CLIMBERS.—The Passifloras, *Mandevilla suaveolens*, *Tecoma jasminoides*, and other such climbers in the conservatory, will now be growing very freely, and will therefore require frequent attention to keep them in order. The young shoots may be allowed to grow in a natural manner, merely preventing them from getting too much entangled, or growing into masses.

FUCHSIAS.—When in a healthy-growing state they require an abundance of water and frequent syringings. Train them in the desired form, and pinch back all weak and straggling shoots.

HEATHS and NEW HOLLAND PLANTS.—Examine them very carefully, and be sure that they are in a proper state as to moisture. The young plants which are not blooming will do best if placed in a pit where they can be exposed or not, as may appear necessary. To lay a proper foundation for a good specimen it is necessary to stop and to train the shoots into form.

KALOSANTHES.—Train them neatly, increase the supply of water, and give them liquid manure occasionally.

### STOVE AND ORCHID-HOUSE.

Continue to shift the young and growing stock of stove plants. To harden the wood of the early-grown plants, or autumn or winter flowering, it is advisable to remove them to some cooler place, such as the shelves of the greenhouse. The baskets, in which the Stanhopeas will now be blooming, should be carefully examined to see that the buds, as they protrude, may not be injured by contact with the side. Many stove plants and Orchids in flower, if taken to a late vinery, or such intermediate house, will thus be prepared, in a short time, for removal to the conservatory during the summer.

CLIMBERS.—When the shrubby plants are large, the climbers hanging loosely give a sort of tropical character to the house; but, either hanging, or trained in wreaths or festoons, they require pruning and regulating, to prevent them becoming entangled, and, therefore, a confused mass of wood and foliage.

### FORCING-HOUSES.

CHERRIES.—Give air night and day in fine weather.

FIGS.—When the ripest of the fruit is gathered, give the trees a good syringing overhead, to cleanse and refresh the leaves, and to keep down insects.

MELONS.—To be slightly shaded with a net, or a few pea-sticks, during bright sunshine in the middle of the day, to prevent the scorching of the leaves; for if such occurs, the fruit ripens prematurely, and is, in consequence, without flavour.

PEACHES.—When the fruit is ripening, give as much air as possible during the day, and when the nights are mild and warm leave the lights open. When the fruit in the succession-house is stoned, give a good watering to the roots, and syringe the trees frequently, as previously advised.

PINES.—Apply an abundance of moisture to the pathways of the fruiting-house during bright weather. Give plenty of air, but allow at the same time the thermometer to range from 90° to 95°. Shut up when the rays of the sun are getting partially off the house, and ply the syringe freely about the leaves and stems of the plants, and the surface of the plunging material. Air to be given an hour or two afterwards for the night.

VINES.—Keep thinning the berries and stopping the laterals as they advance, which, with syringing and giving air, is the principal work to be done.

## THIRD WEEK.

### GREENHOUSE AND CONSERVATORY.

The stock of plants out of doors to be carefully looked over in showery weather that they may not suffer from imperfect drainage. The more delicate sorts to be returned to the houses, or protected by some means during heavy rains.

CAMELLIAS.—When they are kept in-doors give an abundance of air night and day, with an occasional application of the syringe, keeping the paths and floors damp. When they have ceased growing, and have formed their flower-buds, discontinue to syringe the plants overhead, as it sometimes starts them into a fresh growth that will be the destruction of the flower-buds.

CHRYSANTHEMUMS.—Plant them out eighteen or twenty inches apart in an open piece of ground. Some to be left to grow as standards on one stem, and others to be topped, to make them bushy.

CINERARIAS.—In raising seedlings it is advisable to select each parent plant, distinguished for its dwarf habit and decided colour, and to place them by themselves in a pit or frame. The seed should be carefully gathered as it ripens. It should be sown in shallow pots, or pans, well drained with crocks; then some siftings, and over that some light soil, with some finer and more sandy on the surface, covering the seeds very lightly with the same; and slightly sprinkling, or watering, through a very fine rose, and the surface covered with a little moss, to prevent evaporation. In a few days the seedlings will be up; then remove the moss, and let them remain in the pots, or pans, until they are large enough to be handled with safety; then pot them in small pots, and keep close for a day or two.

LILIUM LANCIFOLIUM.—Give attention to them; as also to tree Carnations, *Salvia splendens*, Scarlet Geraniums, &c., for autumn and early winter flowering.

ORANGES.—The same as advised for *Camellias*.

#### STOVE AND ORCHID-HOUSE.

ACHIMENES.—Repot, as also *Begonias* and *Gesneras*, for succession of late bloom.

LUCULIA GRATISSIMA.—Propagate by cuttings.

Some of the Orchids will now require to be topped up a little with fresh soil. The *Barkeria spectabilis*, *Epidendrum Skinneri*, the *Lycastes*, *Odontoglossum grande*, &c., will now enjoy the temperature of the conservatory.

#### FORCING-HOUSE.

FIGS.—Continue to stop all shoots when five or six joints long. Never allow the trees in tubs, or pots, to want water; they now require daily attention.

MELONS.—Shade them during bright sunshine for a few hours in the middle of the day. If the red spider appears, rub sulphur vivum, mixed with water, on slates or tiles, and place them in the pit, or frame, where the sun's rays may fall upon them.

PEACHES.—Admit plenty of air when the fruit is ripe, or nearly so. When the crop is gathered, give them a good washing with the syringe. Those changing for ripening, if the trees are young and vigorous, to have a general stopping of the strong shoots all over the higher parts of the tree. To keep down red spider, it is advisable to wash the walls, pipes, or flues, with sulphur vivum reduced to the consistency of paint; or to paint some slates, tiles, or common saucers, with the mixture, and to place them in different parts of the house, where the sun can shine upon them.

PINES.—If the pot plants in fruit are in a healthy condition, well furnished with roots, an occasional supply of clear manure water, in a warm state, may be given with advantage to them.

STRAWBERRIES.—As it is necessary, by early attention, to ensure a healthy, vigorous growth, therefore, as soon as the runners have emitted the least portion of root, take them off, and prick them out on a rich piece of ground, or on an old hotbed where Radishes or early Potatoes have been grown under hoops, where, when the weather is hot, they are more convenient to shade, and require less water.

VINES.—When the fruit is cut in the early houses, ripen the wood by exposing it night and day, except during heavy rains. Water to be gradually withheld as the growth of the plants declines, and somewhat in the proportion in which you would have vegetation stop, not all at once, but gradually. The Vines with fruit now stoning may be allowed to produce a few redundant shoots if there is sufficient room to lay them in without crowding, or overlapping the old wood, or shading the old leaves. The late Grapes to be finally thinned, their shoulders to be tied out, and every useless shoot to be removed. Keep the Vines in pots trained, and exposed to light, and apply weak liquid manure frequently.

#### FOURTH WEEK.

##### GREENHOUSE AND CONSERVATORY.

Many of the finer kinds of hard-wooded plants—such as *Boronias*, *Epacris*, &c.—will now be out of bloom, and will require cutting in rather closely, to form neat bushy plants. Some of the greenhouse plants will most probably require shifting, and should receive that attention now, or, at latest, by the middle of next month. Keep a sharp look out for insects of all kinds, and also for mildew; and give the plants, if the weather is dry, a sprinkling once or twice a-week from the syringe or garden engine.

NEW HOLLAND PLANTS.—If any are retained in the house, let them be placed where they can have a sufficiency of light and fresh air, and at the same time in a place where the sun has no power on the pots; but if such cannot be avoided, place the pot containing the plant in another two sizes larger, and fill the intervening space with moss.

PELARGONIUMS.—When out of bloom, they should be placed in the open ground for a fortnight or three weeks to ripen the wood before they are cut down.

SCARLET GERANIUMS.—To prepare them for winter blooming it is advisable to place the pots during the summer on a hard bottom out of doors and in the full sun, and to pinch out the flower-stems as they appear. To be carefully attended with water.

#### STOVE AND ORCHID-HOUSE.

Keep up a kindly humidity by frequent syringings, and keeping the floors, paths, &c., damp. Many of the stove plants—viz., *Clerodendrons*, *Erythras*, *Gardenias*, *Ixoras*, *Jasmines*, *Liliums*, *Pergularias*, *Stephanotises*, &c.—may be removed to the conservatory, where the flowers will attain a deeper colour and retain it for a longer period than if they had remained in the stove.

**EUPHORBIAS.**—Propagate *jacquinæflora* and *fulgens*, and grow them on a successional system of culture for furnishing the conservatory and stove throughout the autumn, winter, and spring.

**GESNERA ZEBRINA.**—Keep up a succession in various stages of growth, and place another batch of tubers in a pan.

## FORCING-HOUSES.

Give particular attention to the preservation of the foliage in houses where the fruit has been gathered, keeping the atmosphere cool and moist; and give the trees an occasional washing with the engine, to keep down red spider and the leaves clean and healthy.

**CHERRIES.**—When the trees are planted in the house, and the fruit has been gathered, give all the air possible by throwing it entirely open. Give them a good washing occasionally with the garden engine. When the plants are in pots, it is advisable to place them on a hard bottom on the north side of a wall or fence.

**MELONS.**—Bottom heat is necessary for their healthy growth; without it a check would be given that would be sure to produce a most injurious effect on the swelling fruit. Water to be given to the plants overhead occasionally.

**PEACHES.**—Continue to maintain a moist, healthy atmosphere while the fruit is swelling. Give air sufficiently early in the morning, to prevent the sun scorching the foliage. Syringe and shut up early in the afternoon.

**PINES.**—Continue to provide proper bottom and surface heat, and give attention to airing, watering, syringing, and shifting in due time. By such means a large amount of healthy growth may now be secured for the fruit-swelling and succession plants. The plants swelling their fruit to be also favoured with a high temperature, a moist atmosphere, and plenty of water, and occasionally manure water at the root. If worm-casts appear in any of the pots, water with lime-water in a clear state.

**VINES.**—As the dry atmosphere necessary for the preservation of the ripe bunches is conducive to the increase of red spider, the sulphur must be immediately applied as advised last week. Discontinue the use of the syringe as soon as the succession crops begin to ripen. Check the growth of laterals by timely pinching. Give the final thinnings to the latest Grapes; and as they are frequently required for winter use, a good thinning should be given, as crowded bunches and berries will not keep late in the season.

# JULY.

## FIRST WEEK.

### GREENHOUSE AND CONSERVATORY.

The plants permanently planted out in the borders of the conservatory should have a thorough soaking of weak liquid manure. Give all the air possible at this season, both night and day, and keep the house as neat and clean as possible. If it contains many tender stove plants, shut it up for an hour while the sun is on it in the evening, so as to produce a more genial atmosphere for them.

**ACHIMENES.**—Encourage them, as also *Clerodendrons*, &c., to grow and to prolong their beauty in the conservatory by supplying them with liquid manure, taking particular care not to give it too strong, especially at first.

**CINERARIAS.**—Sow seed immediately. Plants for early blooming should also be potted and started at once, choosing the strongest suckers for the purpose, and placing them in a cool, shady frame until they have made fresh growth.

**CHRYSANTHEMUMS.**—Propagate some for blooming in small pots.

**HEATHS.**—Pluck off the flowers and seed-pods as soon as they become unsightly, and prune straggling growth. The softwooded kinds—such as the *ventricosa*, &c.—do best in a sheltered

situation in the open air, with means to protect them during heavy rains; while the woolly-leaved—such as *Masonii*, &c.—and hardwooded varieties delight in cold pits where the glass can be shaded or used for protection as necessary. Examine the plants which were not shifted in the spring, and, if necessary, pot them without delay; but if they require to be cut in, to make them bushy, it will be best to let them break afresh before they are repotted.

LESCHENAULTIAS.—If they have done blooming, and are pot-bound, to be repotted and placed in a shady place to make their growth.

#### STOVE AND ORCHID-HOUSE.

Give abundance of air to the stove plants at all favourable times, and abundance of moisture by all means. Examine young specimens that were potted early in the season, and shift at once such as require more pot room.

IXORAS.—Encourage the young plants by giving them plenty of air both night and day, to make short, sturdy growth; and discontinue stopping them for the season.

#### FORCING-HOUSES.

CHERRIES.—When the fruit has been gathered from the trees grown in tubs, or pots, it is advisable to place them in some open, airy quarter, to make their wood for next season's bearing.

FIGS.—Give liberal supplies of water to the trees now throwing up their second crop. A top dressing of old cowdung would now be useful. Pinch out the top buds, if the shoots are growing very long. It should be a practice to manage the trees during the summer that nothing more than a slight thinning out should be wanted at the winter pruning.

MELONS.—Give attention to the crops now growing, in thinning out the shoots, stopping, &c.

PEACHES and NECTARINES.—When all the fruit is gathered, and the wood seems well ripened, it will be best to take the lights quite off, and place them under cover until wanted again. Plenty of air to be given to the trees that are swelling off their fruit. Also, stop in succession many of the strong shoots about the period the last swelling commences. Use the syringe freely over the leaves early in the morning and again in the evening.

PINES.—Give abundance of air to the fruiting and succession plants, and during dry, hot weather, saturate the paths and every open space with moisture, to prevent the leaves of the plants becoming brown. If such a practice be regularly adopted during hot, bright sunny weather, shading will seldom or never be necessary. Be at the same time particular in maintaining a mild, genial bottom heat.

VINES.—The houses containing ripe fruit will require to be kept dry and well ventilated; those swelling will still require attention to keep a regular steady temperature with regular supplies of air. *Muscats* very frequently require fires during the night and on wet, cold days.

### SECOND WEEK.

#### GREENHOUSE AND CONSERVATORY.

ACHIMENES.—They delight in a steady, moist heat; to be shaded in the middle of hot days, to prevent the sun from scorching the foliage; and never to be watered overhead.

CACTI.—Remove them to a dry, airy place as soon as they have finished their growth.

COCKSCOMBS.—They can be grown with strong, short stems, and very large heads, if they are allowed to remain in small pots until the flowers are formed, then potted in large pots in a compost of one-half rich loam, one-fourth leaf mould, and one-fourth sand, and supplied with as much liquid manure and moist heat as possible.

FUCHSIAS.—As the plants progress in growth give them plenty of air and moisture, occasionally moistening the paths, walls, and stages with clear manure water, and syringe the plants both morning and evening overhead.

GLOBE AMARANTHUS.—To be potted into 48-sized pots, in which they will flower in a soil composed of peat, loam, and leaf mould, or rotten dung. They should be allowed to stand near the glass, and be subjected to a moist heat of not less than 75°.

HEATHS.—If mildew appears, dust them with flowers of sulphur. When watering, give them a good soaking, so that every part of the ball is thoroughly wet, and then withhold further supply until it is again completely dry.

JAPAN LILIES.—As they are succulent in growth, keep them well and liberally supplied with water.

The flower-stems to be properly sticked, so as to keep them in due bounds, and also to assist in presenting a large mass of flowers to the eye at once.

PELARGONIUMS.—If the plants have been exposed to the open air, as advised in a previous calendar, they will now be fit to cut down. After the plants are cut down, place them in a shady place until the most forward young shoots are one inch long; then shake them out, and repot into small pots, using sandy loam and peat only, and placing them in a close, cold frame until they begin to grow again; after which freely expose them to the weather until heavy rains in autumn, or the approach of frost, renders it necessary to house them for the winter.

#### STOVE AND ORCHID-HOUSE.

Cleanliness is indispensable amongst the Orchids, use a sponge to remove filth from the leaves. See that no plants are neglected in standing in corners or behind large plants; arrange and rearrange frequently, as it tends both to promote the healthy growth of the plants and a pleasing variety in the house.

#### FORCING-HOUSES.

CUCUMBERS.—Although bright hot weather may prevail, it is advisable to keep up a brisk, regular bottom as well as top heat. Strike cuttings of choice sorts for winter bearing.

MELONS.—The same as advised for *Cucumbers*, as they both delight in plenty of heat to keep them healthy and in regular bearing. Give them good soakings of weak manure water occasionally, and shut up early on all fine days, sprinkling the sides of the pits or frames, and the plants at times overhead. When watering the plants never allow any to fall on the main stem. If gum, or canker, appears, apply lime to the parts affected. Old plants cut back should be stimulated to grow freely.

PEACHES.—Any tendency to premature decay in the leaves of those from which the fruit has been all gathered to be arrested by liberal waterings at the roots and by syringings.

PINES.—Keep up the temperature from 90° to 95° by day and from 70° to 75° by night, with plenty of moisture among the growing plants and swelling fruit. Shift the successions as the roots fill the pots.

VINES.—Uncover the house, or give all the air possible night and day as soon as the Grapes are gathered, unless the wood is not fully ripened, in that case the house should be closed in the afternoon at a good heat. Stop the laterals on the later Vines, thin and tie up the bunches, and maintain a steady, moist temperature, with plenty of air, but do not syringe the bunches.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

If any of the stove plants, as lately recommended, have been brought into the conservatory, they will require a free admission of air at every favourable opportunity to keep the atmosphere of the house dry. The plants must be kept clear of decaying leaves and flowers. Some judgment is also required in watering recently repotted plants, that they may not be injured by saturation in cloudy weather, nor by drought in hot sunny days.

The growth of twiners should be carefully regulated, allowing them sufficient freedom to develop their natural habits as far as other considerations will permit.

Continue to shift the hardwooded plants as they require it. A turfy compost of three-parts sandy heath soil of a fibrous and rather lumpy character, and one-part loam, will suit the majority. Particular attention should be paid to the drainage, more especially to the crock at the bottom; for if that is flat, and not hollow, it matters but little how much depth of drainage material rests upon it, the soil will soon become saturated and sour. Remember that the final shift should be given in good time to those intended to flower in the autumn.

CALCEOLARIAS (Herbaceous).—Sow seeds; the compost to be equal parts of peat or leaf mould, loam, and rotten dung, with a small portion of sand. Place a layer of broken crocks two inches thick at the bottom of the pot; then fill up within half an inch of the rim with the compost, passed through a fine sieve. After the pot has been gently struck on the potting-bench to settle the soil, the surface must then be made level with a flat piece of wood, or the bottom of a small garden pan or saucer. Sprinkle the seeds regularly over the surface, do not cover with soil, and water with a fine rose; then to be placed in a cold frame, and be kept shaded from the sun.

CHOROZEMA.—The beauty of this genus for early spring display is generally appreciated, and, therefore, requires no commendation from me. They delight, like most other New Holland plants, in sandy peat containing plenty of fibre, and require plenty of air at all times, and also to be kept constantly moist, but never very wet. A large pot and frequent stopping will soon

produce a fine specimen.

CHRYSANTHEMUMS.—Continue to top the plants that have been planted out in the open ground.

EPACRIS.—The varieties of this genus are most useful for the adornment of the conservatory in early spring. They delight in fibrous peat, broken rough, mixed with fine white sand. The young plants to be frequently stopped by pinching off the points of the shoots while growing, to induce them to throw out laterals; those again to be stopped until the plants have attained a size sufficient to warrant their blooming.

GARDENIAS.—If any have been removed to the conservatory while in bloom they should be returned to heat as soon as the bloom is over, to encourage growth and to allow them sufficient time to mature their growth.

EUTAXIA MYRTIFOLIA.—It is a profuse and early bloomer. During the summer and autumn every new shoot should be stopped as soon as it has attained two or, at most, three joints: by such treatment it can be easily formed into a neat, compact specimen.

WINTER FLOWERS.—The Cinerarias, Chinese Primroses, Heliotropes, Perpetual, Tea, and other Roses, will require frequent and diligent attention as to watering, shifting, &c.

#### STOVE AND ORCHID-HOUSE.

Give immediate and regular attention to the young stock of stove plants intended for winter blooming. Keep up a moist temperature at all times; with air during the day. When a few days of gloom occur, the humidity that sometimes becomes stagnant and injurious should be dissipated by a free circulation of air when bright weather returns. Keep a free circulation of air amongst the Orchids by day; endeavour to supply an abundance of atmospheric moisture during the latter part of the day; and dispense with shading as much as possible by using it only during a few hours of the hottest part of the day.

Pay every attention to specimen plants in the stove. Keep them neatly tied to sticks, or trellises, as the case may require. Give them a plentiful supply of water, and, if not in flower, syringe them frequently overhead.

STANHOPEAS.—About the end of this or the beginning of next month is the most proper time to remove and repot them. Persons who wish to grow fine specimens ought to put them in large baskets, or pots, so that they may not require to be shifted for several years, as then the plants grow much finer and flower better than when annually shifted. Now, as soon as they have done flowering they commence growing, when they should have plenty of heat and moisture until they have completed their pseudo-bulbs, when they should be reduced to a comparative state of rest by gradually withholding water until they show flower; then to be supplied with atmospheric moisture, but should have no water at the root, or at least but a small portion, until they begin to grow. As all the plants belonging to this genus push their flowers downwards, it is advisable to have them elevated, or put in baskets, where the flowers can get through and show themselves to advantage.

#### FORCING-HOUSES.

FIGS.—Supply with plenty of water the roots of the trees that are swelling their second crop; ply the syringe frequently amongst the foliage, and sprinkle the paths, &c., to keep the atmosphere moist. Shut up early in the afternoon. As the fruit of the first crop ripens, curtail the supply of atmospheric moisture—otherwise before they reach maturity they are apt to turn mouldy. The roots to be regularly supplied with water, and some liquid manure added about once a week to assist the second crop. Keep down red spider by the application of sulphur in the manner so frequently advised of late. Give the fruit that is ripening the benefit of the sun, by fastening on one side the leaves that shade it.

PEACHES.—The fruit will be all the more delicious for a comparatively cool temperature while ripening. Examine the fruit daily, and gather before it is overripe and loses its flavour.

PINES.—Maintain a good bottom heat, and encourage the growth of the advancing crop by kindly humidity and allowing them plenty of air and sufficient space from plant to plant. Give air, also, freely to the young stock in dungpits, to secure strong stocky growth; but a circulation should not be allowed by giving back and front air at the same time during hot drying winds. Attend to former directions to afford the plants swelling their fruit a moist atmosphere by frequent syringings and by sprinkling the paths and every other available surface until the fruit begins to change colour, when the atmosphere and soil should be kept rather dry, to improve the fruit's flavour. See to the stools from which fruit have been cut. Earth them up, so as to cause suckers to strike root. Give them a brisk bottom heat, and proper supplies of water. You will thus gain time and assistance for the suckers from the declining strength of the parent plant as long as possible. It is now a good time to start a lot into fruit, as they will have two or three most favourable months for swelling, and will come in at a season when they are in very general request. Keep the bark-bed moderately moist, as in that state it will retain its heat much longer than if it is allowed to get dry.

VINES.—Keep up a brisk heat to the late Grapes during the day, as it is advisable to get them well ripened before the season gets too far advanced. By such means they will be of better quality and keep longer than if the ripening process be delayed to a later period. Do not allow plants in pots to remain in the house to cause damp, which, despite every care in ventilating, is apt to settle on the berries and spoil them. The outside borders of the late houses should be watered and mulched, if the weather continue dry.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

The conservatory should now be gay with Balsams, Cockscombs, Fuchsias, Globe Amaranths, Heliotropes, and the varieties of Japan Lilies. Strict attention must be paid to all plants in these structures that they do not suffer from the want of water. Continue to stop over-luxuriant growth, to obtain compact, sturdy specimens. On the evenings of hot, dry days, after the plants have been watered, give them a slight syringing, or sprinkling, over the leaves, and also the ground upon which they are standing.

AOTUS GRACILLIMUS.—When done blooming, to be cut down close to the pot.

APHELEXIS and HELICHRYSUMS.—When past their best state, cut the flower-stems close into the old wood; to be set in a cool shady place until they begin to grow, when any that require it may be repotted.

CHRYSANTHEMUMS.—Propagate by cuttings, or layers, to obtain dwarf stocky plants. Continue to top the plants that have been planted out in rows in the open ground, as advised some time ago.

CINERARIAS.—Pot off the first batch of seedlings and offsets. Sow seed.

FUCHSIAS.—Shift in the last batch, and put in cuttings.

LESCHENAULTIAS.—When they are going out of bloom, or past their best, remove the flowers and flower-buds, and put them in a cool place to start again.

KALOSANTHES.—When done blooming, the flower-stems and all straggling growth to be cut in closely, to form compact specimens for another season.

PELARGONIUMS.—Cut back the principal stock, and treat them as advised lately.

PIMELEA SPECTABILIS.—When that and the other kinds have done blooming, to be freely cut in, and to be set in a cool shady place to break.

POLYGALAS to be treated in the same manner as the *Pimeleas*.

### STOVE AND ORCHID-HOUSE.

Look out for insects in the stove, and destroy them as soon as visible. The *Gishurst Compound* is worthy of a trial. Follow former instructions as to moisture and air.

IXORAS.—When done blooming to be cut in rather closely, to be started in a gentle heat to make fresh growth. The Orchids suspended on baskets, or on blocks of wood, require a soaking of water at the roots, and frequent, but slight, syringings overhead. A little fire-heat applied in the afternoon will be of service to them.

### FORCING-HOUSES.

FIGS.—If the second crop on the earliest trees is advancing towards maturity, as soon as the fruit begins to ripen the atmosphere should be kept dry and rather cool, giving air freely every fine day. Keep the foliage clean and healthy, and clear from insects, and do not allow the young shoots to get crowded.

MELONS.—Keep up a good bottom heat when the fruit is setting. Keep the plants on which the fruit is ripening rather dry at the root, with an abundance of air in fine weather.

PINES.—Air to be admitted freely during hot weather to fruiting and succession plants. Particular care will be necessary in the application of water that they may not suffer for want of it, or by saturation. The walls, paths, and surface of the bed to be kept constantly moist, and frequent syringings to be given to the young stock. Continue all other routine operations according to former directions.

STRAWBERRIES.—Some lay the runners at once into pots of strong, rich loam, cutting them away from the parent plants when they have made roots enough for their own support. Some prefer to lay them in small pots, to be shifted into larger by-and-by, and others prefer to lay them in



their fruiting-pots. The principal object should be, to attain plants of a moderate growth, well matured and rested before forcing time.

VINES.—The early houses, when they have been cleared of their fruit, and the wood is properly ripened may have the sashes removed and repaired, if required; indeed, every house is purified by free exposure to the atmosphere for some time. The late crops to be encouraged to swell by giving the borders good soakings of manure water, and by being carefully thinned, more especially if they are wanted to keep late. A little fire-heat will be necessary in unfavourable weather, with an abundance of air day and night.

## AUGUST.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

The conservatory borders will now require liberal supplies of water. Faded blossoms to be constantly removed; straggling growth and exhausted stock to be cut previous to making a new growth. As the autumn is fast approaching, the sooner the new growths are encouraged the better, that they may have sufficient time to mature them. All greenhouse plants will now be benefited by exposure to the natural atmosphere: the dews are more refreshing and invigorating than artificial moisture or the application of the syringe.

Finish *potting* all specimen plants; for if left until later in the season they will not have sufficient time to fill their pots with roots, and, therefore, will be liable to suffer from stagnation of water at the roots. No position can be worse for a plant than that of surrounding it with fresh soil for months when the roots should be in a comparatively dormant state.

PELARGONIUMS.—Continue to head them down, and to propagate the cuttings, which will now strike freely in a sunny situation in the open ground.

#### STOVE AND ORCHID-HOUSE.

Much moisture and free ventilation will be necessary here during warm weather. The young plants of Euphorbias, Ixoras, Poinsettias, and other such stove plants, to be rendered bushy by stopping them betimes. The *Æschynanthus grandiflorus*, *Aphelandra cristata*, *Eranthemum pulchellum*, Justicias, and any others that are intended for the decoration of the conservatory in the autumn and early part of winter, should be carefully looked over, and shifted without delay if they want more pot-room; the shoots to be tied out thinly, and to be exposed to as much sun as they will bear without scorching the foliage, to induce stocky growth. Nothing is more injurious to stove plants than to keep them growing late in the season, and thus to prevent the ripening of the wood, which will render them more liable to injuries in winter and more unproductive of flowers the following season.

#### FORCING-HOUSES.

MELONS.—The plants on which the fruit is ripening to be kept rather dry at the roots, with free exposure to the air in favourable weather. A steady bottom heat to be kept up to the late crops.

PEACHES.—If the lights have not been taken off the early-forced houses, it would be advisable to remove them as soon as possible, that the air, rain, and dews may have free access to act both beneficially on the trees and to keep down red spider. In those houses which have been treated as advised in former Calendars, the principal object now should be to get the wood properly ripened. The late houses to be treated in a similar manner when the fruit is gathered. Where the trees in peach-houses have been recently planted, and are not yet in a bearing state, the shoots will require to be trained carefully, and insects to be kept down.

PINES.—The plants growing in beds of soil to be carefully attended to with water, giving at each application sufficient to penetrate the whole body of soil, as it frequently happens that the surface is moist while the bottom is quite dry. Pot a portion of the strongest successions for early forcing next season.

STRAWBERRIES.—Continue to lay the runners of the kinds you wish to force in pots until you have a sufficient number.

VINES.—Muscats, now beginning to ripen, will generally require a little fire heat to push them on; when ripened in good time they are better flavoured and keep longer than when the

ripening process is delayed to a late period of the season. Continue to remove the stray laterals that begin to shade the larger leaves; to be done a little at a time, as disbudding on an extensive scale is prejudicial to fruit trees. The young Vines in pots to have every attention, to secure as much growth and healthy vigour as possible while the growing season lasts. Allow all young planted Vines to ramble freely without stopping them so closely, as is frequently practised. Before wasps and flies do much mischief to ripe Grapes, coarse canvass should be fixed over the top lights and front lights that are opened for the admission of air. Remove decayed berries as soon as observed, and keep the house containing ripe fruit dry and free from dust.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

**BULBS.**—The selections for winter and spring flowering to be made as soon as possible, choosing the most suitable varieties for each season; to be potted at two or three intervals for succession. To be potted in light fibrous turfy loam of a sandy quality, and placed in a dry situation; to be covered with three or four inches of old tan or coal ashes.

**CAMELIAS.**—The large, old specimens that have set their flower-buds to be carefully supplied with water; for if they are allowed to get too dry at the roots they are apt to drop their buds. Young vigorous plants, on the contrary, will require to be watered rather sparingly, to prevent them making a second growth.

**CINERARIAS.**—Shift as they require it, and let no neglect as to watering, &c., cause a check to their growth.

**CLIMBERS.**—To have a succession late in the season when flowers become scarce, it is advisable to cut them back for that purpose, more especially the climbers on rafters or ornamental trellises.

**NEW HOLLAND PLANTS.**—If any have been standing out of doors for some time, it is advisable to remove the best and most tender varieties to the cold pits, or other secure situations, to avoid the danger and risk of exposure to wet or windy weather.

**SOILS.**—Now is a favourable time to collect soils of different sorts for future use. The advantages of forethought for such matters will become evident when the time for use arrives. Leaf mould, decomposed sheep, deer, and cowdung, road and river sand, old Cucumber, Melon, and other such soils, to be put in separate heaps in a shed, or any other dry place, protected from drenching rains. Each sort to be numbered, or named, that no mistake may occur when wanted.

### STOVE AND ORCHID-HOUSE.

All plants intended to flower this autumn to be regularly supplied with water and occasionally with liquid manure; but all the other stove plants to be watered more sparingly after this time, and the water to be given early in the morning. The house to be shut up early in the afternoon with a strong sun heat. Slight fires to be made in the daytime, if the weather is dull, so that plenty of air may be given to the plants.

### FORCING-HOUSES.

**FIGS.**—If the nights are cold, the house or pit should be closed early, for the benefit of the second crop of fruit.

**MELONS.**—Withhold water when the fruit is ripening, as a sudden supply at that time very frequently causes the fruit to crack and become worthless. Keep the shoots so thin that every leaf may receive the benefit of the light. Do not expose the fruit to the sun's rays till it is fully swelled. Give a supply of manure water to the late crops, and thin out useless laterals. It is advisable to paint the interior of the frame, or pit, with sulphur: this, with slight syringings and shutting up early while the sun shines upon it, will keep down insects.

**MUSHROOMS.**—Collect some very short stable-litter and horse-droppings, and turn them over frequently with the addition of a small portion of turfy loam until they are well incorporated. When moderately dry, to be packed on shelves or in boxes, and be well-beaten down in layers four or five inches thick, till the bed is the required thickness—from a foot to eighteen inches; for success will depend in a great measure upon the solidity of the bed. To be spawned when there is a brisk heat.

**PINES.**—If a strong body of fresh materials have recently been added, the watch-sticks should be frequently examined, and any approach to a burning heat to be counteracted by lifting the pots, &c. Fruit recently started and swelling off to have every encouragement for the next two months. Shut up early, to secure a strong amount of solar heat. Keep all the growing stock warm and moist, syringing them lightly twice a-day.

VINES.—The early-forced houses, where the wood is nearly ripe, would be benefited by free exposure to the air; but if the lights are required to remain on, cleanliness should be observed, and all laterals kept down. When the fruit is swelling or colouring, and when the weather is wet or cloudy, a gentle fire, if then applied, will expel damps, and be in other respects very beneficial to them. Stop all useless growths in the late houses; do not remove the leaves to expose the fruit to the sun, unless they are very thick indeed, as they are the principal agents by which nutriment is carried to the berries.

VINES IN POTS.—When the leaves begin to fade, to be removed to the north side of a wall, and the pots to be laid on their sides, to keep the roots dry. A little litter thrown over the pots will protect them from sudden changes.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

As the majority of greenhouse plants are out in the open air, or in pits, where they have either set, or are setting, their blooms, preparations should be made for their return, by scrubbing and washing all the shelves of the greenhouse, and clearing out all crevices and corners, to banish all insects that may be secreting there. When by scrubbing, brushing, &c., you have brought everything to the ground, let no time be lost in clearing the insects, rubbish, &c., off the ground, and also out of the house. If painting and glazing are necessary, the sooner they are done the better, leaving the house entirely open for three weeks or a month, that the effluvium from white lead, which is prejudicial to plants, may pass off before the lights are put on again.

#### STOVE AND ORCHID-HOUSE.

Shift into pots a size larger any small plants, or indeed any plants that you are desirous to grow fast, or to make specimen plants, as soon as they have filled their pots with roots.

CUTTINGS inserted in pots of light, sandy soil, well drained at the bottom, will readily strike when plunged in the tan-bed, where there is a little bottom heat, and covered with bell-glasses, that will allow of the edge being pressed into the soil inside the pot.

Henceforward a certain degree of care and consideration will be necessary to have the summer growth of plants generally—and especially that of all those whose period of excitement is continued over a certain portion of the autumn—so arranged and circumstanced as to secure its perfect maturity, or, in gardening terms, to have it “well ripened.” For that purpose it is necessary to avoid the application of moisture beyond what is necessary to prevent a decided check in the growth of the plants, to expose them to the influence of light, by not suffering them to crowd or overhang each other, and to prevent from what cause soever the too sudden declension of the average temperature to which they are exposed.

THE ORCHIDACEOUS PLANTS that are growing to have plenty of moisture and heat, it will be easily seen when their growth is completed, and then it is proper to let them go to rest by gradually lessening the supply of water, and removing them to a cooler part of the house.

Any ORCHIDS that you are desirous of increasing may be separated or potted into small pots, or fastened to blocks, or placed in baskets. Fill pots with pieces of turfy peat the size of Walnuts, and peg them altogether until they form a cone above the pot. On the summit place your plant, which is, in fact, a piece cut off another plant, and with four pegs or wires make it fast. Let the roots go where they please in the pot, or outside it. Orchids depend more for sustenance upon the atmosphere and moisture, than upon the soil.

#### FORCING-HOUSES.

PEACHES.—It is advisable, when practicable, to get the lights off the early houses, presuming that the trees are fast advancing towards a state of rest. The practice is certainly not absolutely indispensable, but it is of much benefit to the trees. Whether the lights are off or on, attention may now be given to the repairs of glass or woodwork where necessary, and to finish with a coat of paint and whitewashing, if possible.

PINES.—The plants swelling their fruit to be carefully looked over in hot weather that they may receive no check for want of water. Continue to pot or plant suckers as soon as they are taken off the parent plants, as they are apt to shrivel much at this season, if left out of the ground. Attend to the state of the linings to dung pits, as all Pine plants, in whatever situation, will require a lively bottom heat of 90°.

VINES.—The houses containing late Grapes to be shut up warm and rather early (about four o'clock), in order to dispense, if possible, with fires, giving air by seven o'clock in the morning, and increasing it abundantly towards noon, and to be then diminished at intervals, in accordance with the state of the weather.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

The plants in these houses should receive particular attention that they do not suffer from want of water or fresh potting; the water to be given in the morning or forenoon, that the plants and houses may be dry towards night, to prevent the ill effects arising from damps.

CAMELIAS.—Look over them, and disbud where too many are set in a cluster. Resurface the soil, and see that the drainage is efficient.

NEW HOLLAND PLANTS.—Heaths and other such hardwooded plants that have been placed out of doors will now do best in a cold pit or frame, where they can be protected from heavy rains.

PELARGONIUMS.—When the shoots of the plants that have been cut down are about an inch long, the old soil must be shaken away, the roots slightly trimmed, and then repotted into small pots, &c., as advised early in July. Some of the cuttings may now be fit for potting off; when potted, to be placed in a pit or frame, kept close, and shaded until they have made fresh roots, when they should be placed out in an open situation to grow firm and stocky, pinching out the leading shoots; and to be placed on coal ashes, slates, or boards, to prevent the admission of worms. Sow the seed immediately it is gathered, and also that of Fuchsias, or of any other perennial plant, if ripe before the middle of September.

### STOVE AND ORCHID-HOUSE.

The stove plants of strong and early growth may be allowed a gradual increase of ventilation and more sunlight. Plenty of moisture is still essential for the general stock. Shading may now be dispensed with, except during bright sunbursts. Careful attention to be given to the Allamandas, Echites, Euphorbias, Luculias, Stephanotises, Dipladenias, and other such valuable stove plants. The surface soil of large specimens to be stirred, and weeds and moss removed.

GESNERA ZEBRINA.—Shift them for winter flowering; they delight in a mixture composed of equal parts of fibrous loam, heath soil, and leaf mould. All plants after shifting do best when placed in a gentle bottom heat; to be syringed occasionally, and shaded during bright sunshine.

Shift on all ORCHIDS that now require it, and are making their growth. Top dress others, if they require it. All that are growing freely in pots or baskets, or on blocks, to be syringed with clear, tepid, soft water in the afternoons of fine days, and to be shut up early.

### FORCING-HOUSES.

FIGS.—If any are growing against the back wall of a vinery, or other such structure, it may be advisable to give them a good soaking of water, and but very little, if any, after—as a dry atmosphere is necessary to ripen the fruit.

MELONS.—Continue to supply them with bottom heat. If they are growing in pits or frames, keep the linings well topped up or renewed, to produce a comfortable heat inside; for without it canker is apt to set in and destroy the plants.

MUSHROOMS.—In making beds for these on shelves, or in boxes, as recommended a fortnight ago, or on the floor, let the whole mass be made very firm by well-beating it as it is put on in layers. It is advisable when the spawn is put in to cover it with good, strong, fresh loam at least from two to three inches thick, and to make it as firm as possible. The Mushrooms will come stronger and of much better quality than if partly-exhausted soil is used.

PINES.—If the winter fruit have finished blossoming, supply them occasionally with clear liquid manure when they want water. The growth of the crown to be checked, and all useless suckers, gills, &c., to be removed. When a house or pit is devoted to late Pines alone, an abundance of moisture should be supplied. Give abundance of air to the young stock in dungpits, and increase the dryness of the atmosphere, to induce maturity of growth and a hardy constitution against winter. Shift, if not already done, succession plants into larger pots. Any plants recently potted to be shaded during bright sunshine, sprinkled overhead every afternoon, and the house closed early. The sprinkling will be sufficient without watering at the root until the plants begin to grow.

VINERIES.—Continue to secure a dry state of the atmosphere when the ripe fruit is intended to hang for any length of time, using a little fire heat when necessary to dispel damp. To ripen the fruit in late vineries, it is frequently necessary to use fire heat, but more especially when the external temperature ranges below 50°.

# SEPTEMBER.

## FIRST WEEK.

### GREENHOUSE AND CONSERVATORY.

**BALSAMS.**—Give them a good watering when they show indications of drooping; but be cautious in watering when the least stagnation appears, as saturation will be death to them.

**BULBS.**—Pot Hyacinths and other such bulbs for forcing. When potted, to be placed in a dry, cool situation, as advised in the early part of the month, and covered with some porous material—such as coal ashes, old spent tanner's bark, coarse sand, or any other material that will serve to keep the roots not only cool and un-acted on by atmospheric changes, but which, from being moderately damp, will not abstract moisture from the roots, but keep them uniformly and evenly moistened. The Cape bulbs, if obtained now, may be had in flower at various periods throughout the winter and early spring. *Amaryllis Johnsoni*, *vittata*, and many other varieties, are splendid. Ornithogalum, both the white and orange-flowered species, the free-growing species of *Ixia*, and the varieties of *Sparaxis tricolor*, are desirable plants that may be easily bloomed by gentle forcing.

**CALCEOLARIAS** (Herbaceous).—Pot off seedlings into small pots, and keep them close in a frame for some days. Put in cuttings of the best kinds; they will strike readily in a common frame.

**CHRYSANTHEMUMS.**—They should now be stopped for the last time, to produce a late succession of bloom.

**CLIMBERS.**—Be careful to train the shoots, that the trellis or stakes may be furnished and clothed with foliage and flowers from the rim of the pot upwards.

**FUCHSIAS.**—To have a late bloom, cut back about half of the young wood, trimming the plants to handsome shapes. If placed or plunged in a little bottom heat they will break again, and continue blooming till Christmas.

**LILIUM LANCIFOLIUM.**—Supply them cautiously with water, as advised for Balsams, and shade the flowers from bright sunshine, to prolong their beauty. When they have done blooming, to be removed to the foot of a south wall or fence to ripen their growth. Water to be given sparingly until their tops show signs of decay, when they may be laid on their sides till potting time. The same treatment is recommended for *Gladioli* and plants of like habit.

### STOVE AND ORCHID-HOUSE.

Some judgment will now be necessary to arrange the plants that are finishing or have completed their season's growth in the coolest part of the house, where they should be freely supplied with air, and rather cautiously and sparingly with water. While others in free growth should be encouraged with warmth and moisture by giving but very little air and a liberal supply of water during very fine sunny weather.

### FORCING-HOUSES.

When the fruit in the early houses is gathered, the great object should be to ripen the wood. A certain degree of attention is necessary to be given by exposing them to light and air, and preserving the leaves from injury, as it is upon their healthy action that the future crop depends.

**CHERRIES.**—Trees in tubs, or large pots, if intended for early forcing, to be removed to a cool, and plunged in an open airy, situation, to continue the regular root action, upon which much of their future success will depend.

**FIGS.**—Withhold water from the borders where the second crop of fruit is ripening. Trees in tubs, or large pots, intended for early forcing, to be treated as advised for Cherries.

**PEACHES.**—If mildew attack the trees before the leaves have performed their necessary functions, dust the affected shoots with sulphur. Trees in pots to be treated as recommended for Cherries.

**PINES.**—Take advantage of fine weather to encourage free growth where it is desirable. Plants swelling their fruit to be supplied occasionally with clear liquid manure. The succession plants to be supplied with water at the roots, as inattention to that particular during hot weather is very likely to cause some of the plants to fruit prematurely.

**STRAWBERRIES.**—The stock intended for forcing to be carefully attended to; to be kept free from

runners and weeds; and, when necessary, to be liberally watered. Free exposure to sun and air, and a little weak liquid manure, will assist to produce stout healthy plants for forcing.

VINES.—When the fruit is ripe, give air freely, and keep the house as cool and dry as possible. Stop laterals in the late houses, and expose the foliage to light, to make it as healthy and vigorous as possible. Vines in pots to be treated as advised for Cherries.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

As boisterous winds, heavy rains, and other atmospheric changes occur about this time, it is advisable to draft the choicest out-door greenhouse plants to their winter quarters. Each plant to be carefully examined, dead leaves removed, and any defects in the soil or drainage of the pots to be remedied. If worm-casts, or other indications of the presence of worms, appear on the surface of the soil, by carefully turning the ball of soil out of the pot they can generally be picked out. If they are not visible on the outside of the ball, a small peg stuck in will direct particular attention to it until the intruder is removed. When staging the plants, a pleasing variety may be introduced by placing a few on inverted pots. Sufficient space to be given to each plant to allow the air to circulate freely around. If there is not sufficient room for all, the oldest or mis-shapen plants may be rejected, or wintered in a pit or vinery. When housed, all the air possible should be given in fine weather by the entire withdrawal of the lights, and only reducing the ventilation when unfavourable changes in the weather take place.

HELIOTROPES.—Pay attention to keep them in a growing, healthy state for winter flowering.

MIGNONETTE.—Sow now and a month hence, for winter and spring blooming.

PINKS.—Pot *Anne Boleyn* and other sorts, to be well established before they are wanted for forcing.

ROSES.—Some of the Tea-scented and China kinds, being placed under glass, and to be repotted if requisite, will promote immediate growth and early blooming.

VIOLETS.—Take up with good balls, to be potted in rotten turf, or leaf mould and road-scrapings, in 48 or 32-sized pots, placed in a pit or frame near the glass, for flowers in the winter and early spring.

### STOVE AND ORCHID-HOUSE.

As the season of active growth is now getting to a close, it is advisable to ripen off gradually the pseudo-bulbs and strong healthy shoots by keeping up a genial atmosphere, ranging from 70° to 80°, with abundance of air in favourable weather. *Cattleyas*, *Epidendrum Skinneri*, *Lælias*, *Lycaste Skinneri*, and *Odontoglossum grande*, to be kept rather cool, and to be slightly syringed occasionally. Water to be given more sparingly to all the plants except such as are growing freely. Shading to be now dispensed with as much as possible, that the plants may have the benefit of the ripening influence of the sun.

### FORCING-HOUSES.

FIGS.—Continue to pay strict attention to the state of the atmosphere. Where the fruit is still swelling and ripening, slight fires will be useful in dull, cold weather, to assist in ripening the fruit; and but little syringing and watering will be required from this time forward.

MELONS.—Take advantage of fine weather by giving plenty of air, shutting up early, and keeping the shoots regularly thinned. In whatever structure they may be growing, it is advisable to keep up the bottom heat by a gentle fire, or by linings.

PEACHES.—We will suppose the trees to be now fully exposed to the air night and day, and will, therefore, require but little attention, except an occasional washing with the engine, to remove insects and to allow the foliage to perform its functions to a natural decay. If a blank in the house is to be filled up, it may be done as soon as the crop is gathered from the open wall; and the crop to be expected from the same tree next season will depend upon the care with which it is removed, as there will be sufficient time for the wood to be ripened and the tree to make fresh roots, and to get sufficiently established before winter.

PINES.—Where young stock is grown in dung-pits, care to be taken by giving air freely in favourable weather, to avoid growing the plants weakly in a close and warm temperature, and by a sufficient command of heat from the linings to allow a little air to be given at night and on cloudy days.

VINES.—All long growths, whether bearing or not, to be stopped, as it is getting too late for them to be benefited by the foliage made after this period of the year. A gentle fire in damp

weather is useful to keep the atmosphere dry when the fruit is ripe. The bunches to be frequently and carefully looked over and all tainted berries removed, and the foliage kept free from insects. Fire heat is also necessary where the fruit is not yet ripe, and where the fruit is cut it is sometimes necessary to keep the atmosphere dry and rather warm, to ripen the wood.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

Finish housing the greenhouse plants, and give them as much air as possible; for if air is too sparingly admitted at this season, when many of the plants have not finished their growth, it will cause them to produce weak and tender shoots, which will be very liable to damp off at a more advanced period when the inclemency of the external air will cause them to be kept close. Water to be liberally supplied when they are first taken into the house, as the dry boards on which they may stand, or the elevated situation and free circulation of air will occasion a more frequent want of that element than when they stood on the moist earth. However, by no means go to the extreme, but give it only when evidently necessary.

**AZALEAS.**—Plants that have set their blooms to be removed to the greenhouse; but the late kinds to remain in heat until their growth is matured and the bloom set. If a few are required to bloom at Christmas, or a little after, they should be kept in heat until the bloom-buds have swelled to a good size, when they will require but very little forcing to start them into bloom.

**BULBS.**—Procure and pot them as soon as possible, as much of the success of early forcing depends upon early potting.

**CAMELLIAS.**—Treat them as advised for Azaleas.

**HEATHS.**—Look sharply after mildew, as plants that have been growing freely in a shady situation in the open air, and are in a rather succulent state when taken indoors, are liable to be attacked by this pest, which should be removed on its first appearance by an application of sulphur.

#### STOVE AND ORCHID-HOUSE.

Commence a gradual reduction of the temperature in correspondence with the decline of external heat; by such means the plants will be better prepared to withstand the gloom and other vicissitudes of the winter season.

**BEGONIAS.**—Encourage the different kinds for winter flowering by shifting them, if necessary, into larger pots. They succeed best in a compost of half leaf mould and half loam. They grow luxuriantly in a soil composed entirely of decayed vegetable matter; but in that they are liable to rot off at the base of the stem.

#### FORCING-HOUSES.

**FIGS.**—Trees in tubs or pots still bearing to be assisted with a little liquid manure when dry. Withhold water gradually from the borders, to induce an early, but not a too premature, ripeness of the wood and an early rest.

**PEACHES.**—The flues of the early house may now be cleaned, and, if not yet done, the lights washed and painted, if necessary.

**PINES.**—If there are some of the spring fruiting plants still remaining in the fruiting-house, they should either be placed at one end of the pit, or removed to a small house by themselves; the house should then be prepared for the best of the succession plants for the second crop next summer. Plants showing fruit after this time, although they cannot be expected to produce as fine fruit as if earlier in the season, will, nevertheless, be found very useful, and should have every attention given to them while the season continues favourable. To be placed in the warmest corner of the house, and to be supplied when dry with a little liquid manure. Continue to grow on the young stock while the weather continues favourable; for fine sunny days and moist growing nights are all that we can desire. A good portion of solar heat to be secured by shutting up early. On cold nights gentle fires will be necessary to keep up the temperature to 70° towards morning.

**VINES.**—The Vines that are to be forced early, if the wood is well ripened and all the leaves nearly off, may be pruned without much fear of bleeding, keeping the house as cool as possible; but if, from appearances, the sap is not considered to be sufficiently at rest, the pruning should be postponed. Continue to forward the Grapes not yet ripe by giving a little fire heat during the day. Air to be given to the house as soon as the sun shines upon it, as the vapour that ascends, if not allowed to pass off by ventilation, will cause the Grapes to become mouldy and worthless.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

The plants that have been in the open borders during the summer to be taken up, the roots carefully cut back, and repotted; to be placed in a gentle bottom heat, or in some close place, until they have made fresh roots, the better to resist the vicissitudes of the dull, dreary months of the approaching winter.

AMERICAN PLANTS.—If a rich display of bloom is desired in early spring, the plants should be now potted in rather small pots, to be plunged in the warmest part of the garden, and introduced to the forcing-house from November until February, as they may be required. The most suitable for such a purpose are the Azaleas of the *nudiflora* class with various hybrids, *Andromeda pulverulenta*, *Daphne cneorum*, Kalmias, of sorts, *Ledum latifolium* and *L. thymifolium*, *Polygala Chamæbuxus*, Rhododendrons, and *Rhodora Canadense*.

CALCEOLARIAS (Herbaceous).—Remove them to a shelf as near the glass as possible, with plenty of air at all favourable opportunities. To be duly supplied with water.

CAMELIAS.—Water to be given carefully, to prevent the dropping of the buds. The late-flowering plants to be thinned of their buds, leaving not more than two buds on each shoot, and retaining the largest and smallest to get a long succession of bloom. The leaves, if necessary, to be washed clean.

CHINESE PRIMROSES.—Place them as advised for Calceolarias.

CINERARIAS.—Protect them from the ravages of green fly by the application of the Gishurst infallible compound.

FUCHSIAS.—Continue to encourage the late stock for bloom. Seeds may be sown at once, where there is a greenhouse or other means of sheltering them from frost and damp; but if you have no such convenience, it is advisable to postpone the sowing until spring. The seed is separated most easily from the pulp by bruising the berries amongst dry sand, and allowing it to stand in the sun, or in a warm place, until the moisture has evaporated, when the seed and sand will be intermixed, and in a fit state to be sown.

HEATHS.—On fine mornings syringe them, and Epacris and Pimeleas, and give all possible ventilation, both night and day, while the weather continues favourable.

NEW HOLLAND PLANTS.—Place them in situations to enjoy a considerable share of air and light. All luxuriant shoots to be stopped, to maintain symmetry and uniformity of growth. A vigilant eye should be kept upon them almost daily, to see that neither mildew, green fly, nor other such enemies be allowed to injure them.

ORANGE TREES.—If they have been standing out during the summer, the sooner they are returned to their winter quarters the better. Clean the leaves, if necessary, and fresh surface the soil in which they are growing.

SUCCULENTS.—Cacti, Euphorbiæ, and other such plants to be gradually curtailed in the supply of water as they approach the winter and their season of rest.

TROPÆOLUMS.—If any of this beautiful tribe, particularly *T. tricolorum* or *T. Brachyseras* that have flowered early in the season, begin to grow, they should not be checked, but allowed to grow slowly through the winter; but if there is no appearance of growth—which is best for their future success—the roots should be kept dormant, in a cool place, with the soil about them quite dry, and protected from mice.

### STOVE AND ORCHID-HOUSE.

Stove plants cannot be too cautiously watered late in the autumn. Nothing is now wanted but to keep the soil from getting quite dry. Slight fires to be made in the forenoons of dull and rainy days, not so much for the purpose of raising the temperature as for drying the house. Air to be given at all favourable opportunities, to maintain a healthy atmosphere. Several of the Orchids—viz., *Aërides*, *Dendrobiums*, *Saccolabiums*, *Vandas*, &c., may be encouraged by the application of a high temperature, with much moisture and less shading, to make further and sometimes considerable growth.

CATTLEYAS.—Young plants may also be encouraged to grow for some time longer; but older specimens should be reduced to a comparatively dormant state by a gradual diminution in the supply of water, and a decrease in temperature, with less shading.

STANHOPEAS.—To be treated as advised for Cattleyas.

### FORCING-HOUSES.



Continue to make fresh beds as formerly directed, and prepare fresh material for successional ones. To ensure success it is advisable never to allow the manure to be put together in a dry state, nor to get too far exhausted, but in that medium state when the strong fermentation has passed off, and a moderate heat is likely to remain in it for some time. The temperature to be kept from 60° to 65°, with the admission of air for several hours daily.

CHERRIES.—Whether they are in pots or in borders, and have arrived at, or are only approaching, a comparatively dormant state when but little attention will be necessary, still that little will be required to keep them clear of insects and of the leaves as they become sufficiently ripe, when they come readily off with a touch. The old surface of the soil of those grown in pots to be removed, and the same quantity of fresh, in a rough state, put in its place. Remove them without further delay, if not already done, as advised in the early part of the month, to the north side of a wall or hedge until wanted; or if not wanted until a sharp frost sets in, they should be protected from its icy grasp.

FIGS.—Trees in pots to be treated as advised for Cherries.

MELONS.—Although the weather may have been favourable for ripening the late fruit, they will in some places still require the assistance of a good top and bottom heat, and a large portion of air in the middle of the day.

PEACHES.—Trees in pots to be pruned, and treated as recommended for Cherries. No time should be lost if fresh trees are to be planted in the place of any that may be worn out. The choice should be made of young trees that are in a bearing state, and all the better if they had been moved last autumn. In pruning the trees, after the leaves have dropped, be sure not to leave them too crowded; but if the summer pruning, as frequently advised, have been properly done, but very little, if any, will be required now. To remove the leaves from the trees in the early houses it is advisable to shake them daily, and sometimes to brush them gently with a few pieces of birch-spray tied in a bundle. All foreright shoots to be removed, and the trees in the late houses kept free from insects.

PINES.—Persevere in former directions as to general routine management. Whilst fine weather continues air may be given liberally; and shut up earlier in the afternoon to secure as much sun heat as possible. Plants swelling their fruit to be assisted with a brisk temperature, both at top and bottom, from 65° to 70° at night, allowing it to rise to 80° on sunny days with a steady bottom heat of about 80°. When watering is necessary let it be given in sufficient quantity to moisten the whole of the soil. The suckers and crowns that were potted in the summer months should now be shifted, if they have grown freely; they should then be plunged in a brisk bottom heat in the succession-house or pit, from which the plants have been removed, to the fruiting-house. Any remaining suckers on the old stools to be taken off, potted, and plunged in a brisk heat in the nursing pit.

VINES.—The early house, or the first lot of Vines in pots, if it is intended to start them in November or December, to be pruned, that sufficient time may be allowed to heal up the wounds, and the buds to become more plump and prominent. The border of the early house to be thatched with straw, or covered with any other such material, to protect it from heavy rains. It is also advisable in some situations to cover the borders of the houses in which it is intended to keep Grapes late, to prevent the soil getting saturated about the roots. Continue to look over ripe fruit, cutting out the mouldy or tainted berries; applying gentle fires only when necessary to expel damps, with a free circulation of air—as a warm, close atmosphere is as injurious as damp. Where the long-rod system is adopted, the old shoots should be cut down as soon as the fruit is gathered; and, whatever system is adopted, if there are any shoots to remove they should be taken out as soon as they can be spared; the ends of the remaining shoots, if green, to be cut off. Continue to pay strict attention to late Grapes, look over them daily, and cut out every decayed berry.

## OCTOBER.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

The plants when newly set in the house are very liable to lose a portion of their leaves: these should be removed, and the plants kept supplied with water, so as to preserve the soil moderately moist throughout. Air to be given every day, and also a portion at night, if the weather continue mild.

BULBS (Dutch).—All kinds to be immediately potted and plunged in a convenient situation ready

to be removed, when wanted, to the forcing-house or pit. If potted and treated as advised some time ago, a few of them may now be excited into growth.

CHRYSANTHEMUMS.—Take up the plants from the open ground; choose a showery day for the purpose. After potting to be well watered and shaded for a few days, then placed in a cold pit, or removed to the greenhouse, and neatly tied to stakes. The buds to be thinned for a fine display.

GLADIOLI.—Pot them, and *Ixias*, *Sparaxis*, &c.; and to be watered sparingly until they begin to grow.

LILY OF THE VALLEY.—Pot some, to be treated as advised for Bulbs, that a regular supply of this favourite flower may be had during winter.

SHRUBS.—Get in, if not already done. A supply of American plants to be potted, as advised a fortnight ago, and plunged in old tan until wanted for forcing.

#### STOVE AND ORCHID-HOUSE.

Continue to act in unison with the season, allowing the temperature to decline slightly as light decreases. Although the *Aërides*, *Dendrobiums*, &c., will continue to enjoy a temperature of 80° by day and 70° by night, the *Cattleyas* will require 10° or 15° less to bring them to a healthy state of rest; for if kept in constant excitement they will continue to sprout buds from their pseudo-bulbs, which generally adds to the size of the plant at the expense of the blooms.

ACHIMENES PICTA.—Promote their growth by every attention, also *Gesnera zebrina*, which adds much to the beauty of the stove during winter.

BEGONIAS.—Encourage the different kinds for winter flowering by giving them larger pots if required.

EUPHORBIA FULGENS and SPLENDENS.—These are also worthy of especial attention, as they contribute to enliven the house at the dullest season of the year when flowers are scarce.

#### FORCING-HOUSES.

CUCUMBERS.—To prolong the season of fine crisp fruit it is necessary to keep the plants clean and healthy by giving them plenty of top and bottom heat.

FIGS.—The trees having no fruit likely to come to perfection, and whose leaves are fading, to be kept cool and dry, to induce an early rest. A seasonal rest should also be given by the same means to trees in pots, that they may be in a fit state for forcing early.

MELONS.—Continue to maintain a warm, dry atmosphere, to give flavour to the fruit. They will require little or no water after this.

PEACHES.—Vacancies to be filled with trees from the walls on the open ground. This is a plan preferable to having young trees from the nursery, which are usually some years in covering the space allotted to them. Where the lights have been wholly removed, after being repaired and painted, they should be put upon the houses to protect the trees and borders from unfavourable weather.

PINES.—Ripening fruit to be kept in a dry, warm atmosphere, to give it flavour. The swelling fruit to have a warm, moist atmosphere. Water to be given to the plants cautiously; every one to be examined before it receives any, and manure water to be dispensed with altogether. The heat of the dung-pits to be kept up by renewing the linings. The crowns and suckers that are planted in the tan to have no water; all they require is attention in giving air and keeping up the heat.

VINES.—Attention to be given to the young Vines in pots that are intended for forcing, that they may not become soddened, which would injure the young roots considerably. Where netting or any other such material had been used over the lights that open in houses containing fruit, to prevent the ingress of wasps, it may be taken down as little mischief will now be apprehended from their attacks. Mice are sometimes very troublesome in vineries at this season, and will spoil a whole house of Grapes in a short time if not prevented. Traps should, therefore, be kept set, and every means used to prevent their ingress from the garden. Cover the border when the trees are planted outside, with a good coat of fern or any other such material before they become saturated and chilled by the autumnal rains, to be laid on thickly in layers, beginning at the front of the border, the whole to be covered with a thin layer of good straw, and fastened down as a thatcher does the straw on stacks.

#### SECOND WEEK.

#### GREENHOUSE AND CONSERVATORY.

The plants being cleaned, surfaced, staked, and arranged, they will require but little beyond the ordinary attentions of watering and regulating the admission of air. Plants, when fresh surfaced, sometimes droop without any apparent cause, which generally arises from the roots being very dry; the fresh soil absorbing most of the moisture, and the water escaping between the pot and ball of earth. This is usually brought on by surfacing the plants when dry: as soon, therefore, as the consequences are observed, the plants should be examined, and sufficient water given to wet the ball of earth thoroughly.

CHRYSANTHEMUMS.—Treat them without further delay as advised in a late Calendar. An occasional and moderate supply of clear liquid manure will assist to develop their flowers to greater perfection. If any indication of mildew appear an application of the flowers of sulphur, when the foliage is damp, will banish it.

FUCHSIAS.—Encourage the young stock to continue their blooming by the application of a little weak liquid manure. When the flowering is over, and they have lost most of their leaves, they may then be set aside in any corner free from frost for the winter. To be kept moderately dry.

MYRTLES.—These and other such evergreen plants requiring protection to be placed in pits or frames, or in any other structure, as near the glass as possible. To be watered regularly; but, like all other plants, care must be taken that they do not get too much at any time during the winter.

#### STOVE AND ORCHID-HOUSE.

The plants that have taken their rest should be shaken out, and repotted; pruning back such as require it, and placing them in a gentle bottom heat. The Orchids showing bloom—such as the *Cypripediums*, *Phajus grandifolius* and *Stenorhynchus speciosus*—to be supplied with plenty of heat and moisture. Some of the other sorts—such as the *Catasetums*, the *Cycnoches*, *Lycastes*, &c., that are approaching their dormant state—to be accommodated, if possible, with a drier and cooler atmosphere. All fast-growing plants—such as *Clerodendrum*s, *Vincas*, &c.—that require large pots in summer, to be now turned out of their pots, the soil to be shaken from them, and repotted into the smallest sized pots that will contain them, without pruning the roots much at this time.

CLIMBERS.—Some of the most rambling will now want some pruning, more especially where they obstruct the light in any material degree. The *Combretums*, *Echites*, *Ipomsæas*, *Mandevillas*, late-blooming *Passifloras*, *Pergularias*, *Stephanotises*, *Thunbergias*, &c., which are still growing, to be regulated with a more gentle hand, cutting out but little more than barren shoots, and drawing the remainder into somewhat closer festoons, to allow the more free admission of sunlight into the interior of the house.

#### FORCING-HOUSES.

CUCUMBERS.—The plants for a winter supply of fruit should now be making progress. Keep the vines thin and use every means to keep up a good heat, with liberal admissions of air at all favourable opportunities, to get them strong and vigorous against the winter months. Stop mildew by dusting the leaves with sulphur.

MUSHROOMS.—Succession-beds to be made according to previous directions. Give a good sprinkling to those in bearing, to produce a genial humidity; and turn the covering material occasionally, to keep them sweet and free from mouldiness.

PEACHES.—When the trees in the early house are pruned, it is advisable to cover the cuts, when dry, with white lead, to prevent the admission of air and water to the wound. Wash the trellis, whitewash the flues and walls, and make every part of the house clean. Dress the trees with a mixture of soft soap and sulphur in hot water; to be well rubbed in with a brush or sponge.

VINES.—Continue to look over the ripe Grapes, cutting out any decaying berries. If the fruit is to be kept for any length of time, and if any plants, through want of other accommodation, must be kept under the Vines, they should be watered in the morning, using a little fire heat in the day, with air, to expel damp before night. Whatever system of pruning is adopted, whether the long-rod or spur, it is advisable, when the brown scale is visible, to take off the loose bark, to wash them, and the wires and rafters, with soft soap dissolved in hot water, using a hard brush, being careful not to injure the buds; afterwards to apply hot lime, made to the consistency of thick paint.

#### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

The decline of temperature and less watering must go on progressively, more especially in dull weather, with free ventilation at all favourable opportunities. If the weather be cold, use a little fire-heat occasionally during the day, especially where there are many plants in bloom, that

ventilation may be given to expel damp and stagnant air.

CINERARIAS.—Plants that have filled their small pots with roots to be shifted, according to their size and strength, into larger pots. The compost to be one part turfy loam, one part peat or leaf mould, and one part rotten horsedung. They delight on a cool bottom, and will thrive tolerably well in a cold pit, protected from frost during the winter. They should be placed on a dry bottom of coal ashes, and kept as near to the glass as possible.

HEATHS.—They may, if there is no room for them in the greenhouse, be kept in a cold pit, or frame, during the winter. Water to be given carefully on the forenoon of a fine day. Frost to be excluded by mats, or other covering; but they can be grown sufficiently hardy by free exposure to bear a few degrees of frost without injury if they are shaded from the sun's rays until gradually thawed.

MIGNONETTE.—Sow, to come into bloom about the end of February. The soil to be rich, light, and the pots to have a good supply of crocks at the bottom, as the success of growing this favourite plant through the winter will depend in a great measure upon the drainage and keeping the plants dry and untouched by frosts. Those who have a hotbed frame will find it useful to start the seeds by moderate heat. Others who have no such convenience may place their pots in a cold frame in a sheltered situation, and upon a floor of rough stones overlaid with ashes.

PELARGONIUMS.—The more dormant they can be kept during the winter the better. Therefore, only a very moderate supply of water should be given to keep them from flagging, and a liberal supply of air at all favourable opportunities.

VERBENAS.—To be placed on swing or other shelves as near to the glass as possible. They require plenty of air, the extirpation of green fly, and a moderate supply of water to preserve them in a healthy condition.

#### STOVE AND ORCHID-HOUSE.

FERNS.—Sow the seeds, or spores, when ripe. A convenient sized pot to be filled with sandy peat, finishing with a few rough lumpy pieces to form an uneven surface. The seeds to be shaken over the tops and sides of these pieces of soil, by which there is more probability of some of them vegetating than if they had been sown on a level surface where the whole of the seed would be subjected to the same kind of treatment, which might with ordinary care be either too wet or too dry. The pot to be set in a saucer that contains a little water, which will feed the whole mass with sufficient moisture without a drop being required on the surface of the pot. The seedlings succeed best in a cool part of the stove where evaporation can be most effectually prevented; but they do not like to be continually kept close under a bell-glass.

#### FORCING-HOUSES.

CUCUMBERS.—Top dress the plants in pots or boxes with leaf mould, supplying those that are rooting freely with an abundance of atmospheric moisture, and free circulation of air, stopping at every second joint, and setting the fruit as the blossom expands.

STRAWBERRIES.—It is usual, when the stock of plants in pots is large, to lay them on their sides on the south side of a wall or fence, packed in dry coal ashes, and topped with boards, or any other such covering, to protect them from heavy falls of rain until they are wanted for forcing.

#### FOURTH WEEK.

##### GREENHOUSE AND CONSERVATORY.

As fresh air is indispensable for the health of plants, and as fogs occur about this time, it is essential to apply a little fire-heat during the day, to expel damps, and to cause a desirable activity in the circulation of the air. Attend to cleanliness, picking off dead leaves, and the destruction of insects.

BULBS.—Pot Hyacinths, Narcissi, Tulips, &c., to flower late in the spring; also the Ixiæ and Gladioli, and various other Irideæ; and also Oxalis, Lachenalia, &c. They delight in light open soil composed of peat, loam, and sand, and rotten leaf mould as an addition to, or substitute for, the peat.

CINERARIAS.—Give the final shift to the plants intended to flower as specimens in early spring.

CHRYSANTHEMUMS to be treated with manure water occasionally. All suckers and spindly shoots to be removed, and the flowers to be thinned.

PELARGONIUMS.—A little fire-heat by day, with plenty of air, will be of service to drive off the damp and stagnant atmosphere caused by heavy rains. Watering, if necessary, to be given in the morning; the principal shoots to be tied into a regular form, and the weakly and useless

ones removed; to be placed near the glass, to encourage a sturdy, short-jointed growth. Two ounces of the Gishurst compound, dissolved in one gallon of soft water, will speedily banish the green fly.

## FORCING-HOUSES.

CUCUMBERS.—Keep them tied in as they grow; stop the side-shoots at the second joint; allow the leader to grow to the required length before stopping it; and pinch off the young fruit if you think they are not sufficiently strong to carry a crop.

PEACHES.—Prune and dress the trees as soon as they lose their leaves. If the lights are still off any of the early houses the sooner they are put on the better. An abundance of air to be given.

PINES.—The temperature of the fruit-swelling plants to range from 60° to 65° at night, with an increase during the day in accordance with the state of the weather, whether bright and sunny, or rainy, foggy, or frosty; and the succession plants a few degrees less. Humidity to be considerably reduced, as it tends at this season to produce weak and immature growth. The bark-beds of strong succession plants that are required to start into fruit early, to be renewed by having a small quantity added to the surface of the bed. Pits heated by dung will require covering with mats at night: when covered let every other light be slightly raised, to allow the steam to pass off. When the covering is off it will escape through the laps of the glass. Take advantage of all opportunities for giving a little air. If it can be done every day, so much the better for the health of the plants.

VINES.—The Vines in late houses that will not require to be pruned for some time should have the tops or other portions of the immature wood cut off, to give strength and plumpness to the back eyes. If the houses are dry, kept free from drip, and the scissors employed amongst decaying berries, the fruit that now remains will be in a good condition for holding on for a long time.

# NOVEMBER.

## FIRST WEEK.

### GREENHOUSE AND CONSERVATORY.

Now that the dull, foggy days and sharp frosty nights have arrived, it is necessary to keep all plants that have finished their growth free from excitement, and rather dry at their roots. A gentle fire to be applied during the day, which will allow the advantage of a free circulation of fresh air, and, by closing up early in the afternoon, will retain sufficient heat to resist the encroachments of ordinary frosts during the night. But if the frost should set in severely, night coverings, if possible, should be applied in preference to fire-heat.

AMERICAN PLANTS, &c.—Pot, if not done, Rhododendrons, Kalmias, hardy Azaleas, Lily of the Valley, and other plants usually required for winter forcing.

CHRYSANTHEMUMS.—They will require an abundance of air to prevent the flowers expanding weakly. Keep them well supplied with water, and the leaves in a healthy state; for a great portion of their beauty depends upon so doing. They may sometimes be seen almost entirely denuded of leaves when in flower, which considerably detracts from what should be their ornamental appearance in the greenhouse or conservatory.

PRIMROSES (Chinese).—Give a few of the strongest and most forward a shift into larger pots. The double varieties are very useful for cutting where bouquets are much in request, as they do not drop the flowers like the single varieties.

### STOVE AND ORCHID-HOUSE.

Great caution will now be necessary in the application of atmospheric heat and humidity, as an excess of either will cause a premature and unseasonable growth which no after-care could thoroughly rectify. The thermometer for the majority of stove plants need not at any time of the day exceed 60°, with a fall of 8° or 10° during the night.

BEGONIAS.—They deserve a place in every stove, as they are plants of easy cultivation, and bloom at a season when flowers are scarce; they can also be introduced to the conservatory or sitting-room when in bloom.

## FORCING-HOUSES.

HOTBEDS.—Keep up the heat of dungbeds by adding leaves and dung to the linings; but not sufficient of the latter to cause a rank steam in the frames.

PEACHES.—If any vacancies occur in the late houses they should now be filled up. We have before recommended trees of large size to be taken from the walls for this purpose, but in so doing care should be taken to select such sorts as the *Murray*, *Elruge*, and *Violette Hâtive* Nectarines; *Noblesse*, *Royal George*, *Grosse Mignonne*, and *Chancellor* Peaches, being the best adapted for forcing. Some sorts are of little value as forced fruit, although they may bear abundantly.

PINES.—Coverings to be used, and as little fire-heat as possible, to keep up the required heat during the night. The heat of the spring-fruiting and succession-houses to be gradually decreased, so that it may range from 60° to 65°. The winter-fruiting plants to range 10° higher.

VINES.—The Grapes will require unremitting attention to keep the house dry, and to cut out the decayed berries. It will, we suppose, be generally observed that the fruit that was ripe before wet weather sets in will keep better than the more backward ones, which may be a useful hint “to make hay while the sun shines,” or, in other words, to ripen the fruit in good time. Prune and dress the Vines in the succession-houses as recommended for the early ones. When Vines have been taken out of the house they should be protected from the vicissitudes of the weather, as they are sometimes greatly injured by being exposed to excessive wet and severe frosts.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

Continue to admit air in favourable weather, but not in currents; shut up early; use water sparingly, and always tepid—giving little or none to succulents and plants in a state of rest.

FLOWERS.—Where there is a pit at liberty it may now be prepared for forcing flowers. The glass must be thoroughly cleaned, as light is of importance at this season. The tree leaves when gathered to be mixed with a portion of well-prepared dung, to produce an early action, and about nine inches of tan or sawdust placed over them in which to plunge the pots. The plants, if in proper condition, may be introduced immediately—viz. Azaleas, Camellias, Persian Lilacs, Gardenias, Moss and Provence Roses, Rhododendrons, Sweet Briars, Honeysuckles, &c. The Hyacinths, Narcissi, Tulips, and other bulbs that have been potted early, as advised in due season, may be introduced successively in small quantities when the buds are an inch or two long, plunging them in any out-of-the-way part of the pit, covering them for a time with four or five inches of old tan.

HEATHS and NEW HOLLAND PLANTS.—Water them sparingly. Dry the atmosphere if necessary by lighting a slight fire on fine days. Give air freely.

PELARGONIUMS.—Shift and tie out as they may require. A few of the most forward may be accelerated by a little heat.

PRIMROSES (Chinese).—Water with caution. Two or three small pegs to be stuck into the soil around each, to keep the stem and plant erect in the pot. Thin out weak and deformed bloom-buds.

### STOVE AND ORCHID-HOUSE.

The resting section of Orchids should now be allowed to settle down gently to their annual repose by withholding water at the root, by diminishing the amount of atmospheric moisture, and by giving a more liberal ventilation than in the growing season. The more evergreen kinds—such as some of the *Aërides*, *Dendrobiums*, *Saccolabiums*, *Vandas*, &c., to be favoured with the warmest situation.

## FORCING-HOUSES.

ASPARAGUS.—Where it is wanted early, preparations should now be made for forcing it. Any old Cucumber or Melon-bed that still retains a gentle heat may be used for the purpose. The plants to be placed as closely as possible, and covered with three or four inches of any light soil. The application of linings will supply any deficiency of heat that may be caused by severe weather. When the heads come up, to be supplied with an abundance of light and air.

CHERRIES.—Look over the plants in pots, and if they require shifting into larger pots it may be done at once. The pots to be plunged in coal ashes, or any other loose material, to protect the roots from frost, and where they will commence rooting immediately.

FIGS.—If the summer and autumn attention has been given to them, as advised, very little, if

any, winter pruning will now be required; but if such is necessary it may be done as soon as the leaves fade. The trees to be carefully washed clean all over with soap and water, and then painted over with a mixture composed of one ounce of soft soap and one ounce of sulphur to a quart of water. Trees in pots to be shifted, or top-dressed, as may be necessary. Shifting is only recommended when it is desirable to increase the size of the trees. To be afterwards placed in a shed with the pots plunged in leaves.

PINES.—The plants on which the fruit has recently appeared to be encouraged with heat and moderate moisture; but those that are likely to “show” for the next two months to be supplied with a temperature to keep them progressing slowly that they may be just beginning to swell their fruit when the days and sun are lengthening and strengthening. The state of temperature of the beds recently renewed with tan to be examined frequently, as they sometimes become suddenly too hot. Now, when Oak and other tree leaves can be collected, it is advisable to use half leaves and half dung for lining the pits heated by fermenting materials; the leaves contribute to make the heat more regular and lasting. Give no water to the succession plants during dull weather except to such plants as are near the flues and pipes, and are apt to get over-dry in consequence.

SEA-KALE.—If this delicious vegetable is wanted early, a small hotbed should be made in some convenient place; the roots to be taken up and placed upon it, covered with a little light soil, and protected by boards or any other contrivance most convenient and suitable to exclude light and the inclemency of the weather.

RHUBARB.—The same as advised for Sea-kale. Where a Mushroom-house is at work is the best place for both.

VINES.—All fading leaves to be removed from the Vines on which fruit is hanging, and the house to be kept dry, light, and airy, and free from anything likely to create mould or damp.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

Careful attention should now be given to the picking off mouldy and dead leaves, decaying flower-stems, &c., as they spread contagion wherever they touch. Drip to be prevented, and atmospheric humidity to be disposed of by a gentle day fire occasionally, and the free admission of air.

AZALEAS (Chinese).—Introduce a few into heat for early bloom. The *A. Indica alba* and *Phœnicea* are best to begin with; to be succeeded by *Smith's coccinea*, and after it any of the other varieties. As decorations for the conservatory or drawing-room they are invaluable where they continue for six weeks or two months in perfect beauty.

CAMELLIAS.—Water, when necessary, to be given in a slightly tepid state, and plenty of air, that the buds may be allowed to swell full and prominent by a slow but sure process. If bloom is required early, to be forwarded by introducing them into a situation where heat is applied.

#### STOVE AND ORCHID-HOUSE.

Withhold moisture entirely from the roots of deciduous Orchids, and such as are sinking into a state of repose. Any late specimens, or importations, making late growths to be favoured with the best light situations in the house and a little water, to keep up the vitality sufficient to produce the secretions necessary to carry them safely through the dull days of winter. Look over all growing plants, and see that they do not suffer for want of water. Look to every Orchid, even the smallest growing on blocks or in baskets, they all require attention. Repot or surface dress any that require it. A favourable day to be chosen to wash the lights for the more free admission of that agent most indispensable for their health. The whole to be kept neat, and free from insects; and the plants on stages, tables, or suspended from blocks, baskets, &c., to be arranged in a manner the most suitable for a picturesque and pleasing effect.

#### FORCING-HOUSES.

Where early forcing is intended it is advisable to give a thorough cleansing to the houses by limewashing and dressing the wood of Cherries, Figs, Peaches, Vines, &c., as frequently directed.

BEANS (Dwarf Kidney).—Sow in six-inch pots; when crocked to be filled within three inches of the rim with a compost consisting of old Cucumber or Melon mould, rotten dung and leaf mould in about equal proportions. To be placed in any convenient part of the forcing-house for a few days until the soil is warm. The Beans are then sown about ten or twelve in each pot, and pressed by the finger about an inch below the soil. In a week they will be up; to be then thinned out, according to the strength of the plants, to six or eight in each, and to receive a gentle watering. When the two first leaves are fully developed the plants to be earthed up as high as

the cotyledons. To be regularly syringed and watered at the roots, taking especial care that they do not become too wet, or they will damp off. When they have made two joints to be stopped, to cause them to produce laterals and bearing branches. The plants to be placed as close to the glass as possible. The *Chinese Dwarf* and *Fulmer* are good sorts for forcing.

FIGS.—A temperature of about 40° will suit them at present; if allowed to get lower they are very apt to suffer. Trees in pots to be removed to any house where that degree of temperature is kept up.

PEACHES.—Where the roots are inside, and have been kept dry, an application of weak, clear liquid manure, at the temperature of summer heat (76°), will act as a stimulant to the roots, whose services are required before much excitement takes place at top.

PINES.—Now, at the dullest season of the year, it is necessary to be very cautious in regulating the bottom and surface temperatures, more especially in the succession-houses or pits; a bottom heat of about 70°, with a steady top temperature of about 60° during the day, and about 55° during the night, will keep the plants in a comparatively comfortable state of rest, neither allowing the temperature to decline so low as to reduce their vitality to such a degree as to endanger their restoration to vigour in proper season, nor to rise so high as to excite them into a growth that would be immature for want of solar light and heat. A moderate application of water will also be necessary.

VINES.—When the Grapes are all cut, prune the Vines without loss of time, that the wounds may have sufficient time to get perfectly healed before they are excited into growth. If delayed until early spring, bleeding will be sure to follow. Vines in pots intended for forcing should either be placed within the protection of the house appropriated to them, or secured from the effects of severe weather.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

The great object should now be to keep them moderately dry; water, when necessary, to be given in the forenoon. Gentle fires to be applied in the daytime, with a sufficiency of air to allow the vapour to pass off. All decaying leaves, flower-stalks, &c., to be carefully picked off. All weeds, moss on the surface of pots, or anything else that would tend to cause dampness, mildew, or decomposition, to be cleared away. Pinch off the tops of any of the half-hardy plants that are growing too rapidly.

CLIMBERS.—To be closely tied, that they may interfere as little as possible with the admission of light.

FORCING PIT.—The various plants described in former Calendars, and recommended to be forwarded here for furnishing the drawing-room, conservatory, or mixed greenhouse, will require careful and skilful attention. Moderate syringings with tepid water to be given on suitable occasions. Fire heat to be applied, more especially in the daytime, with air at every favourable opportunity. The pit to be shut up early, and the heat to be husbanded by external coverings in preference to night heat. Syringings with the Gishurst Compound, or frequent and moderate fumigations of tobacco smoke, to be given to destroy green fly. The water to be always tepid when applied to the roots or branches when they require it.

NEW HOLLAND PLANTS.—As they are very apt to suffer when exposed to cold draughts of air, and as they are generally wintered in the same house with the more hardy sorts of greenhouse plants, they should occupy a part of the house where air can be admitted, when necessary, from the top lights only.

ORANGE TREES.—Advantage to be taken of unfavourable weather for out-door work, to clean the foliage of Orange trees and Camellias. It is as essential to the health of such things that the foliage be kept clean, and, therefore, in a fit state to perform its functions, as that their roots be kept in a healthy, active state.

### FORCING-HOUSES.

ASPARAGUS.—Make a slight hotbed of tree leaves, if they can be procured, of size or substance sufficient only to cause a gentle heat. The roots may be taken up from the open ground, and planted at once in the bed. Mice and slugs to be looked after. Any vacant pits, or frames, may be made available for the purpose of forcing Asparagus.

CHERRIES.—To be treated as advised for Peaches.

CUCUMBERS.—If the plants are strong, and you have a full command of bottom and atmospheric heat, you may calculate, with a little attention, upon ultimate success. Air to be admitted when it is safe to do so, to get the leaves dry, if possible, daily. Light is indispensable, and steep-



roofed houses, or pits, are preferred for that object in winter. The early nursing-box for young plants should be well supplied with linings, the glass washed clean and kept in good repair.

MUSHROOMS.—Continue to prepare succession-beds as formerly directed. The beds that have been in bearing some time, if the surface is dry, to be watered with clear, weak liquid manure, a few degrees warmer than the temperature of the house.

PEACHES.—The early house should now be set in order, by being thoroughly cleansed, whitewashed, and the trees pruned, dressed, and tied. Air to be given during the day, and the house to be shut up at night for a fortnight or three weeks, preparatory to the commencement of forcing.

PINES.—The principal objects of attention during this dull season should comprise a moderate declension of heat and moisture, and a moderate supply of air at all times when it can be admitted with safety. When heat is supplied by fermenting materials the linings will require some sort of covering—as straw, fern, boards, or shutters—to protect them from cold winds, frosts, or rains; only a gentle bottom heat is now required at this, that should be, their season of rest, as a dry and moderately warm atmosphere is nearly all they will require. If the young plants are growing in pits heated solely by dung linings, be careful to exclude the steam from the dung, as excess of damp will rot the hearts of the plants.

VINES.—If early Grapes are required, it is advisable to adopt the old-fashioned plan of placing some sweet hot dung inside the house, to produce an atmosphere that is most congenial for softening the wood, and for “breaking” the buds. The roots, if outside, to be covered with a good depth of litter, to produce an increase of heat by fermentation, and to prevent the escape of terrestrial heat. All Vines casting their leaves to be pruned immediately.

## DECEMBER.

### FIRST WEEK.

#### GREENHOUSE AND CONSERVATORY.

Every endeavour should now be made to keep these houses as gay as possible. Fire-heat to be applied occasionally during dull, dark, or rainy weather, taking care not to raise the temperature too high—say greenhouse from 50° to 55° by day and from 40° to 45° by night; conservatory 60° by day and 50° by night. Chrysanthemums to be removed as soon as they get shabby, to be succeeded by early Camellias. The *Euphorbia jacquiniflora* is well worthy of attention now; it requires but a very moderate allowance of water at this season, as the least saturation or interference with the root action will cause the leaves to turn yellow while the plant is in flower. *Poinsettia pulcherrima* is also worthy of particular attention as a noble ornamental flower at this season. The old *Plumbago Capensis* and *rosea* still retain their places amongst our best plants at this season. Acacias and Cytisuses, being yellow and showy, give, with the other flowers, a variety of colours to beautify the whole. *Gesnera zebrina* should not be forgotten; the elegant markings of the leaves contribute to enhance the beauty of this beautiful winter flower.

HEATHS.—As fire-heat is generally injurious to this tribe of plants it is advisable to be very cautious in its application. They can bear a good deal of cold and some degrees of frost without sustaining any very serious injury; but they cannot bear the drying influence of fire-heat without serious damage to their foliage, and which is very frequently death to the plants. They will require but very little water, especially the large specimens, which should be very particularly examined as to their state of dryness or otherwise, as a guide to the application or withholding of water. An abundance of air to be given on fine days, to keep the plants from growing.

#### STOVE AND ORCHID-HOUSE.

A cautious application of fire-heat to be still observed here. The temperature to be kept rather low than otherwise, for fear of exciting premature growth. A small portion of air to be admitted on fine days, to purify the atmosphere of the house. Keep the surface of the soil in the pots free from weeds, as also from moss and lichen; but when doing so do not loosen the soil so as to injure the roots near the surface. Keep every plant free from dead leaves, and all climbing plants neatly tied up. The Achimenes, Clerodendrons, Erythrinas, Gloxinias, and the various bulbs will now be approaching a state of repose, and therefore will require but little or no water. To prevent confusion or mistakes it is advisable to place them on a shelf, or some other part of the house, by themselves. Although dormant, or nearly so, they require a stove

temperature to keep them safe and sound.

## FORCING-HOUSES.

ASPARAGUS and SEA-KALE.—Make up beds as wanted.

MUSHROOMS.—Keep a moist atmosphere in the house, and the temperature steadily at or near 60°. A fresh bed to be made and spawned every three or four weeks, to produce successional crops.

PINES.—The fruit now swelling will require the temperature and moisture of the house or pit to be kept up. Those intended for the main crop to be kept in a regular state, allowing them air at every favourable opportunity, with a day temperature from 70° to 75° and from 55° to 60° at night. Plants in bloom to receive careful attention. Keep the atmosphere dry with a brisk temperature, admitting a little fresh air at favourable opportunities, to prevent them from being injured by damp. When the heat is kept up by dung linings, constant watching will be necessary to prevent any fluctuation of temperature, having materials at hand to assist in case of frost.

VINES.—Where forcing has commenced attend to the breaking of the Vines by the application of fermenting manure inside the house, as advised last week, which will be found the best means of keeping the atmosphere regularly moist; but if such cannot be used, the wood should be syringed frequently, and evaporating-pans, or troughs, kept full of water. The roots, if outside, to be protected, and afforded a steady, gentle warmth until the buds are fairly swelled. As it is advisable to proceed very slowly with early Vines, the temperature to range from 55° to 60° by day and from 45° to 50° by night, and even rather under than over the above scale. Late Grapes will require great care to preserve them from damp. Look over them frequently, and dry the house by fire during the day.

## SECOND WEEK.

### GREENHOUSE AND CONSERVATORY.

Every dead, decaying, and mouldy leaf, and flowerstalk, to be removed as soon as they are seen. Mildew to be banished by an application of flowers of sulphur, and afterwards to be prevented from making its appearance by a free ventilation on clear, mild mornings, using a little fire heat at the same time. Great caution is now necessary in giving water to the plants, more especially to such as have not well matured their growth, and are in a rather soft state. It is also advisable to look over them every morning, that the flagging of a leaf may be noticed, and the necessary supply of water be given. All pots to be turned around occasionally to keep the plants uniform.

CALCEOLARIAS.—Remove all decayed leaves, and be careful to give no more water than is really required. Keep down green fly.

CINERARIAS.—No more fire heat to be given than is necessary to keep out frost. The plants intended for large specimens to receive their final shift; air to be given on all occasions in favourable weather. Every one that is getting pot-bound to be shifted. Green fly to be kept down by fumigating. The most forward to have the lightest place in the house, close to the glass, with sufficient space for the air to circulate freely around the foliage of each.

PELARGONIUMS.—To be kept rather cool and dry; fire heat to be avoided, except when necessary to prevent the temperature falling below 40°, or to dispel damp. Every plant intended for early bloom to be arranged in the best form. The system of arranging a piece of twisted bass under the rim of the pot, to which loops are fastened to secure the shoots and the better formation of the plant, obviates the too-extensive use of sticks, a superfluity of which is at all times objectionable.

### STOVE AND ORCHID-HOUSE.

Continue to act as advised lately. Care and caution in the application of water are more especially required, as there is not a single feature in the cultivation of plants during the winter in which the amateur is more likely to err, and by reason of which a greater amount of injury is sustained, than in the application of water either in its fluid or vaporous state. If applied to the soil in superabundance, the roots, being inactive, are certain to sustain some degree of injury; and if it is applied in excess to the atmosphere in the form of vapour, the exhalations from the leaves of the plants will be checked in consequence of the density of the medium that surrounds them when they will be sure to suffer.

## FORCING-HOUSES.

CUCUMBERS.—Sow some good variety for planting out next month. A one-light frame on a well-

worked bed of dung and leaves is most suitable for the purpose, as producing an atmosphere moist and congenial for their healthy vegetation and growth.

PEACHES.—Syringe the trees that are just started and swelling the buds, and keep every plant clean and neat.

PINES.—When the application of fire heat is necessary during severe weather, it is advisable to pay particular attention to those that have done blooming and swelling off in various stages, that they may not receive a check from being over-dry at the roots.

VINES.—Leaves, or dung, or both mixed together, when used to produce fermentation, and a sweet vaporous atmosphere to “break” the early Vines, should be turned and watered at least once a-week. Keep the wood generally moist, and proceed in forcing with caution as before advised. As the most essential point in early forcing is to secure a healthy and vigorous root action, it is advisable, if the Vines are planted inside, to excite the roots by an occasional application of water at a temperature from 85° to 90°. If the Vines are planted outside, a steady heat of about 60° should be maintained by the fermenting matter placed on the border to be frequently turned over, and protected with dry litter from the frost or other unfavourable weather. Houses intended to commence forcing the early part of next month, to have some fermenting materials placed on the borders to excite the roots a little before the Vines are started, which will be of some assistance to make the buds push strongly and without much loss of time. To induce the buds to break regularly throughout the whole length of the Vine, it is frequently necessary to bend the rod so as to incline the most forward buds to the lowest level, and to elevate the most backward.

### THIRD WEEK.

#### GREENHOUSE AND CONSERVATORY.

As many of the hard-wooded plants are impatient of fire heat and a confined atmosphere, it is advisable to use no more artificial heat than is absolutely necessary. The drying effects of fire heat must be counteracted by a supply of moisture; the moisture becomes condensed on the glass and falls in drips, that are apt to spoil the beauty of the flowers, and to injure the foliage of the plants. The best corrective for such unfavourable results is to be found in keeping the temperature as low as may be consistent with the safety of the plants, and in withholding moisture as much as possible whenever the glass is affected by frost. See that the young stock of Heliotropes, Scarlet Geraniums, Persian Cyclamens, and other such flowers, that are grown especially for winter, are accommodated with a light, airy situation, and receive regular attention as regards watering. Avoid watering the Pelargoniums until they are thoroughly dry, and keep down insects.

#### STOVE AND ORCHID-HOUSE.

The plants in the stove should be kept as quiet as possible, and only just sufficient water given to keep them from flagging, to be accompanied with a moderately low temperature; about 60° by day, and 50° by night, the object being to prevent them from growing before the spring of the year. Admit air when it can be done safely, but do not expose the plants to cold, frosty winds at any time. As our collections of Orchids are from countries with different seasons of growth, and various kinds of temperature and climate, it is difficult to cultivate in one house a miscellaneous collection of them so satisfactorily as where there are two divisions, the one commanding a higher temperature, with more moisture, than the other. Where there is no such division, advantage may be taken of a forcing-pit, or other such house, to which any of them now in a growing state may be removed, and thus their growth may be promoted without injury to the general collection. For the general collection a drier atmosphere and lower temperature are now desirable, as no plants are more benefited by a season of rest than Orchids.

#### FORCING-HOUSES.

All VINES, PEACHES, and FIGS in POTS, or TUBS, to be secured from frost and wet. A fermenting body in a forcing vinery is an excellent plunging medium for such of these as are wanted very early. Keep up a succession of Asparagus, French Beans, Rhubarb, Sea-kale, &c., according to the demand.

CUCUMBERS.—Thin out the fruit occasionally, more especially if too many appear at one time. If any plants have been bearing some time, and now appear nearly exhausted, they may be rallied into vigour again by a judicious pruning and thinning, and by the application of a top dressing of leaf mould or other such rich, light soil, and of liquid manure occasionally.

PEACHES.—A moist heat, arising from dung or leaves, is as beneficial to Peach trees as to Vines before they break, but as it can but rarely be made use of, in consequence of the difference in the structure of the interior, moisture must be supplied by other means, such as syringing and sprinkling the flues, or pipes, when warm. A few trees, in pots, are useful for early forcing, as

they can be easily plunged in a pit or any other convenient place where a mild regular bottom heat can be supplied. The trees for this purpose must have been grown and established for some time in pots.

PINES.—A regular heat, both bottom and atmospheric, to be kept up to carry the general stock of fruiting plants safely through the winter. A high and close temperature to be avoided in the management of the succession plants.

STRAWBERRIES.—If ripe fruit is wanted very early, some of the strongest plants, if treated as advised, should now be selected, and placed in a pit where they can get a gentle bottom heat, or on the back or front shelf of a vinery or Peach-house, just started for forcing, to be placed near the glass with a free admission of air on fine days.

VINES.—It is advisable, when beginning to force, to commence with a low temperature—say, 55° by day and 50° by night, to be increased 5° more until they break, when it may be raised to 60° at night, and 65° in the day, or thereabouts, allowing a rise of a few degrees by sun heat. The Vines to be syringed evening and morning until they break, and the walls and floor kept damp. If the stems of the Vines are near the flues, or pipes, wrap moss over that part, and keep it constantly moist. The Vines in the late houses to be pruned, the loose bark to be removed, and the scale, if visible, to be banished by an application of the Gishurst Compound, or by the more ancient composition of sulphur, soft soap, and tobacco water. Where the fruit is ripe, a little fire heat will be necessary in frosty weather to prevent the vapour that adheres to the glass on the inside being frozen, for the moisture on thawing is apt to drop upon the bunches causing injury to the bloom, and decay to the berries.

## FOURTH WEEK.

### GREENHOUSE AND CONSERVATORY.

Continue to keep the supply of heat and moisture at the lowest degree compatible with the safety of the plants from frosts. In damp, foggy weather, a gentle fire to be applied occasionally during the day to expel moist, stagnant air. During severe winterly weather it is advisable to be cautious in the application of heat, more especially at night. From 45° by night to 50° by day will be sufficient for the conservatory, and 40° for the mixed greenhouse. To give a pleasing variety to the appearance of these houses it is advisable to rearrange the plants occasionally; those going out of flower to be removed, and a fresh supply introduced from the forcing-pit. All plants in these and other departments to be regularly looked over, removing the dead leaves and tying in straggling branches. The surface soil to be stirred a little, and some fresh added. As all compost-heaps are benefited by exposure to frosts, it is advisable to turn over the caked or frozen surface every morning, until the whole is turned over and penetrated by the frost, by which grubs and all such kinds of vermin are destroyed, and the soil considerably ameliorated.

CALCEOLARIAS (Herbaceous).—To be shifted into larger pots if they require them, to be kept near the glass, to be watered moderately through a fine rose, and on no account to be allowed to get thoroughly dry. To be careful when removing decayed leaves, not to pull or to cut them off too close to the stem, by which the flower-shoots would be very likely to get injured.

CAMELIAS.—Great care is necessary that they may not be exposed to great alternations of temperature, which are sure to cause them to drop their flower-buds. The great reason why flower-buds very often fall off without properly coming into bloom, is the too sudden changes in the temperature to which they are exposed. For instance: when the buds are nearly ready to expand, a sudden heat causes them to push too rapidly; and, on the contrary, a decrease of warmth at the time checks their growth, and in other cases causes them to fall. The heat required to expand the blossom-buds is about 60° by day, and 50° by night. If this be attended to, the plants will continue in flower for a great length of time, as the plants in that heat are not excited to grow. A little weak manure water to be given occasionally to the blooming plants.

CHRYSANTHEMUMS.—When they begin to fade, to be removed to the north side of a wall or fence, the pots to be plunged in old tan, leaves, or sawdust, to protect them from the severity of winter.

CYTISUSES.—Place them and other such early-flowering plants in the coldest part of the house, where they may receive plenty of air at all favourable opportunities.

ORANGE TREES.—These, or other such plants that have not been recently potted, to be surfaced by removing a little of the top soil and supplying its place with fresh. Attention to be paid to keeping the leaves clean and healthy.

### STOVE AND ORCHID-HOUSE.

As it would be improper to attempt to maintain the same degree of heat in any structure, when the external temperature is below the freezing-point as may be permitted if it were 10° or 15° above freezing, we would advise from 50° by night to 60° by day, for the stove and Orchid-

house. As many plants, especially Orchids, suffer from drip at this season, a careful look-out should be kept, and either the cause remedied or the plants removed. The decoration of the hothouse would now depend in a great measure upon Begonias, Euphorbias, Luculias, &c. Such plants should be carefully tied up and placed in the most conspicuous situations, or some of them may be removed to the conservatory so as to prolong their season of blooming.

ALLAMANDAS.—Continue the temperature and treatment as lately advised. To be potted, as also *Stephanotis*, &c., and trained preparatory to starting them into growth, about the beginning of the new year.

FORCING-PIT.—Introduce such plants as are generally used for forcing, especially the sweet-scented sorts, Lily of the Valley, Sweet Briar, Lilacs, some of the Tea, Bourbon, or Hybrid Perpetual Roses, and bulbous plants.

IXORAS.—To be elevated near the glass to set their bloom, and to have plenty of air at favourable opportunities.

#### FORCING-HOUSES.

CUCUMBERS.—No diminution of heat to be allowed after the plants are ridged out and in action.

PEACHES.—It is becoming very much the fashion to have Peach and some other sorts of fruit trees which are wanted for early forcing in pots, and the plan is so far good, that it affords the advantage of being able to give the roots a mild, regular bottom heat, which is of the greatest importance in early forcing. Those who have good established trees, in pots, may now start them in a moderate heat. Air to be given liberally in favourable weather, and the syringe to be used freely over them morning and evening. The surface soil to be stirred up and kept open, and a supply of manure water to be given previous to starting them. The trees in the late houses to receive whatever pruning is necessary, and to be cleansed of every particle of scale, and afterwards washed with a composition of soft soap and sulphur. All bast ties and insect-haunts to be carefully removed.

PINES.—During the continuance of severe weather, dry fern, straw, &c., will be necessary, in addition to mats; such coverings will be of more service than maintaining strong fires to keep up the temperature. When a supply of fruit is required throughout the year, it is sometimes necessary, at this season, to subject some of the plants to a high temperature to start them into fruit. A few of such as are most likely to fruit soon, to be put into a pit, or house, by themselves, where a temperature of from 60° to 65° by night, and from 70° to 75° by day, with about 80° of bottom heat, will be the most certain treatment for starting them into fruit. The other plants can then be supplied with a moderate temperature until the beginning of February; by such treatment a succession of fruit will be prolonged. Do not suffer the linings of dung-beds to decline, keep up, if possible, a temperature of 50° at night, and 60° by day, with a little air at every favourable opportunity.

POTATOES.—Plant some sound, whole sets, singly, in three-and-a-half-inch pots, to be placed at the back of a Pine-pit, or in any other place where there is some heat, they will, in due time, be useful for planting out in the exhausted Asparagus-frames or pits.

RASPBERRIES.—When a few early dishes would be considered a treat, if some canes are taken up and planted in any vacant spot in the Peach-house, they will be found to bear fruit abundantly with common care. It is a more certain method of obtaining fruit than by potting them.

VINES.—When started and until the buds are fairly broken, endeavour to keep the points of the shoots nearly on a level with the lowest part of the Vine, and if that should not be found sufficient to induce the buds to start regularly throughout the whole length of the Vine, the rod should be bent so as to bring the most forward buds to the lowest level, and elevating those that are backward. A moist atmosphere to be kept up by sprinkling the floor and paths, and by syringing the Vines lightly every morning and evening until the leaves begin to appear, when the supply of moisture will not be so much required. Introduce a lot in pots to some house, pit, or frame prepared with leaves or manure, if not done as advised last week. At first, Vines in pots are most useful for early work, as they, in many places, save the established Vines in houses, from the hazardous operation of early excitement. Increase the temperature slightly when the buds are beginning to swell, or are starting a little. The fermenting material in the house to be stirred up occasionally. This fermenting material should, if possible, consist of a large proportion of leaves mixed with the dung, to prevent the steam from the latter discolouring the rafters and sashes; and if the vapour is likely to be too strong, a thin covering of sawdust or old tan will prevent any injurious effects. If the roots are outside the house, and had been covered before the commencement of frost, as advised, some more dung and leaves should be added to keep up a genial heat in the border, the good effects of which will be soon evident in the progress of the Vines inside. When the Grapes are all cut in the late houses, the Vines to be pruned immediately, and the cuts to be covered with white lead.

Irregularly hyphenated words have been left as they appeared in the original. A few minor punctuation errors and omissions have been silently corrected.

The following typographical errors have been corrected:

<b>Original</b>	<b>Emendation</b>
<u>[unclear] to leave one-third more</u>	<b>but</b> to leave one-third more
<u>If green fly makes it appearance</u>	If green fly makes <b>its</b> appearance
<u>a compatively dormant state</u>	a <b>comparatively</b> dormant state
<u>but if such is necessary</u>	but if such is <b>necessary</b>

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IN THE YEAR \*\*\*

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