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Use of Cut Flowers

Michigan State University Agricultural Experiment Station

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Alex Laurie, Horticulture

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By
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AGRICULTURAL EXPERIMENT STATION
MICHIGAN STATE COLLEGE
Of Agriculture and Applied Science

Horticultural Section

East Lansing, Michigan

USE OF CUT FLOWERS

By

Alex Laurie

In the earliest period of primitive society, flowers were used largely for ceremonial purposes. History shows that they entered very extensively into sacred rites. From their use as offerings in the old heathen worship, they acquired an additional veneration and became associated with customs which had important significance. The great quantities of flowers required for ceremonial purposes of various kinds undoubtedly promoted and encouraged a taste for horticulture even among the uncultured tribes. The Babylonians had their floating gardens, and the profuseness of the use of flowers by the Romans in their triumphant processions, has become proverbial. The gigantic scale upon which the Greeks conducted their floral ceremonies may be gathered from the fact that in the processions of Europa at Corinth a huge crown of myrtle thirty feet in circumference was borne.

Flowers have always held a prominent place in the wedding ceremonies. According to a very early custom the Grecian bride was required to eat a quince, to wear a hawthorn wreath, and the altar was bedecked with blossoms. In Germany, a wreath of vervain is presented to the newly married bride. This plant, on account of its supposed mystic virtues, was formerly used for its love philtres and charms. In Switzerland, the edelweiss is regarded as proof of devotion of the lover, by whom it is often gathered with much risk. In England, flowers have always been employed in wedding ceremonies, varying at different periods according to the caprice of fashion. Among the many floral customs associated with the wedding ceremony may be mentioned the bridal-strewing, which was very prevalent in former years. This practice was not confined to any one country and is still in vogue.

Nature's lovely floral products have been employed as symbolic emblems. This symbolism is eloquently illustrated in the early writing of the Greeks, Persians, Egyptians, Indians, and Chinese. The amaranth, because of the lasting nature of its flowers, is the emblem of immortality. Grass has been made the emblem of usefulness, while ivy, from its persistent clinging to the heaviest supports, has been universally adopted as the symbol of love and fidelity. The cypress, in the floral language, denotes mourning; and, as an emblem of woe, may be traced to the classical myth of Cyparissus, who, after having killed his favorite stag, was transformed into a cypress tree. The rose and the myrtle are the emblems of love. The olive indicates peace, while the palm is the symbol of victory.

Some flowers become emblematical because of their curious characteristics. Balsam is held to be expressive of impatience, because its seed parts when ripe, curl up at the slightest touch and dart forth their seeds with violence. The wild anemone is indicative of transitory action because its blossoms are quickly scattered to the wind. The poppy has been made symbolic of sleep and oblivion. The heliotrope denotes attachment, from its having been supposed to turn continually towards the sun.

The aspen is an emblem of fear; the lily is the emblem of purity. The thistle, the poppy, and the bachelor's button were all used in the divination of love and were credited with possessing magical effect upon the fortunes of lovers. The rose, basil, and crocus were thought to inspire love.

The love of flowers is universal. When properly selected and arranged, they add charm to any occasion. The effect of cheer in the sick room, the finishing touch to the formal affair, the added grace to the home are only a part of the value of flowers. Their use need not be confined to the summer season. In the fall, the striking array of colors of foliage and fruit presents interesting effects for home use. During the winter, the various shrubby, berried materials are abundant and very suitable; while, in the spring, the early blooming bulbs constitute the chief source of supply. In addition, the greenhouses produce an abundance of flowering material at all times of the year.

RECEPTACLES FOR FLOWERS

The receptacles used for holding flowers may serve two purposes. They are needed to contain the flowers and the water or they may be used to display their own particular beauty, in which case the flowers contained may be few and serve only as a foil for the bowl or vase. In the first case they are subordinate to the arrangement and at best serve merely as an aid to the background. Simplicity of design is their principal requirement. (Figure 1.)

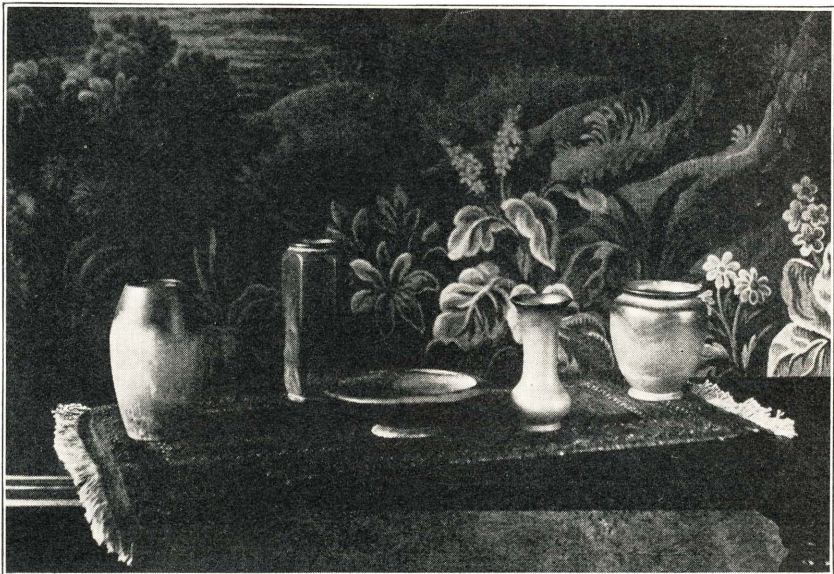


Fig. 1—Good shapes in pottery. This group fits almost any need.
(Courtesy Flower Shoppe, Lansing.)

They should be large enough to hold the flowers without crowding them and deep enough for a sufficient supply of water. Size should be in proportion to the kind and the amount of material used or, perhaps

more accurately, the material should be selected with due regard to the vase in which it is to be displayed (Figure 2). Simplicity might well include lack of floral designs upon the receptacles; the flowers themselves will furnish the needed decorative note. Conformity of shape of the container to the kind of flowers used is of some importance. Too much stress need not be laid upon this point, for, unless the receptacle is really ugly and poor in shape, it lends itself to almost any type of



Fig. 2—A vase of gladiolus and honeysuckle. Height and breadth are proportional.

arrangement. A common mistake is the use of tall vases and baskets for short stemmed flowers, while shallow bowls are employed for long stemmed gladioli, or irises or chrysanthemums. Straight lines of the vase tend to harmonize with and emphasize the length of stem of the slender, tall material.

The apparent stability of a floral arrangement is determined largely by the breadth of the bowl, vase, basket or other container (Figure 3).

Top-heavy bouquets are all too frequent. Bowls are very effective for violets, pansies, sweet peas, and other short stemmed flowers, but, if the containers are broad enough to lend stability, many large stemmed kinds may be used in them with propriety. In color, the receptacles should be unobtrusive. They should be either complementary to the tint of the flowers or else provide contrasted harmony such as combinations of gray and red, black and orange, or white and blue. In each case, the containers may be of the neutral color.

To simplify arrangement in bowls, various glass and wire blocks are used. The Dazey holder is one of the most satisfactory. It is indestructible, solid, and eliminates the stiffness which accompanies the use of glass blocks.



Fig. 3—Garden flowers in a serviceable container.

FLOWER ARRANGEMENT

Although it is true that imagination, innate ability, and much practice are necessary to produce the most artistic combinations of flowers, anyone can succeed in a measure if a few simple principles are observed. The most common fault observed in bouquets is crowding. This may be due to inclusion of an unnecessary number of flowers, to the use of small containers, or to the placing of flowers too deeply in the receptacle. Under ordinary conditions, the beauty of each individual flower should be displayed. Individuality and naturalness of arrangement call for the elimination of mass effects. Large color masses are suitable when the decoration is large and viewed from a distance. Single flowers or a small number of them with a setting of foliage and proper background are to be preferred to heavy, depressing, and unwieldy bouquets.

Obvious symmetry is the second common fault usually found in home decorations (Figure 4). The placing of flowers in the same plane, at the same height and at equal distances from one another, results in an appearance of stiffness and unnaturalness. The usual method of placing a flower on one side of the composition and a similar flower on the other side results in a regular orderly outline which is strictly symmetrical but not artistic. Proper balance may be secured without this studied symmetry (Figure 5). Balance in its strictest sense signifies repose, but the composition may be made interesting, without destroying repose, by an occasional broken line or a point in place of complete symmetry of shape and strict gradation of color. The advocacy of gradations of



Fig. 4—Unnecessary symmetry.

color from white through pink, rose, rose red, purple and almost black may be correct in principle but the effect is too staid to be pleasing .

Nature might well be followed as a guide in all floral decorations. The study of the growth and position of natural plantings will indicate readily how superficial many of the supposedly artistic compositions become. Certain gradations in height from the front to the background are usually found in nature, but these gradations are not uniform. Taller plants and spikes of flowers are interspersed among the lower forms, and introduce points of interest. If natural effects are desired, close adherence to these natural conditions is necessary. As a rule, flowers are most effective when displayed with their own foliage. If this is not available or if its quality is poor, foliage of similar shape, color, and

texture should be used. The greens and foliage are meant merely as a background or as peacemakers between clashing colors, so that their promiscuous use is to be deplored. Many plants have foliage which is ornamental in itself and no additional greens are required. The attractive foliage of the rose, chrysanthemum, and a host of the garden flowers is sufficient to set off their beauty. Masses of woodferns, *Asparagus plumosus*, *Asparagus sprengeri*, and maidenhair fern are useful, when flowers are scarce or when the foliage is so poor as to require masking. In the making of hand bouquets, presentation bunches, corsages, and other formal offerings, greens are essential, while, in many other cases,



Fig. 5—The same bowl arranged loosely, but showing proper balance.

a touch of maidenhair fern or *Asparagus plumosus* is a distinct advantage. Too much of this foreign foliage detracts from the desired effects.

Only a limited number of kinds should be used in a single composition. A single kind of flower, either in one or many colors, gives better effects than a combination. Bouquets containing more than three kinds of flowers are likely to be unsatisfactory when designed by inexperienced persons. The varying shapes of different flowers often make for incongruity, which may be striking but not attractive. Tight, compact bunches, which were so favored by our grandmothers, are no longer in vogue (Figure 6). Looseness of arrangement, where each individual flower is shown, has superseded these massed compositions (Figure 7). When the bouquet is made of mixed flowers, one color should pre-

dominate. Failure to observe this precaution results in the loss of character in the composition. Several different kinds of bouquets should not be used in the same room. Such a treatment destroys the unity of the decoration and results in a hodgepodge of color and effect.

Clashes of color should be avoided. The art of combining colors seems very perplexing, often because of the recommendations and the

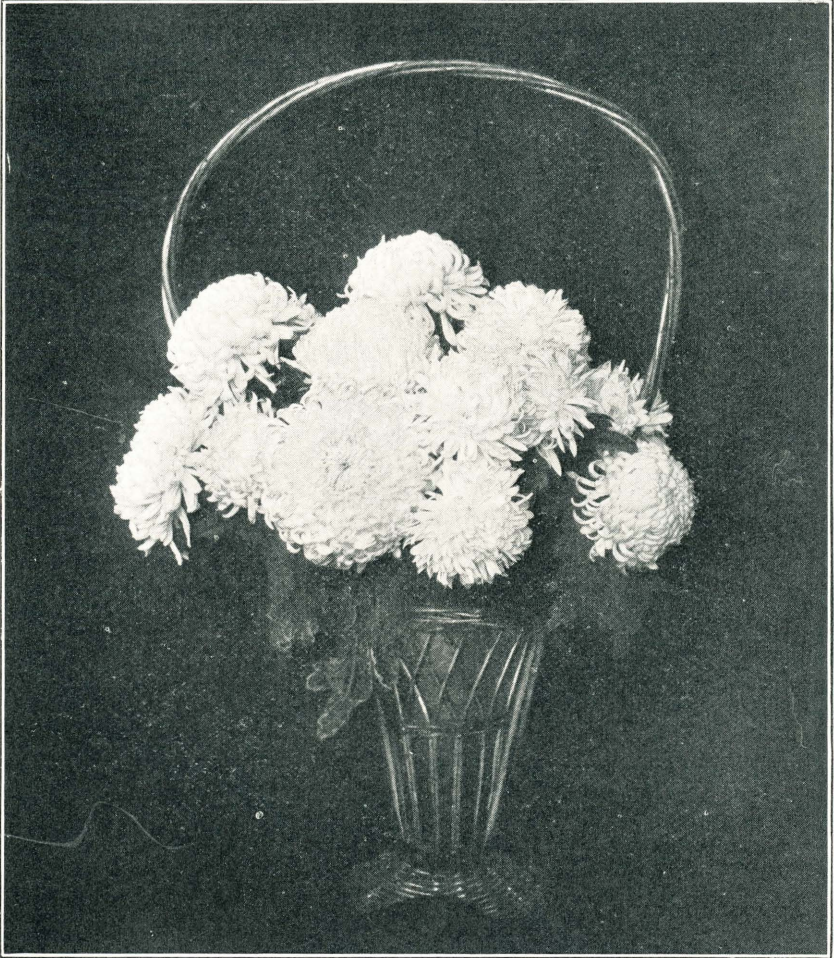


Fig. 6—Crowding of flowers in a basket.

mystery with which the matter is enshrouded by authors dealing with the subject. In reality it is comparatively simple. In nature, there are many striking combinations, and even apparent clashes of varying shades of red and other colors near each other are toned down by the liberal use of white and the green of the foliage. Color harmony is desirable in all floral arrangements. It consists of harmony of contrast and complementary harmony. The former is illustrated by the so-called fundamental colors: red, orange, yellow, green, blue, and violet, combined

with neutral colors such as gray, black, or white. Complementary harmony consists of colors which produce white when united. Examples of these are yellow and blue, green and purple, red and greenish blue, orange and green blue.

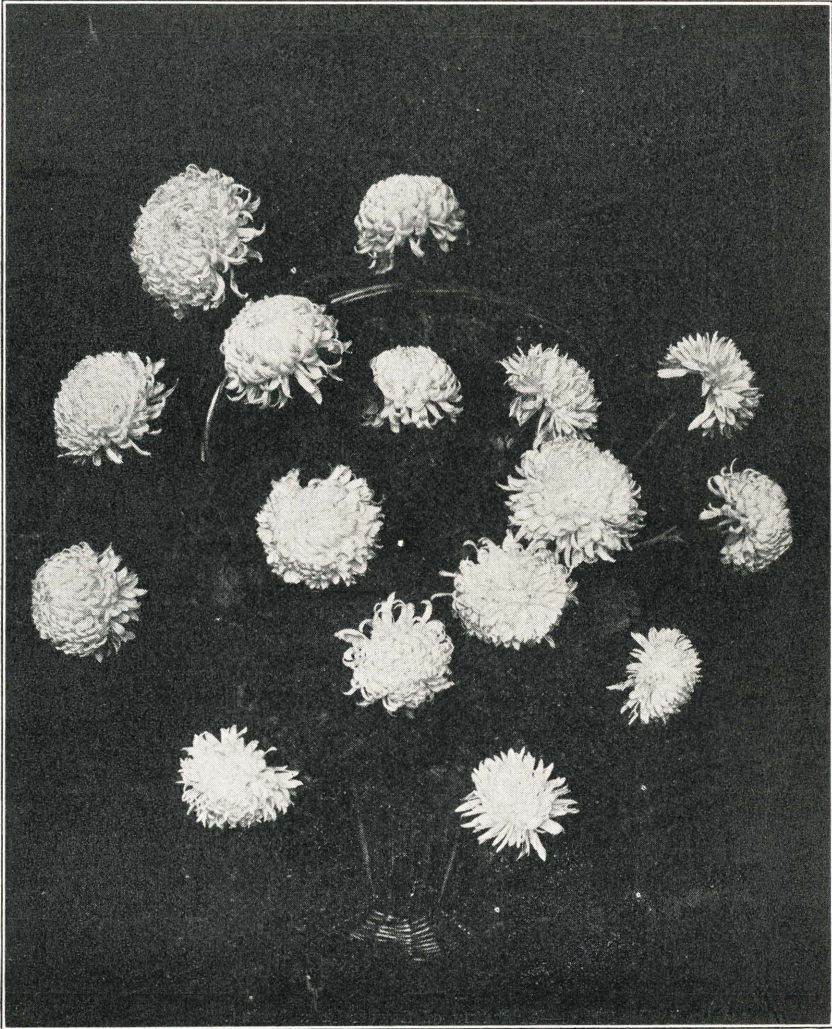


Fig. 7—The same number of flowers with a different effect.

The following suggestions for three-color combinations afford pleasing floral effects:

1. Red—*Salvia splendens*—Scarlet sage
Yellow—*Coreopsis tinctoria*—Tickseed
Blue—*Delphinium formosum*—Larkspur

2. Orange—*Calendula officinalis*—Pot marigold
Blue—*Veronica longifolia*—Speedwell
Cream—*Dimorphotheca aurantiaca*—African daisy
3. Pink—*Antirrhinum majus*—Snapdragon
Blue—*Centaurea cyanus*—Bachelor button
Orange—*Gaillardia pulchella*—Blanket flower.
4. Orange—*Gladiolus*—Jewel
Reddish brown—*Zinnia elegans*
White—*Achillea ptarmica*.

The choice of colors should vary for different degrees of illumination. Blue and yellows become less intense under artificial light. Since this is disadvantageous to the blue it should be used rarely for evening decorations. The harshness of the yellow is subdued somewhat under artificial light and for that reason its use for evening is desirable. Pinks and reds are suitable for artificial light effect. The neutral colors—white, gray, black—when used as a background have varying intensifying effects upon the primary colors. White tends to show greater intensity by contrast; red, green, blue, orange, purple appear darker, purer and more intense when used against it. Gray as a background is intermediate. Black increases luminosity of red, yellow, blue, and orange, but equalizes and almost eliminates the purple and violet.

DECORATIONS

In decorating houses for special occasions, seasonal material should receive preference. Its use should be proportional to the size of the rooms and to the occasion. Overcrowding the rooms is very easy. This impedes freedom of movement and produces a spotted effect in general. To avoid this, a color scheme should be selected which is in harmony with the permanent decorations of the house such as the woodwork, wall coverings, and draperies. If these permanent decorations are attractive, the role of the flowers is merely to accentuate them. In such cases, the floral material should be limited in quantity. Masses should be used only when it is necessary to transform the rooms for some special effect or to hide undesirable objects. A central feature as a point of emphasis is often produced by a basket or a mantel decoration upon which attention is focused upon entrance. Whatever the scheme, it should be complete, simple, of finished execution, and, above all, satisfying.

Flowers for the table and particularly in the dining room are very welcome. Their effectiveness depends upon simplicity and naturalness of arrangement. Light airy flowers with little fragrance are most suitable for the breakfast and the luncheon; daffodils, sweet peas, baby's breath, columbine, violets are good for this. Heavy masses should be avoided. Usually, a single bowl or vase, harmonizing with the rest of the service and filled with dainty flowers is sufficient decoration for any table (Figure 8).

For dinners and formal affairs, more massive effects are permitted. At times, garlands of fruits and flowers make an effective centerpiece, especially when set off by candles in suitable holders. Seasonal combinations of fruits and flowers in baskets embellish the buffet luncheon.

Centerpieces should not be high enough to interfere with the sight of the diners, and the flowers should not be spread out to inconvenience the service. If greens and ribbons are used to radiate from the center to boutonnières or corsages at each plate, their arrangement must take in consideration the convenience of service. The flowers themselves should be perfect individually since they undergo close scrutiny. The receptacles used should conform to the shape of the table.

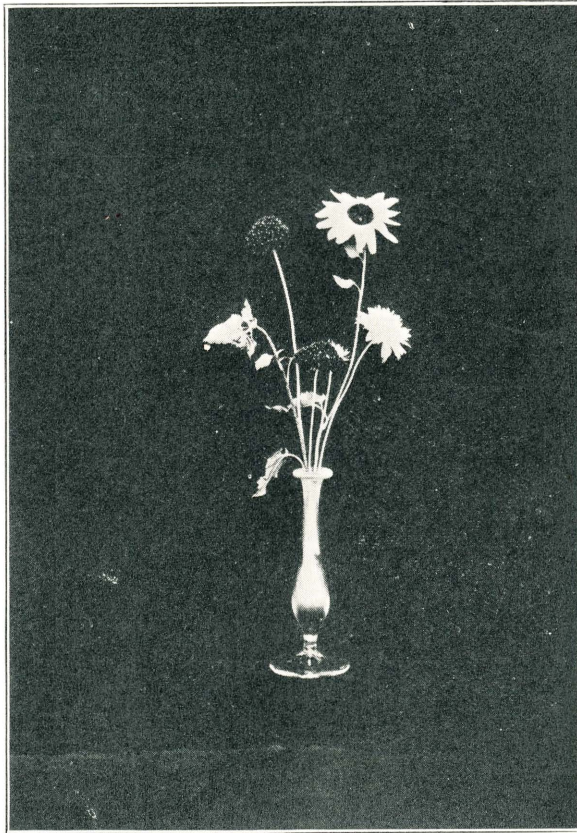


Fig. 8—A bud vase suitable for the center of a small table.

BOWLS AND BASKETS

The manual operation of arranging a bowl is simple. It is filled first with water as high as possible and a block placed in the center to hold the flowers. Suitable greens are then inserted about the base and the flowers arranged, according to the destined position of the bowl. If it is to be viewed from all sides, it must have a fairly regular outline with the greatest height at the center. If it is to be placed upon a buffet or mantel, the bowl should be made one-sided. In this case regularity of outline is preserved. To insure the proper arrangement of the flowers in the basket, the container may be filled with moss, old stems cut in

pieces, or branches of evergreen or fern leaves packed tightly. A wire screen may be placed over the mouth of the basket. Any of these expedients keep the flowers in the position desired. It is essential that the water in the basket reach as close to the top of the container as possible, to permit the insertion of some of the flowers at an angle. In this manner the basket is made to appear larger, wider, and of better proportions. The handle should be inconspicuous. The promiscuous use of ribbons upon the handle often spoils the entire effect.

SPRING FLOWERS IN WINTER

During the winter months, branches of spring flowering shrubs may be brought into bloom indoors, with comparative ease. They make very interesting and beautiful decorations during February and March. The branches selected should be well supplied with flower buds. In most shrubs, the flowers are produced only from certain specialized buds which are sometimes difficult to distinguish from the leaf buds. In some cases, the leaf buds are set between flower buds, while, in others, the reverse is true. Pears and apples bear their flowering buds on crooked side branches known as fruit spurs. The best results are obtained by soaking the entire branch in warm water for fifteen minutes and then placing in jars of water in a warm light room, where humidity is high. The moisture is essential in preventing the drying of the buds before growth starts.

Among the best shrubs for this purpose are:

Goldenbell (*Forsythia* spp), Cornelian Cherry (*Cornus mas*), Japanese quince (*Cydonia japonica*), Japanese barberry (*Berberis thunbergi*), honeysuckle (*Lonicera* spp), wild plum (*Prunus americana*), crab apple (*Malus* spp), and many other spring flowering shrubs. About two weeks are required for the flowers to come out and they last for a week or ten days.

For further winter effects there are many plants that drop their leaves only to assume a new beauty of form and color through their handsomely colored stems and the berries which cling to the twigs. Arranged in bowls, vases, or baskets very interesting effects may be secured. (Figure 9). The following are berry-bearing plants (those marked with an asterisk hold their fruit late in the winter):

- Aronia arbutifolia—Red chokeberry—red
- *Aronia nigra—Black chokeberry—black
- *Berberis thunbergi—Japanese barberry—red
- *Celastrus scandens—Bittersweet—orange
- Cornus amomum—Silky dogwood—blue
- Cornus alternifolia—Alternate leaved dogwood—blue
- Cornus florida—Flowering dogwood—red
- Cornus stolonifera—Red osier dogwood—white
- *Crataegus sp.—Red Haws—red
- Euonymus alatus—Burning bush—orange
- Euonymus atropurpureus—Burning bush—orange
- *Ilex verticillata—Winterberry—orange red
- *Ilex opaca—Holly—red

- **Ligustrum ibota*—Privet—black
- **Ligustrum vulgare*—Common privet—black
- Lonicera tartarica*—Honeysuckle—reddish
- Rhamnus cathartica*—Buckthorn—black
- **Rhodotypos kerrioides*—White kerria—black

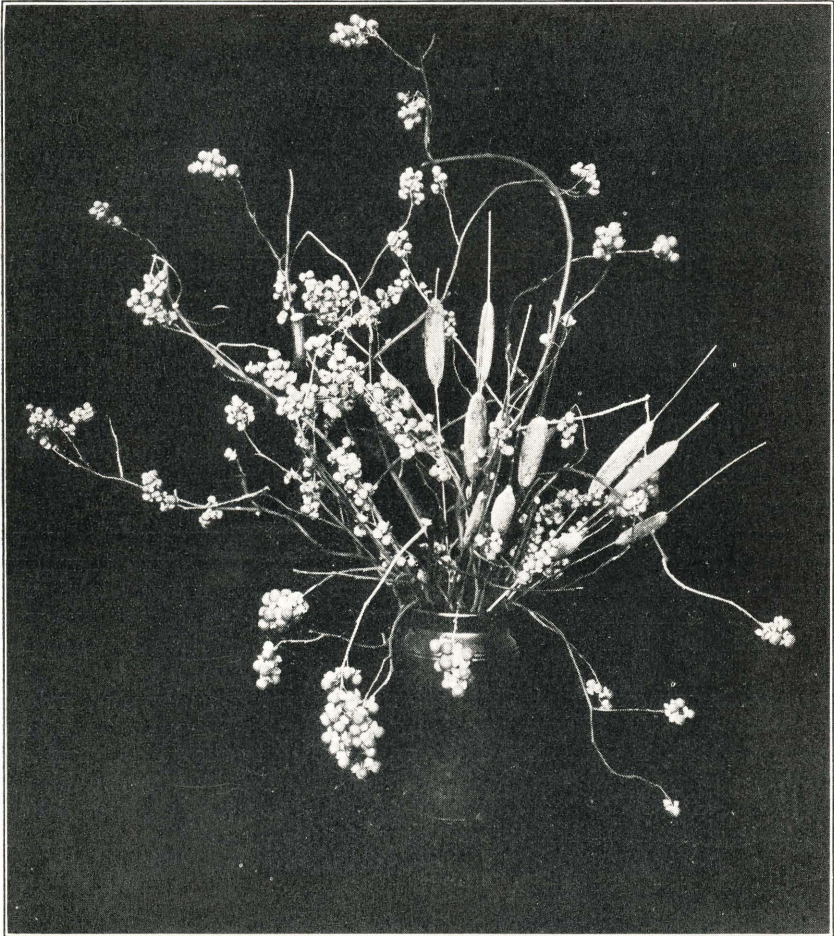


Fig. 9—Bittersweet and cattails in a brown vase. A black background will produce greater brilliancy.

- **Rosa lucida, blanda, rubiginosa*—red
- Symphoricarpus racemosus*—Snowberry—white
- **Symphoricarpus vulgaris*—Coralberry—red
- **Sorbus americana*—Mountain ash—orange
- Viburnum* species—red to black

The twigs of a number of ornamental species are valuable because of their high coloring in winter:

Green

Acer pennsylvanicum—Striped maple
Cornus sanguinea viridissima—Green dogwood
Forsythia viridissima—Goldenbell
Kerria japonica—Yellow kerria

Gray

Cornus paniculata—Gray dogwood
Elaeagnus sp.—American olive
Hippophaë rhamnoides—Sea buckthorn

White

Betula populifolia—American birch
Betula papyrifera—Paper birch

Yellow

Cornus stolonifera flavamea—Golden dogwood
Salix vitellina aurea—Golden willow

Red

Cornus stolonifera—Red osier dogwood
Cornus alba sibirica—Siberian dogwood
Rosa lucida—Glossy rose
Rosa blanda—Meadow rose

THE USE OF WINTER BOUQUETS

Setting has much to do with the attractiveness of winter arrangements. There should be no heavy massing and little crossing of branches. Each cluster of fruit should be emphasized in clear cut profile. Each spray should stand out distinctly (Figure 10). The light should either fall upon the fruit or shine through the twigs. A background of contrasting color is essential to enliven the picture. Bittersweet is attractive in a brass container, in wall pockets, or in tall amber glass receptacles which permit drooping effects. The brown and the pale green of old fashioned jugs are peculiarly adapted to the orange and red of the berries (Figure 11). Viburnums are effective in low brass or luster bowls, while dogwoods fit in well in green pottery with high lights or pink. Barberry looks well in brown rustic baskets. It will brighten many a dull corner. Its small well filled twigs are pleasing in low bowls when used upon the glistening white linen of the Thanksgiving table.

Everlastings form an important part of winter decoration. They fit into bowls of brass or luster pottery and into wall pockets. Their numerous colors, white, pink, rose, purple, yellow, orange, and maroon, present possibilities for brilliant combinations. Used with sea lavender (*Statice*), to relieve the bareness of the stems, they produce many showy effects (Figure 12). The absurdity of the use of artificial flowers, waxed and gaudily colored, should be realized readily. The everlastings are so easily grown that no garden is complete without them, when winter decorations are desired.

The following everlastings are desirable :

Ammobium alatum—Winged everlasting—white
Gomphrena globosa—Globe amaranth—purple, white, rose
Helichrysum bracteatum—Strawflower—many shades
Helipterum roseum—Rose everlasting—pink



Fig. 10—A blue bowl of bittersweet and Japanese lanterns.

Lunaria annua—Honesty—Silky, papery seed pods
Physalis franchetti—Chinese lantern plant—The deep orange seed pods are shaped like lanterns and are very ornamental as they fall casually over the sides of a dark blue pottery jar. Twigs of junipers are particularly pleasing in combination with these lanterns.

Statice latifolia—Sea lavender—lavender
Statice sinuata—white or mauve
Xeranthemum annuum—Immortelle—purple, lavender, pink
 and white.

Many weeds produce seed pods which are useful in combination with everlastings and grasses for winter effects. By means of various tints of aluminum paint, many of these brown and unattractive forms may be made quite attractive. The following are suggested for this purpose:

Cattails, dock, evening primrose, globe thistle, goldenrod, *Gypsophila paniculata*, *Hydrangea paniculata grandiflora*, Jimson weed, milkweed, mullein, plantain, meadowrue, Rose of Sharon, and teasel.

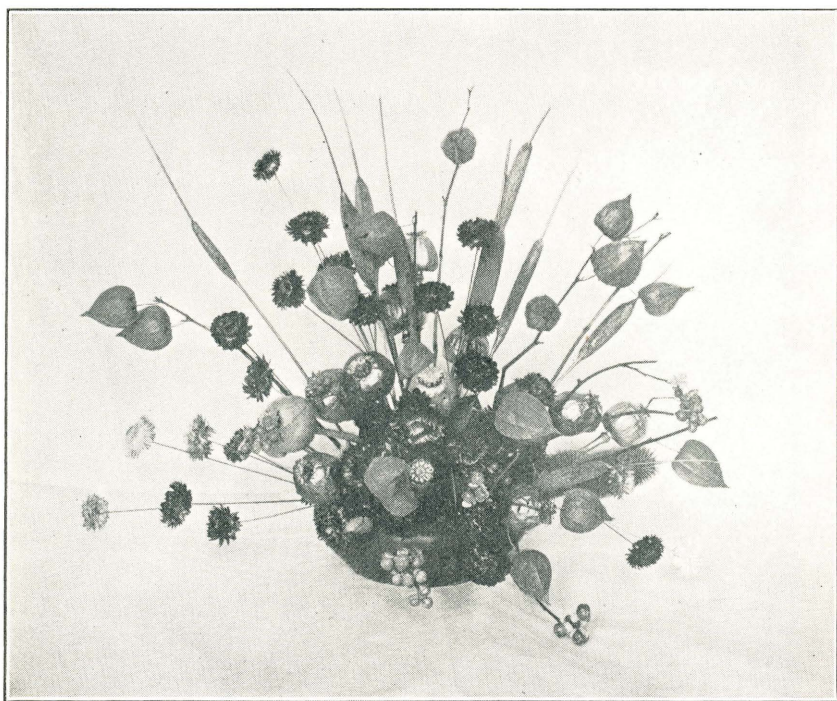


Fig. 11—A winter bouquet of strawflowers, bittersweet, poppy heads, cattails and Japanese lanterns.

CARE OF CUT FLOWERS

The desire to prolong the life of blossoms after they have been severed from the parent plant, dates back to the days of the Romans who discovered that keeping quality was increased by low temperatures. The Japanese found that changing the water and cutting of the stems daily was even more effective.

The wilting of flowers is due to their inability to maintain a sufficient supply of water through the stems to keep pace with evaporation through the foliage and the flowers. At ordinary temperatures, bacteria multiply

rapidly in the water, attack the tissues of the stems, clog the conducting vessels, and prevent free ascent of the moisture to the flowers and foliage above. Various means have been tried to counteract this action of bacteria.



Fig. 12—A mantelpiece basket of strawflowers, statice, bittersweet and cattails.

The ordinary precautions are as follows:

1. Cut flowers early in the morning or late in the day when the stems are turgid.
2. Use a sharp knife in preference to shears. The sharper the cut, the less is the bruising of the conducting vessels and the greater the absorption of water. In addition, the lack of ragged edges may lessen the chance of bacterial action.
3. Plunge the stems deeply in water up to the base of the flower. All arranging should be postponed until after the stems have been thoroughly soaked.

4. The proper stage of development should be selected. Gladioli are best for cutting when the first floret is open; peonies, when the petals are unfolding; roses, before the buds open; dahlias, when fully open; poppies, the night before they open.

5. Keep the flowers in a humid room and never in sunshine. This reduces the evaporation to a minimum.

6. Flowers keep well at 45 degrees F. If they are kept cooler than that during the night, the lasting quality is improved.

7. Use containers which permit free entrance of air through the top. For this reason, narrow necked vases should be avoided.

8. Cut stems and change water daily. Make a slanting cut to prevent the ends from resting squarely on the bottom.

9. All leaves which are submerged should be removed to prevent their decomposition and the fouling of the water. This is particularly important with many of the outdoor flowers such as asters or zinnias.

10. Slit stems of woody plants and peel the bark back to a distance of one inch at least. Chrysanthemums, lilacs, azaleas, and the like are benefited by this treatment.

11. Poinsettias, poppies, heliotrope, dahlias, and mignonette will last much longer if a hot water treatment is applied. The stems are immersed in boiling water for a minute and then plunged in cold water. This seals the ends of the conducting vessels, prevents downward flow of the sap, and permits absorption of water through the outer surface of the stems. Precaution must be taken to keep steam from the flowers or they will turn brown.

Wilted flowers may be revived by cutting their stems short, plunging them deep in water and storing in a cool dark place for ten hours or more. Hot water treatment is also useful in this case. Immerse the stems in hot water (not boiling water) for half an hour, keeping them in the dark, and then change to cool water. Usually several hours are required for the restoration. Thin petaled flowers should not be immersed in water to revive them, but thick petaled kinds like hyacinth, tulip, daffodil will be benefited by being covered completely with cold water.

SPECIAL TREATMENTS

Some flowers require special treatments to make them keep at all. Violets keep well out of water if wrapped in waxed paper and laid on ice. Lily-of-the-valley should be wrapped in wax or tissue paper while in the refrigerator. Gardenias require a treatment similar to violets. In all three cases, the covering aids in preserving the fragrance. Carnations and snapdragons keep best out of the refrigerator. Water lilies may be kept from closing by pouring a few drops of paraffin into the heart of the flower. The paraffin must be just hot enough to flow, else it will damage the flower. A few drops of gelatin dropped into the heart of a poppy flower will increase its life by several days.

Many chemicals have been tried in an effort to prolong the life of flowers. In most cases their disinfecting properties have been sought. Charcoal, salt, formaldehyde, camphor, ammonia, sulphurous acid, or listerine, when added in very small quantities, help keep the containers clean and prevent detrimental bacterial action. Usually the period of prolonged life is not great. Several special cases have been found

(Experiments at Department of Horticulture, Michigan State College) where chemicals were of decidedly beneficial nature. Boric acid, one-tenth of one per cent concentration (one-half teaspoon to two quarts of water), used with carnations increased the keeping qualities by three to seven days. Repeated trials indicated that with this solution there was no apparent need for cutting the stems or changing the water daily. One-half a tablet of aspirin added to two quarts of water was found to be helpful in prolonging the life of cut chrysanthemums and dahlias. Potassium permanganate, one-tenth of one per cent was also helpful. The most pronounced increase in keeping quality was found with asters through the use of one per cent cane sugar solution (one teaspoon to a quart of water). Their life was doubled by this treatment. Hollyhocks dipped in nitric acid (one-tenth of one per cent) keep well, while dahlias have been benefited by using a one-tenth of one per cent potassium nitrate.

SHIPPING CUT FLOWERS

If it becomes desirable to ship flowers by express or parcel post, they must be allowed to absorb water in sufficient quantities to prevent wilting in transit. If possible, the flowers should be precooled before shipping, by placing them in a refrigerator for several hours. Flowers should be laid carefully in the box one at a time, making several layers the head of each lying just below that of the preceding. A layer of wet absorbent paper should be wrapped about the stems and the entire bunch sewed to the bottom of the box to prevent shucking and bruising. Most flowers will benefit by a light sprinkling of water in the box. Carnations, sweet peas, and lilies become watersoaked from a treatment of this sort. Waxed paper should be used as a liner inside of the box, while the outside should be wrapped with light colored, water proof paper. Light colored wrappers are preferred because they reflect some of the heat rays that otherwise would be absorbed. During winter, several layers of newspapers should be used in wrapping the box, to afford proper insulation from the cold. In cutting gladiolus for shipping, those of light color should be cut earlier than the darker kinds. They are less likely to fade. To carry any considerable distance, gladioli are best packed damp and laid flat, close together and sealed airtight. Wet tissue or small pieces of cloth wrapped about the ends of the stems are beneficial.

HOW TO "SAY IT WITH FLOWERS"

The giving of flowers has become very popular. Their cheering qualities are unexcelled for convalescents in home or hospital. For this purpose, seasonal bouquets are sent. Hyacinths, white narcissi and other strongly scented kinds are often found objectionable in the sick room. Floral gifts have become very appropriate upon the special days of the year such as Christmas, St. Valentine's Day, Easter, and Mothers' Day. For formal presentation, baskets, bouquets, and corsages are suitable. Corsages play an important part of personal adornment and are worn upon the bodice, the shoulder, or the arm. Bon voyage arrangements of flowers have come in vogue in recent years. Special containers are supplied which hold one bouquet for each day of the voyage, the rest being kept in the refrigerator of the ship. The most up-to-date of the ocean

steamers are now establishing floral departments on board. The universal service known as the Florists Telegraph Delivery Association has been a potent factor in stimulating flower giving. This service enables the florist to deliver gifts in all parts of the world upon short notice. The perishable nature of the material no longer becomes an obstacle in long distance delivery. The only additional charge for this service is the cost of the telegram from one point to another.

