

—15—Split-Corona Daffodils

On browsing through Hill's *Eden, or a Compleat Body of Gardening* (1757), I came across a note on the "Fringed Narcissus" and an interesting, but perhaps not very accurate, old woodcut of the type. The flower is described as the "Winter Daffodil": *Narcissus pumilus* var. *fimbriatus*, or "Narcissus spatha uniflora nectari limbo campanulato profundo secto"; it is currently classified as a form of *N. minor* var. *pumilus*. The margin of the corona is deeply cut into six distinct, spreading lobes; each lobe, in turn, being subdivided into three lobules. Some time ago I examined a specimen and, like other species, it demonstrated that a six-lobed corona is one of the characteristics of the genus.

It is this characteristic of the "schizocoronati," or "split-corona" daffodil that offers interesting genetic possibilities. For some time this type of daffodil, in varied dress and hues, and under florid names, has invaded the precincts of the daffodil world.

As in some other genera, the undivided corona which characterizes the daffodil is believed to be a comparatively recent attribute. The corona has mystified botanists as to its origin and nature and, in the daffodil, is said to be the most distinctive occurrence of its kind. Among the more primitive daffodil species, the corona is either completely lacking or exists in a rudimentary form.

From a letter of Prof. Dr. Abilio Fernandes, of the University of Coimbra in Portugal, I quote the following translated extract: "My experience with wild narcissus has shown me that the corona in which one can distinguish six lobes appears in the majority of species. This gives definite support to the idea that the corona was first formed entirely

of six lobes. They were fused together to form the very developed corona known today. . . . Besides *N. viridiflorus* which you mention, *N. serotinus* is also of interest from this point of view. In fact, I have found plants of this species whose coronas, themselves rather small, consisted entirely of three lobes, divided each in turn into two lobules. I think that similar six-lobed coronas can be found in *N. elegans*."

By comparing flowers of the Lent Lily (*N. pseudo-narcissus*), one finds convincing evidence of an incomplete evolution of the corona, since they vary considerably in length and the incisions of the edge of the corona likewise vary. Even in such mature species as *N. poeticus* and *N. tazetta*, the minutely incised edge of the corona is unmistakable, if closely observed. This also applies to *N. cyclamineus* and to the primitive wild trumpet species, *N. asturiensis*, which shows the six-lobed corona fringe quite clearly. How the undivided corona of the modern flower developed from a rudimentary stage into its present full length, while still maintaining its characteristically fringed, six-lobed corona margin, can be observed by comparing successively *asturiensis*, *pseudo-narcissus*, Golden Spur, King Alfred, Golden Harvest, Unsurpassable, Golden Top, Prolific, and their derivatives. Obviously these more highly evolved trumpets function as a pollen protector for flowers adapted for pollination by larger insects.

From time to time various mutations have occurred among daffodils, such as doubling, petaloid and lobuloid anthers, and different sports, along with various freaks and reversions. The old trumpet Victoria, in particular, threw these reversions with the corona split right down to the base into six lobes which

were placed before their corresponding perianth segments; sometimes overlapping, at times framed by the perianth. I have come across some of these reversions, but since they did not prove to be genetically constant and were ugly ducklings as well, they were weeded out and discarded.

In some of these freakish reversions from bicolor Victoria, the lobes of the corona margin were divided to the base and the six lobes sometimes framed by, and sometimes completely hid, their corresponding perianth segments.

One such reversion of Victoria was called Buttonhole, and some hybridizers crossed it both ways with such trumpets as Emperor, Empress, Mme. de Graaff, King Alfred, and Glory of Leiden. De Mol and A. Nieuwenhuis formed a syndicate to raise seedlings from Buttonhole and called their strain "Gigantic Orchid-Flowering Daffodils," but it deteriorated and has since been destroyed. J. W. A. Lefeber pollinated a similar reversion with large-cupped varieties and named the progeny "Papillon Daffodils." In his seedlings, the lobes of the divided corona were shorter and did not completely overlap the corresponding perianth segments; some had the corona and perianth segments placed alternately. Burning Heart, Cape Kennedy, First Lady and Papillon Blanche are examples of this strain.

J. Gerritsen of Voorschoten began his strain in 1928 by pollinating a Buttonhole seedling and thought the name "Collar Daffodils" would indicate that his strain consisted of ruffled coronas split to the base. While the first results were disappointing, he persevered by self-pollinating the offspring and soon began to make steady progress. In all his crosses, he has aimed at creating an improved split-corona and he has produced every conceivable form, shape, and shade, including a flower with a three-lobed corona resembling an iris.

The seedlings are tested for several years and only the best are selected for further trials. Thus far about 20 varieties have been named, registered beginning in 1956, and placed on the market; among them are Canasta, Evolution,

Expo, Flaneur, Gold Collar, and Orangery.

As far as registration goes, the split-corona daffodil is still a problem child and has puzzled the daffodil committees both of the Royal Bulb Growers' Association in Haarlem and of the Royal Horticultural Society in London. The latter has considered the difficulty and decided to provide special classes at the London Daffodil Shows for "Ruffles," i.e., varieties in which the corona is split into segments, in order to test the reaction of the show fraternity and the public.

A variety which I took to London was sent to Wisley, at the request of the Narcissus and Tulip Committee of the Royal Horticultural Society for inspection by the botanist, C. D. Brickell. One finds an interesting note concerning this episode in the Daffodil and Tulip Year Book for 1965. In his foreword, Oliver E. P. Wyatt, chairman of the Narcissus and Tulip Committee comments on the work of the Committee, saying: "Moments of somnolence are rare, but if so innocent-looking a word as 'Ruffle' is whispered, the whole hive begins to buzz as do bees in thundery weather."

While I appreciate this kind of daffodil is not everybody's cup of tea, I have always enjoyed reading about and listening to the various opinions with impartiality, yet I have failed to understand why modern use of the original characteristic incisions of the corona has caused so much dissension.

On the recommendation of its Narcissus and Tulip Committee, the Council of the Royal Horticultural Society has decided that as far as daffodils for show purposes are concerned, varieties with the corona split to the base should be classified as Div. 11. Where the corona is not split to the base, they should be placed in the appropriate division according to the length of the so-called corona.

Correspondence initiated by the American Daffodil Society with The Royal Horticultural Society to find a mutually acceptable term to be applied to this new type of daffodil has recently been concluded. The name "Split-Cor-



FIG. 11.—NARCISSUS PUMILUS var. FIMBRIATUS.
From J. Hill's *Eden, or a Compleat Body of Gardening* (1757).

PLATE 49

SPECIES *minor* VAR. *pumilis* f. *Fimbriatus*

A wild form of the species and a botanical precursor of the new split-corona daffodils

ona Daffodil" has been adopted and will be in general use hereafter.

The final judgment of these flowers now rests with the public. Since tastes

do vary, let us be tolerant and weigh them on their merits, realizing that in daffodils, as with people, it takes all kinds to make a world.



PLATE 50

ORANGERY
Split-corona (Div. II)

—16—Daffodils in the United States

THE EARLY BEGINNINGS

There is apparently no record when the first daffodils were brought to this country. John Bartram wrote to Peter Collinson in the 1730's that they were plentiful and that he did not want any more. Unfortunately, he did not describe the kinds he was growing. It seems likely that among them was *Telamonius Plenus* which, under the name of Van Sion, is still to be found in old gardens.

In our southern states, many forms of *N. jonquilla* and *N. tazetta* must have come in with the earliest settlers. They have naturalized themselves and now are features in the spring landscape for mile after mile along the highways.

About a century after Bartram, William Prince, the pioneer Long Island nurseryman, was offering for sale many dozens of varieties of spring bulbs—crocus, tulips, etc.—imported from wholesale bulb growers in Holland. In 1842 his catalog featured 14 varieties of "single" narcissus including Trumpet Major; *N. × biflorus*, *N. poeticus*, *N. bulbocodium*, and *N. triandrus*; six double varieties including Van Sion, Orange Phoenix and Sulphur Phoenix; three *jonquilla* varieties: "Large Single," "Small Single fragrant," and "Double fragrant"; and 32 varieties of "polyanthus" narcissus including Grand Monarque and Grand Soleil d'Or.

PLANT QUARANTINE ACT

During the later years of the 19th century and the early years of this century, daffodil bulbs were brought in from

Holland in immense quantities. American seedsmen and dealers could more than double the Dutch prices and still offer them at such reasonable prices as to encourage a large and constantly growing demand.

In the age of the large estates presided over by British-trained head gardeners, many of these bulbs were forced in greenhouses for winter bloom and then planted out in herbaceous borders, meadows, and woods. If they did not all persist for more than a few years, it was a small matter to replace them as they were so cheap.

Many did persist. Among these were Emperor, Empress, Horsfieldii, Sir Watkin, Prince of Wales, Mme. de Graaff, Frank Miles, Barrii Conspicuous, Albatross, Seagull, White Lady, *poeticus* Ornatus, *poeticus recurvus*, Primrose Phoenix, and Sulphur Phoenix.

The great seed houses of Peter Henderson, Stumpp & Walter, Vaughan, Dreer, Michell, Breck, Fottler, Fiske & Rawson, and Farquhar, and nurseries such as Wayside Gardens, began to feature finer and finer varieties. They were more expensive, yet not much more expensive than the older kinds and they found a wider market as more gardeners read about them in gardening papers or saw them in flower shows.

A revolution in gardening was beginning in the early 1900's. The great estates were beginning to give way to hundreds and thousands of amateur gardeners with small places who became interested in the finer named varieties. King Alfred appeared and with it Van Waveren's Giant, Glory of Noordwijk,

The writer of this chapter gratefully acknowledges the help in preparing it, first of all from George S. Lee, Jr.; from Charles J. Gould of the Western Washington Experiment Station; Ted Sabelis of the Puget Sound Bulb Exchange for furnishing statistics; from Jan de Graaff, Grant E. Mitsch, B. Y. Morrison, Mrs. J. Robert Walker, Mrs. George D. Watrous, Jr., Freeman A. Weiss, and many others.

Spring Glory, Great Warley, Helios, Will Scarlett, Queen of the North, Horace, and Glory of Lisse.

These changes might have continued slowly, but they were accelerated by the reaction from the austerity of the great war. Gardening suddenly enjoyed an unprecedented popularity. The membership of older horticultural societies grew rapidly; the flower shows increased in numbers and size; small garden clubs were formed and then joined into great federations; special plant societies for the rose, peony, iris, dahlia, gladiolus, etc., flourished; new books and magazines were published, and a great number of new nurseries in all sections of the country put out larger and finer catalogs.

In 1919, Plant Quarantine No. 37 shut out from American markets the importation of most plants from abroad. American forestry, agriculture, and horticulture had suffered dreadful losses from insects and diseases brought in on imported plants. A few examples, such as chestnut blight, San Jose scale, and Japanese beetle, were dramatic enough to show the gardening public the need for protection against the entry of further pests. But the cessation of the importation of new plants made the gardening public aware for the first time how much they depended on foreign sources. It at once caused amateur gardeners to yearn for plants they could not get, and it gave a great stimulus to American nurseries to produce these plants here. There was bitter controversy over the methods of the Quarantine, and many amateurs believed it was only a subterfuge for a protective tariff for nurserymen.

The 1919 law did not impose restrictions on daffodils and other bulbs, but the handwriting on the wall seemed so clear they would be included later, that Dutch bulb growers began to come to this country, to bring in immense quantities of bulbs, and to establish bulb farms even before the announcement was made that daffodil importation would be restricted in 1926. The controversy over the need and the usefulness of quarantine rose to new heights. Daffodil growers pointed out that the

government had not restricted importation of bulbs during the years 1910-1915, when infestations of daffodil flies and eelworm had destroyed collections in Great Britain and Holland, but had allowed these pests to come in without restriction or adequate inspection. In the five years after the war, the Ramsbottom hot water treatment had conquered these pests. Now that foreign stocks had been cleaned up, many persons felt that the government officials chose a strange time to keep them out.

There was a rush to bring in new daffodils before the 1926 deadline, and many varieties came to this country, like Fortune and Beersheba, that are still important today, as well as great numbers that were to be superseded by the finer new productions in the 1930's, 40's, and 50's.

START OF AMERICAN PRODUCTION

Commercially, the five years from 1926 to 1931 were the experimental period when bulb farms were established in many different parts of the country, and many different methods of planting, care, and harvesting were tried out. By 1931 it was clear that, for all its science, the helpful advice from the United States Department of Agriculture, sent out chiefly by Dr. David Griffiths from the United States Bulb Station, Bellingham, Wash., beginning about 1908 and valuable to many who were establishing the new bulb farms, was not enough to overcome the lack, in many states, of the natural conditions the bulbs needed. Most of the farms that had been started in New Jersey, the Carolinas, Florida, Michigan, and California were given up. Proper natural conditions, however, were found in Long Island where the Dutch firms of Frylink, van Bourgondien, and Zandbergen had established themselves; in Tidewater Virginia where M. van Waveren and Sons started the great farm later taken over and still run by George Heath; and on the northwest Pacific coast area around Portland, Tacoma, and Seattle.

There had been far earlier beginnings

in the Northwest. In the State of Washington about 1910, George Lawler had begun to grow daffodils near Tacoma for cut flowers and by 1918 was selling bulbs of many varieties; and Joe Smith was growing bulbs near Olympia and offering them for sale in an unusual, if not eccentric, newspaper dealing not only with descriptions but offering sound advice on growing all kinds of plants, along with excursions from time to time into a general philosophy of life.

To the Portland area about 1926 came Jan de Graaff to set up the Oregon Bulb Farms. He brought from Holland the cream of the finest varieties grown by his firm and tested over 2,000 varieties before settling down to offer about 200 in his wholesale catalog. He began breeding and introduced in the next 20 years or so the first fifty or more American varieties to be grown in quantity and distributed. In 1959 all the bulbs were sold to the Puget Sound Bulb Exchange.

Other Dutch growers coming to the Puget Sound area were Fred Delkin, Francis Chervenka, A. N. Kanouse, Segers Bros., Harry van Waveren, van Zanten, and van Zonneveld. Other pioneers were Charles and Edward Orton.

There were, in addition, various local farmers who began to grow bulbs, making in all at the peak in 1936, over 100 growers on some 2,000 acres of land. These growers, after five years of experiments with various methods of planting, cultivating, and harvesting the bulbs with new machines, were able to produce enough bulbs to satisfy the growing demand for newer and better varieties, better bulbs, and seemed to have a rosy future.

END OF THE EMBARGO

Then in one moment the government that had embargoed foreign bulbs and given the opportunity and the scientific advice to build up American production reversed its stand, cancelled the Quarantine, and once more allowed foreign bulbs to come in. Most daffodil growers could not stand this competition from the cheaper labor of Holland and either gave up their farms or concentrated on

other crops. Exact figures are hard to get, but Government statistics estimate that about 700 acres were devoted to daffodils in 1965 and that about one man per acre was employed full time during the year. On the other hand, the bulb growers' cooperative claims that about 75 growers are still producing daffodil bulbs or growing daffodils for cut flowers to ship all over the United States. They estimate that in 1965 about 1,500 acres are in production and that a labor force of about 15,000 men is employed. These figures undoubtedly include land devoted to tulips and to bulbous iris and the part-time labor force needed to cut, bunch, pack, and ship cut flowers, as well as the extra helpers at bulb planting time in the autumn and the bulb harvesting, cleaning, curing, and shipping in the summer and early autumn.

Daffodil bulbs produced in the Puyallup Valley near Tacoma and in nearby Mount Vernon, Sumner, and Woodland, will bloom earlier than the same varieties grown in Holland. This is believed to be due to the latitude of 47° which is four degrees farther south than Holland. The bulbs are, therefore, preferred by the great greenhouse forcing industry. King Alfred and similar varieties are grown by the million. In all, perhaps 200 varieties, mostly derived from the Oregon Bulb Farms purchase, are now being grown in the Puget Sound area.

Daffodil bulbs for forcing are even being shipped to Europe and this is true also of tulip bulbs. It is even more true of bulbous iris. The west coast growers have built up a business of over 25 million bulbs a year to Holland and other European countries. This sounds surprisingly like shipping coals to Newcastle. Apparently the European demand is larger than our growers can now supply, so it is expected the business will continue to increase.

MODERN HYBRID DAFFODILS

I have tried to give a picture of 1) the early beginnings of daffodils in American gardens and of 2) the changes in wholesale production of bulbs caused



PLATE 51

GRANT E. MITCH

PIPIT
Jonquilla Hybrid (Div. 7b)

by the enactment of the bulb quarantine and then its cancellation. This has covered the varieties of daffodils grown in wholesale quantities and available nowadays from every seedsman, garden center, and hardware store in our autumn months. They are good bulbs, at reasonable prices by the dozen and the hundred, and are playing an important part in American gardens.

I now want to touch upon the approximately 50-year development of what are prize-winning exhibition varieties for the modern daffodil enthusiast, daffodil exhibitor, and daffodil breeder who wants the finest in new productions from the science and art of plant breeding.

This type of development began in Britain, not in Holland. It is generally credited to such men as the Rev. George H. Engleheart, Peter Barr, P. D. Williams, The Brodie of Brodie, Guy L. Wilson, and J. Lionel Richardson. It was slow and painstaking for them, but wonderfully rewarding to the present day enthusiastic members of the American Daffodil Society.

HUNT. It traces back to the Royal Horticultural Society daffodil shows. Reading reports of these in the British horticultural press, American gardeners of 50 years ago began to want to try some of the show winners. One American amateur, Chester J. Hunt, a New Jersey school teacher, planted several hundred bulbs of some of these winners in his backyard in 1914. So many people flocked to see them and asked him to get bulbs for them, that after the war he gave up school teaching and established an importing business built largely upon a beautiful display garden which people could visit in the flowering season, placing their orders with very attractive young ladies while being served tea.

SCHEEPERS. About that time, John Scheepers came from Holland and started a similar garden on Long Island. Joseph Lane, then advertising manager of the *Garden Magazine*, claims to have given him a running start by persuading him to put in a full-page advertisement.

Scheepers' business grew fast and he was able to put large and magnificent bulb gardens in the yearly New York Flower Shows. It was these shows, in turn, that enabled untold thousands of eager gardeners to see for the first time the almost unbelievable improvement in the newest daffodils from the British breeders already mentioned and from de Graaff, Krelage, van Tubergen, and others in Holland.

Another feature in the period between the two wars was a sudden interest in daffodil breeding by individuals, mostly amateur gardeners, in different parts of the country and apparently unknown to each other. All of them seem to have brought from Great Britain and Ireland the then new varieties. They made crosses with them wishing to develop varieties particularly suited to their climates. They grew seedlings in great quantity. Some exhibited them at flower shows and thus helped spread interest in daffodils. A few gave names to their seedlings and offered them for sale. More gave names and registered them with the Royal Horticultural Society and then sold a few bulbs privately but did not offer them for sale publicly. Some kept them in their own gardens for public display but did not allow any bulbs to go out, and still others reported in the garden papers what varieties they were using for parents but did not give out other information nor show their results.

Whatever they did, they did accomplish one thing. They spread the interest in daffodils and a good part of what we have today we owe to that. But by and large, their seedlings had no effect, and a small handful of authentic varieties from only one of the breeders mentioned are grown today or still available from commercial sources. Of the others, all are gone, their names in the *Classified List* the only evidence they ever existed.

MORRISON. In the early 1920's, B. Y. Morrison of the United States Department of Agriculture, planted in his home garden in Takoma Park, Md., some of these varieties and began to make crosses. He was probably the first in this

country to do this and to show seedlings which became a feature of the daffodil shows later staged by the Garden Club of Virginia, but he never named and introduced any seedlings.

POWELL. The editor of the Agriculture Department's Division of Publications, Edwin C. Powell of Silver Spring, and later Rockville, Md., began daffodil breeding in 1925. He raised over 65,000 seedlings and exhibited them at daffodil shows. After retiring in 1940, he began to issue daffodil catalogs and named and offered for sale over 50 of his own seedlings. Apparently only a few of them are still in commerce. The most interesting of these are Cheyenne, Cherokee, Hiawasse (one of the few known offspring of Paper White), Kasota, Kiowa, Nakota, and Oconee.

FOOTE. Mrs. F. Stuart Foote (Florence Edna Foote) of Grand Rapids, Mich., went to the London Daffodil Conference in 1935. She bought some startling novelties and proceeded to use them in breeding. In the early 1940's, she registered nearly 50 varieties with the Royal Horticultural Society and they still appear in the *Classified List*, although they were never put into commercial production. There seems to be a difference of opinion on how widely they were distributed. Some of the intriguing names were Arctic Snow, Choice Gift, Crushed Strawberry, Happy Day, Michilinda, Pink Butterfly, Pink Symphony, Sylvan Pink, and Sweetbriar.

It has been difficult to learn much more about Mrs. Foote's work. During the last years of her life, she was paralyzed and unable to care for her bulbs or to write any complete record of them. Her most intimate friends are long since dead, and they apparently did not write or publish anything definite about her work. B. Y. Morrison had a rather lengthy correspondence with some persons who knew her slightly, without being able to ascertain which of her varieties are still in existence. It seems probable that those which do exist can no longer be identified by Mrs. Foote's names. There can be no doubt, however, that Mrs. Foote performed an important

function in writing about them, publishing a catalog, and lecturing. Many people got their daffodil inspiration from her.

DAVIS. Mrs. Paul Davis of Deep Valley Farm, Nashville, Tenn., had, in the 1930's, the most complete garden of daffodil novelties in this country. Money seemed to be no object with her. She bought whole stocks at unheard-of prices from de Graaff, Barr, Calvert, Richardson, P. D. Williams, and others. She apparently named and registered over a hundred of these, but did not propagate or introduce them. Like Mrs. Foote, she chose delightful names: Altar Cup, Alpine King, Blazoner, Coral-beach, Danseuse, Happy Miss, and Stargazer.

REYNOLDS. Mr. and Mrs. Kenyon Reynolds of Pasadena, Calif., attended the 1935 Daffodil Conference with Mrs. Foote and began to breed varieties for California. They named and registered over a dozen seedlings, but most of these apparently have disappeared. The variety Patricia Reynolds is still grown and is offered as a prize in conjunction with the Patricia Reynolds Trophy at the Southern California Daffodil Show.

SMITH. Mrs. Harry O. Smith of Cave Junction, Ore., was another early pioneer breeder who, inspired by Dr. Griffiths, began making crosses about 1920. She has not named, registered, or introduced any of her seedlings.

MITCHELL. Two famous California horticulturists tried their hands at breeding varieties particularly suited to their climate. The first, Sydney B. Mitchell of Berkeley and already famous for his iris, began breeding in the 1920's. He is known to have made crosses of Tunis \times Fortune, Tunis \times Prince Fushimi, John Evelyn \times Cornish Fire, and Beacon \times Fortune.

REINELT. At Capitola, Frank Reinelt, world-famous tuberous begonia breeder, after making crosses for several years, decided progress was too slow to be justifiable commercially. He is known to have made crosses of Tunis, Polindra, and St. Issey \times Galway and Zero which produced satisfactory flowers in his cli-

mate. He found Dreamlight a good seed parent and Green Island, Bread and Cheese, and Matapan good pollen parents. He must have been the first American to use Broughshane for breeding. He grew countless thousands of seedlings but did not name or introduce any.

BERRY. S. Stillman Berry of Redlands, a breeder of iris and an authority on many other plants, served the daffodil world well by being about the first to import daffodils from West & Fell in Australia and from Alan Gibson and Arthur E. Lowe in New Zealand. He listed about 15 of these in his 1938 catalog. Later he named and registered at least four seedlings of his own breeding but does not seem to have distributed them widely, and they are not known today.

DE GRAAFF. Before giving up commercial daffodil production in 1959 and selling his stocks to the Puget Sound Bulb Exchange in order to concentrate on lilies, Jan de Graaff made several series of crosses and named about 50 varieties which were widely distributed and some of them are still grown. Among them are Azalea, Bounty, Bravo, Brightwork, Carita, Circus Clown, Concerto, Cover Girl, Daring, Forty-Niner, Golden Dawn, Gremlin, Halloween, High Sierra, Indiscreet, Magic Pink, Matador, Mount Whitney, Peaches and Cream, Polar Star, Riotous, Roman Candle, South Pacific, Sunburst, Sweet Talk, Tiara, Tonto, Troubadour, Western Star, Windswept, Winkie, and Zircon.

LATER GROWERS AND BREEDERS. In addition to the individuals, nurserymen, and dealers already mentioned, I should add here that George Heath, trading as The Daffodil Mart, Gloucester, Va., and Gerald D. Waltz, Salem, Va., act both as dealers and growers. Their lists probably contain the largest number of varieties, both old and new. A long-established dealer in all the Holland bulbs is Charles H. Mueller, New Hope, Pa. A more recent comer is the old established Dutch firm of de Jager which has opened an American agency in South Hamilton, Mass. This firm purchased, and is now growing in England, the entire stock of the late Guy L. Wilson and will un-

doubtedly be offering seedlings that have bloomed since Mr. Wilson's death in 1962.

The following breeders registered seedlings and have had them introduced by Grant Mitsch: Charles D. Culpepper, Va., Red Sunrise and Snow Gem; Murray Evans, Corbett, Ore., Descanso, Wahkeena, and Space Age; Matthew Fowlds, Canby, Ore., Goldette, Harmony Bells, Honey Bells, Pixie, and Bo-peep; A. N. Kanouse, Olympia, Wash., Pink Chiffon and Inca Gold.

There should be at least brief reference to the fact that the American Daffodil Society has encouraged many amateurs to take up daffodil breeding. Orville Fay of Northbrook, Ill., has raised about 15,000 hybrid seedlings in the last 15 years. He has several seedlings that are extra hardy in his severe climate under propagation for the future and has registered Band of Gold and Spring Hills. Mrs. Goethe Link, Brooklyn, Ind., has registered Corbula, Tanager, Titmouse, and Towhee; the latter voted the best flower in the convention show of 1963 at Greenwich, Conn. Mrs. Ben Robertson of Taylors, S. C., has registered Indian Brave, Mellow Glow, Myomy, Promenade, Sandra Hall, Soft Breeze, and Sunbeater; Kenneth D. Smith of Staten Island, N. Y., has registered Target and Yellow Glory. Mrs. Kenneth B. Anderson of La Canada, Calif., has bred and registered Pineapple Cup and Pineapple Frills. Mrs. George D. Watrous, Jr., of Washington, D. C., has specialized in miniatures and registered Flyaway, Curlylocks, and Wideawake. Harry I. Tuggle, Jr., of Martinsville, Va., registered Court Jester in 1964.

MITSCH. I have purposely kept Grant Mitsch of Canby, Ore., to the last in this discussion of daffodil breeders, growers, and dealers. He was the first to give his seedlings proper publicity and wide distribution. In the last 20 years he has introduced about 125 seedlings. He has published these in his yearly catalog with full descriptions and has included the parentage (seed parent and pollen parent), a matter of vital importance to other daffodil breeders. Of late years,



PLATE 52

GRANT E. MITCH

DAYDREAM
Large-cup (Div. 2d)

he has put more and more emphasis on pinks and reversed bicolors. Some of his first introductions in the 1940's have already been superseded by his later ones, but many of his introductions of the 1950's are available at reasonable prices and have not been surpassed by anyone. His introductions of the 1960's are, of course, more expensive and are not yet available in quantity.

Mitsch has set up educational exhibits in many daffodil shows. He has deservedly had honors heaped on him. His Aircastle, a 1958 introduction from Green Island \times Chinese White, was awarded the title of the best flower in competitive classes in the 1963 London Show. In 1965 he was awarded the Honor Medal of the American Daffodil Society and he is also holder of the Gold Medal of the Men's Garden Club of America for his work with daffodils. His fame has spread abroad; he has definitely put America on the world daffodil map.

It is quite impossible for any one person to pick out the best of his many introductions. However, I list here some random examples in a wide range of type, size, and colors that have come from his garden over the years. The years are the years of registration.

1952. Ardour (3a), Chinook (2b), Fairy Dream (1c), Mirth (1b), Paricutin (2a).
 1954. Bithynia (3b), Festivity (2b), Radiation (2b).
 1956. Lemon Drops (5a).
 1958. Aircastle (3b), Bethany (2d), Moonmist (1a), Nampa (1d), Nazareth (2d), Spring Song (2b).
 1959. Allurement (2b), Chickadee (6a), Kinglet (7b).
 1960. Accent (2b), Bushtit (6a), Daydream (2d), Moonlight Sonata (1d), Precedent (2b).
 1962. Abalone (2b), Angeles (2b), Butter-scotch (2a), Caldron (2a), Chemawa (2a), Flaming Meteor (2a), Gleeful (2d), Gos-samer (3b), Limeade (2d), Prologue (1b), Satellite (6a), Silver Bells (5a), Tranquil Morn (3c), Vireo (7b).
 1963. Dream Castle (3c), Eminent (3b), Joyous (2b), New Song (2b), Noweta (3b), Pipit (7b), Prowess (2b), Thistle Dew (2b).
 1964. Coral Ribbon (2b), Silken Sails (3b).

1965. Audubon (3b), Bobolink (2b), Bunting (7b), Flicker (7b), Quetzal (9), Small Talk (1a), Tern (3c), Verdin (7b), Wings of Song (3c).

DAFFODIL SHOWS AND SOCIETIES

The work of the growers, dealers, and breeders I have mentioned shows how the interest in the daffodil has evolved in the nearly forty years since the daffodil embargo. It will be well now to consider the even greater influence of daffodil shows on today's position of the daffodil in the horticultural world.

In addition to the displays of forced daffodils in the great March flower shows in New York, Boston, Philadelphia, and other big cities, April and May shows of outdoor-grown daffodils were being held before the American Daffodil Society was organized. It is said that a lecture given in 1919 by an amateur gardener, T. McKean Miere, at a garden club meeting in Baltimore, inspired Elizabeth Clark and Mrs. Duncan Brent to organize the Maryland Daffodil Society. Its members purchased bulbs from the best British sources and held their first show in 1922. Shows were held every year except during the second world war. Sixty-four garden clubs with a total membership of over 2,000 now belong to the Maryland Daffodil Society. B. Y. Morrison and E. C. Powell helped stage and judge many of the early shows.

In 1930, Mrs. Leslie H. Gray, President of the Garden Club of Virginia, organized, with Mrs. Floyd Harris, a system of daffodil test gardens in different parts of the state. Mrs. J. Robert Walker became the first Test Garden Chairman. With the help of a number of daffodil experts, fifty varieties were chosen to represent the range of daffodil types in the official classification. Nineteen participating clubs purchased ten bulbs of each of these fifty varieties to grow in their home district. The garden club sponsors brought cut flowers from these collections to the first daffodil show of the Garden Club of Virginia which was held in 1931 in Charlottesville. State shows have been held almost every year since that time. There are now 43 co-

operating member clubs with a total membership of over 2,500, each with its own Daffodil Committee. They grow the daffodil collections distributed annually and carry on the testing program in cooperation with the Garden Club of Virginia. About 250 varieties are now grown in each of the cooperating test gardens.

The stimulus to daffodil growing in Virginia, and very soon throughout the whole country, was tremendous. The Virginia Daffodil Show became the most important held in this country. It set a stamp on the American appreciation of the daffodil and inspired countless gardeners to grow the fine new varieties. Various local and regional societies also helped to promote interest in daffodils. The Washington Daffodil Society was organized in 1950 with Freeman Weiss as first president. Among regional societies are Indiana, Arkansas, Middle Tennessee and Southern California.

The genesis of the American Daffodil Society was an article entitled "Who Will Join a Daffodil Society?", which Paul Frese published in the October, 1953, issue of *Popular Gardening* of which he was editor. Organized activity at that time centered in the Maryland Daffodil Society, the Garden Club of Virginia, and the Washington Daffodil Society.

Upon receiving over 400 responses, Frese turned to these groups to proceed with the details of creating a national daffodil society. A committee was formed consisting of Mrs. Lawrence R. Wharton, president of the Maryland Daffodil Society; Mrs. J. Robert Walker, chairman of the Garden Club of Virginia Test Garden; Carey E. Quinn, president of the Washington Daffodil Society. The committee had the cooperation of Frederic P. Lee, Washington attorney and amateur horticulturist and Freeman Weiss, plant pathologist and curator of the American Type Culture Collection.

All those who had expressed their interest were invited to attend an organization meeting. Mrs. George D. Wat-

rous, Jr., of Washington, called for the meeting as part of the Third Annual Daffodil Institute of Washington to be held April 9, 1954 in Chevy Chase, Md. It was called to order by Frederic P. Lee. Paul Frese was elected temporary chairman and Harry I. Tuggle acted as temporary secretary.

The organization of the Society was completed on January 22, 1955 when the Board of Directors elected Carey E. Quinn, president; Willis H. Wheeler, secretary; and Mrs. William A. Bridges, treasurer.

The first annual meeting of the new society was held in Washington in April, 1956. It was a memorable occasion to the more than one hundred members who attended and was highlighted by the first and only visit to this country of the beloved Guy L. Wilson and by the showing of his latest and then greatest seedling—Empress of Ireland. Wilson was accompanied by another daffodil stalwart, his good friend, C. R. Wootton.

Subsequent annual meetings of the Society have been held in Mansfield, Ohio; Atlanta, Ga.; Philadelphia, Pa.; Dallas, Texas; Roanoke, Va.; Nashville, Tenn.; Stratford, Conn.; Asheville, N. C.; and Pasadena, Calif. The Society has also encouraged the daffodil shows of other societies, among which are the Pennsylvania Horticultural Society, the Massachusetts Horticultural Society, and the Horticultural Society of New York.

The American Horticultural Society has always generously contributed to the growing interest in daffodils, abetted, no doubt, by the personal enthusiasm of B. Y. Morrison, one-time president of the Society and for 37 years editor of its publications. Not only could space always be found in its quarterly for notes and articles on daffodils, many of which Morrison wrote, but under his guidance the Society issued *The American Daffodil Year Book* in 1935, 1936, 1937, and 1938; the series ending in 1942, due to the war, with the *Daffodil Year Book* published jointly with the Royal Horticultural Society.

—17—Daffodils in the British Isles

Spring is a longish tradition in the British Isles. Summer is a hit-or-miss affair, spring often merging into autumn with summer perhaps appearing as a few good days immediately prior to the annual holiday. Winter starts around the first week in October and ends around the 10th of April if we are lucky. In a part of the world where the weather is the main conversational vehicle of social intercourse, it is perhaps not surprising that spring and all appertaining to it form the focus of something resembling a religion. The poets made the most they could of lambs and wild daffodils. With our industrial revolution more or less behind us, any private plan to accentuate the attractiveness of spring is likely to lean more heavily on daffodils than lambs. For these we substitute the budgies' eggs and the expectant corgi next door.

HERBERT. In the middle of the last century one or two men, spurning the popular aspidistra cult, started to hybridize daffodils. One, Dean Herbert, undertook his hybridizing to prove to other botanists that kinds then listed as species were natural hybrids. Others started out of love of the flower that has remained the most popular of all, save the rose, in Britain, and it provided something to do before the cricket season started. The center of breeding was in England; the Welsh had some difficulty distinguishing between daffodils and leeks, and, while the Irish gathered all kinds and allowed them the freedom of their gardens in a land the daffodil made its own, the Scots with one notable exception were too busy building bridges, roads, railways, and managing the affairs of the English to have the time to devote to the intricacies of breeding daffodils.

LEEDS-BACKHOUSE-BARR. Edward Leeds

bred a number of early daffodils. In 1874, with ill health forcing a halt in his activities, his bulbs were saved from destruction by a syndicate headed by Peter Barr who also saved the flowers bred by William Backhouse between 1856 and 1868. William Backhouse with his Emperor, Empress, Barrii Conspicuous, and others like Weardale Perfection helped to lay the foundation for the work of other breeders. The conference and exhibition of daffodils in 1884 was to a large extent due to Peter Barr's work. Certainly from this time the interest in daffodils began to increase and large prices were paid for the new kinds.

ENGLEHEART. The Rev. George H. Engleheart became the father of the breeders of those early years, at least up to the outbreak of the First World War. His breeding was done from 1882 till his death in 1936. It says much for the quality of the flowers he produced that quite a large number are still listed and grown all over the world. His Will Scarlett with its spreading red crown was much admired and used in breeding though the influence of its poor perianth was very strong. Beacon was a small *3a*, a rather weedy plant, but it gave good seedlings, White Sentinel and Mitylene being chief among these. Engleheart's Magnificence and Forerunner are sold by the ton today. Beersheba was not the first white trumpet to make an impact on the daffodil world, but it probably was the first to gain wide recognition as an attractive plant in gardens where daffodils were only one of many plants competing for space and interest. Some of his poeticus kinds like Red Rim and Sea Green are still grown and are often without serious rivalry even now. Below are listed some of Engleheart's most important flowers. After the name

and division is given the date of registration. Similar lists appear after the mention of each breeder as it gives us some idea of the value of their work to see the flowers that have stayed the course and proved themselves for many years.

- 3a Beacon 1897 F.C.C. 1897
- 2b Will Scarlett, 1898. F.C.C. 1898
- 2a Helios, 1912
- 1a Magnificence, 1914. F.C.C. 1921
- 1c Beersheba, 1923. F.C.C. 1926
- 2b Mitylene, 1923. F.C.C. 1927
- 2b White Sentinel, 1926
- 9 Sea Green, 1930

WILLIAMS. A number of growers in the favored Southwest took a keen interest in daffodils and their breeding. The flower trade from the Scilly Isles and Cornwall began to become important. The leading breeder here was P. D. Williams, a man of forceful character and firm ideas about the qualities to be looked for in an ideal daffodil. It is difficult to exaggerate the value of his work as every kind that came away from his seedling beds with a name was sure to be an excellent plant. His flowers were and still are firm, well-posed, strong-stemmed, lasting kinds with good bulbs and neat strong growth. Something of the old Maximus (*N. hispanicus*) strength seemed to underlie much of his breeding. He would not have Will Scarlett on his ground. The fact that Polindra, Brunswick, Carlton, and others of his are grown by the tens and hundreds of thousands now speaks eloquently for his discernment. His method I am told was to wear a flower or two in his buttonhole and dab the pollen of these on to any flower that took his fancy as he walked around. He dabbed to good effect. Some of his flowers would have the pollen of more than one kind on its stigma, something that was also true of Engleheart's flowers.

- 2a Crocus, 1927. F.C.C. 1936
- 2a Havelock, 1927. F.C.C. 1936
- 2a Porthilly, 1927. F.C.C. 1936
- 2a Carlton, 1927. F.C.C. 1939
- 2b Polindra, 1927, F.C.C. 1938
- 2b Penvose, 1927. F.C.C. 1953
- 7b Trevithian 1927. F.C.C. 1936

- 5a Tresamble, 1930
- 2a Trenoon, 1930. F.C.C. 1936
- 8 Cragford, 1930. F.C.C. (forcing) 1947
- 2b Brunswick, 1931. F.C.C. 1939
- 1b Trousseau, 1934. F.C.C. 1947
- 3c Silver Coin, 1949
- 2a Scarlet Elegance, 1938
- 2b Farewell, 1938
- 6a Peeping Tom, 1948

I missed 1927 but it must have been a good year.

BACKHOUSE. Mr. and Mrs. R. O. Backhouse in their garden some fifteen miles from our home here in Whitbourne had a few important objectives. They aimed for improved red-cupped daffodils, they hoped to get red trumpet kinds, they tried to make the pink-crowned dreams a reality. There is no doubt their contribution to breeding was most important, as, although they failed to get a red trumpet until W. O. Backhouse achieved this a few years ago, they did produce Hades, the dark red-cupped kind behind Kilworth from which the vast majority of white and red-crowned modern kinds have come. The double Texas is not a flower I can love, but it is an important commercial double yellow and orange. The pink-crowned Mrs. R. O. Backhouse is listed in the Dutch catalogs as The Pink Daffodil and it is true that scarcely any other single variety has so captured the interest of the public as this one.

- 2b Mrs. R. O. Backhouse, 1923
- 2b Hades, 1925
- 4 Texas, 1928

THE BRODIE. The Brodie of Brodie at Brodie Castle led a quiet life, rarely venturing away from his garden in spring time. Here he worked with meticulous care among a wide range of daffodils keeping careful notes of the crossing done and seedlings selected. He contributed a range of fine flowers through all the sections of the first three divisions and not forgetting some of the others. His Smyrna is still probably the most arresting of the poets. His work with the pink-crowned kinds was perhaps his most successful, the white and primrose sister seedlings Mitylene and White Sentinel being much used for producing pinks. These two together

were of very great help in breeding as they not only gave good pinks, but helped to improve the quality of the whites and reds and also gave good whites.

- 1a Cromarty, 1933
- 1c Tain, 1933
- 4 Swansdown, 1939
- 2a Golden Torch, 1942. F.C.C. 1949
- 2c Cotterton, 1943
- 2b Loch Maree, 1946
- 2b Daviot, 1950

A. M. WILSON. The work of A. M. Wilson spread over a long number of years during which time he raised some excellent flowers. His name would have been honored if he had only raised one, his Carbineer, which was for long the leading red and yellow. Lionel Richardson has said that for many years he did not let a season go without sowing at least a thousand seeds from Carbineer. Certainly it became one of the cornerstones of his and other breeders' work in the 2a section. The vigor of Carbineer and its good habit made it a "must" for using in breeding. Fairy King was one of his red cups that got an Award of Merit in the thirties. His Heaven is another exceptionally robust good plant, but this time with a smooth, thick, white perianth and a shallow crown of apricot and chrome. His Ludlow is still one of the finest 2c's in the garden, being a robust plant and an icy white flower with just a touch of green in the base of the large crown.

- 2a Carbineer, 1927. F.C.C. 1938
- 2c Ludlow, 1937. F.C.C. 1940
- 2b Heaven, 1944

GUY L. WILSON. The two leading breeders of recent times have been the late Guy L. Wilson and J. Lionel Richardson. They are much missed. Their work was broadly complementary; in their own fields each was supreme. The friendly rivalry between them on the show bench was perhaps a spur to fresh efforts. They both had the highest regard for the other's work.

Guy Wilson from earliest childhood had loved daffodils. They grew in the grass and beds around his home in the wide green valley countryside of Co.

Antrim in Northern Ireland. After a short period working in the family textile mill he started growing and breeding his daffodils commercially. He bred with all kinds belonging to the first four divisions. He is thought of as the breeder of white daffodils and, of course, he was preëminent in this field, but, in fact, his yellow trumpets like Slieveboy can stand comparison with any and his yellow-reds include some of the most important. Armada is the earliest flowering kind of good form and color combined in a plant of excellent behavior and constitution. Home Fires and Foxhunter are two more fine colored flowers. His race of pink-crowned kinds combined the work of Tasmanian breeders with his own and that of the Brodie of Brodie. A long series of fine flowers with pink in them lead up to some of today's top-liners. White Sentinel and Mitylene were much used at first. Interim was rather a break away from the usual, coming from the large-cup Dava crossed by the small-cup Cushlake. The pink-rimmed Interim gave a series of solid pink-crowned kinds including Irish Rose that has in its turn proved to be an exceptionally fine breeder. Passionale came from Rose of Tralee \times Irish Rose and is the most vigorous and generous blooming quality pink we yet have. The color of the pinks from the Guy Wilson breeding lines was a pure pink range without orange undertones.

The whites, be they trumpets, large cups, or small cups, would be a poor set without the flowers that Guy Wilson produced. Some fanciers would choose Cantatrice as the finest Wilson flower. Certainly it has won all the awards it could win all over the world, and remained for the greatest length of time at the head of its section as the finest exhibition kind. His Kanchenjunga with its huge petals and wide trumpet was one stage towards the bigger and better things to come. Broughshane was a marvel in its turn. Now we have Empress of Ireland which at its best can be quite wonderful, almost up to the standards of its children like Birthright, Queenscourt, Ulster Queen, and Panache. The refinement of the latest Wilson trumpets

is such that they probably lead all the colored trumpets in quality, certainly his white large-cups beat all others. Knowehead and Glendermott are two leading flowers with definite large crowns. The silky texture is delightful. He raised a series of fine flowers on the borderline of trumpet proportions, but another stream of flowers with neat smaller cups leaned towards the small-cupped proportions and character. These stemmed in part from the small-cupped Silver Coin. Easter Moon is a flower of this type, a variety almost incapable of giving a poor seedling. Homage is a new one; in this the crown has the touch of green in the base that was one of the features which Mr. Wilson was always striving to combine with the high quality and pure whiteness of his latest flowers. It was the Wilson series of seedlings in the small-cupped division that wrought a revolution in the white-petalled, pale-colored types. Chinese White and its sisters and half-sisters made the 3*b*'s without red and 3*c*'s their own dominion. Now the newer generation is winning the top awards in these classes, but all owe something to the Chinese White race in their blood. Incidentally, it is Mr. Wilson's Chungking that after many years is still one of the very few contenders for show honors in the yellow-petalled, small-cupped classes.

The cross King of the North × Content that produced the first reversed bi-color trumpets and a series of lemon flowers was first made by Mr. Wilson. Spellbinder is still a worthy 1*d*.

- 2*c* Slemish, 1930. F.C.C. 1939
- 3*c* Frigid, 1935. F.C.C. 1950
- 1*c* Cantatrice, 1936. F.C.C. 1939
- 3*c* Chinese White, 1937. F.C.C. 1949
- 2*a* Armada, 1938. F.C.C. 1947
- 1*c* Broughshane, 1938
- 3*a* Chungking, 1942. F.C.C. 1950
- 1*a* Moonstruck, 1944. F.C.C. 1951
- 1*d* Spellbinder, 1944
- 1*b* Preamble, 1946. F.C.C. 1949
- 1*c* Vigil, 1947
- 1*c* Empress of Ireland, 1952
- 2*c* Easter Moon, 1954
- 2*c* Homage, 1955
- 1*c* Birthright, 1956
- 1*c* Queenscourt, 1956

- 2*c* Glendermott, 1957
- 1*c* Ulster Queen, 1962
- 1*c* Panache, 1962

RICHARDSON. The stream of world-beaters that came from the seedling beds of J. Lionel Richardson covered many show types. Originally, his strong suit was the colored flowers, the red cups. Bahram was a fine flower of good color and constitution. Then came the Narvik and Ceylon pair to set a new standard of perfection, and seedlings from these two further improved the color and form of this race of flowers. Vulcan and Flagstaff now lead with one or two others. For long the yellow-reds seemed almost incapable of improvement and the emphasis in breeding veered to other types. The red and whites had been immeasurably improved by the introduction of Kilworth from White Sentinel × Hades, and this mated with Arbar from Monaco × Forfar gave the population explosion of fine kinds that is still dazzling us every year in our novelty beds and on the show benches. Somewhat before the impact of these red and whites in large- and small-cup sizes, a series of yellow trumpets was lending new distinction in a class where it has always been difficult to raise sartorial standards. The most famous of these was Kingscourt, introduced in 1938 and still a winning show flower today. But Goldcourt with its deeper color, narrower trumpet, and perhaps thicker texture made almost as much appeal to fanciers. The two were interbred as well as the sister seedlings of Kingscourt and flowers from this line of breeding brought forth a number of fine kinds. Arctic Gold is a favorite as a rich-textured, deep-colored successor to Goldcourt with a wider balanced trumpet. Burnished Gold and Bayard, almost identical twins, King's Ransom, Royal Oak, and Spanish Gold all have something to offer. The large Golden Rapture was a rather different type of flower from the large Pretoria, a yellow trumpet with scarcely the exact fine balance to make it a leading show flower but nevertheless a good large one. Viking strides the show deck fearless of competition.

Richardson worked with very good results among the pinks. For a decade or longer his Salmon Trout was almost without rivals in commerce. Now many new kinds have come along from the pink breeding front that he established, many individuals owing much to the Salmon Trout influence with its fine perianth, others coming from the Green Island line that, mainly through Rose Caprice, added perhaps a touch more vigor and robustness to the bulbs and flowers of the latest pinks. But some fanciers will like best the pinks that trace their origin back through Salmon Trout to Rose of Tralee and so to White Sentinel.

The renaissance of interest in the double daffodils is directly the result of the work of Mr. and Mrs. Richardson. An odd seed from the old Mary Copeland gave the rather weedy Falaise that proved to be the open-sesame to the superdoubles of today and the future. Gay Time and Double Event were followed by a series that we are still watching emerge in every shade, bar the elusive pink and white that is surely due any time now. Falaise was mated with everything that looked like a daffodil and probably a few lilies and amaryllis as well. Top of the results so achieved is Acropolis, hailed as one of the finest flowers from Waterford and rightly so. It is a double of great beauty in pure white but with a few tiny fragments of red, neat in form, finespun in texture, of good size and pose. A formidable beauty.

It is interesting to speculate as to which of the Richardson flowers is his most important. Perhaps it may be the golden Galway, the large-crowned flower close to trumpet size that has dominated its class since it was first introduced quietly and modestly over 20 years ago. As a garden plant it lacks nothing, being floriferous, long lasting, of rich color, neat habit, and abundant vigor. The bulbs are like highly polished cannonballs.

- 2a Bahram, 1935. F.C.C. 1951
- 1a Goldcourt, 1937. F.C.C. 1947
- 2b Green Island, 1938
- 2b Kilworth, 1938. F.C.C. 1946

- 1a Kingscourt, 1938. F.C.C. 1947
- 3b Limerick, 1938. F.C.C. 1946
- 2a Ceylon, 1943. F.C.C. 1948
- 2a Galway, 1943. F.C.C. 1948
- 2b Arbar, 1948. F.C.C. 1961
- 2b Salmon Trout, 1948. F.C.C. 1952
- 2b Tudor Minstrel, 1948. F.C.C. 1956
- 1a Arctic Gold, 1951. F.C.C. 1960
- 4 Acropolis, 1955. F.C.C. 1959
- 4 Tahiti, 1956. F.C.C. 1961
- 2b Romance, 1959
- 3b Rockall, 1955. F.C.C. 1965

With the passing of the two leaders, Guy Wilson and Lionel Richardson, a slackening of the breeding momentum might be expected, but this has most certainly not happened. Mrs. Richardson continues the good work. Guy Wilson Ltd. are using the Wilson breeding stocks, and a group of amateur breeders are now producing flowers of the very top rank in all the main divisions.

LEA. J. S. B. Lea has a large number of fine seedlings to his credit, some having won Awards of Merit. His Canisp has twice won Best Flower in Show at London. It is a 2c with some trumpet character and is a flower of the most exquisite refinement from Ave \times Early Mist. He has a number of other fine whites, together with a lot of red cups both white and yellow petalled and many other leading types.

DE NAVARRO. J. M. de Navarro has yellow trumpets, whites, red and yellows, and all classes of the first three divisions with which to do exhibition battle on equal terms with any. However, he has made a special attempt to improve the sunproof qualities of the red and whites and has done some successful work along these lines. Like most other breeders he had a go at the Chinese White and Green Island cross. Out of his seedlings were selected a number of fine kinds, but Sacramento, named in honor of his mother's birthplace, was quite outstanding. To my eye, it is the best we have seen from this cross on this side of the ocean. It is a totally white flower of the most exact and perfect form that I have seen among the many fine things that have come of this jackpot of a cross. It won an Award of Merit in 1964.

D. BLANCHARD and his son John have become marriage brokers for the whole

Narcissus genus. The results of their labors vary from five-inch flowers to half-inch species hybrids known colloquially by some as "weeds." A heresy, of course, for their little ones are chosen from among their seedling brethren with the same care and discernment as the bigger fellows. They have a number of Awards of Merit to their credit and the F.C.C. for their white triandrus Arish Mell marks out a variety that is the first of its type to be so honored. Some will think their bright bicolor Tuesday's Child, in white and yellow, even better.

BOARD. On a Derbyshire hillside with a slope of approximately one in two are rank upon rank of exciting seedlings paraded under the exacting command, judge's eye, and parental care of F. E. Board, the President of The Daffodil Society. Having purchased what he felt to be the best breeding stock of the leading commercial breeders in the British Isles, Mr. Board has, with care and by raising large numbers of seedlings, got a mass of topline flowers especially in the white kinds which rank as personal favorites. It was Mr. Board who purchased from Guy Wilson such outstanding seedlings as the pink *Passionale* and the white *Homage*. He has had the benefit of such flowers in his breeding stocks for quite a number of years now. Recently a large number of his seedlings have been christened and more may be expected to be seen and heard of them soon. Previously the very late climate of that part of Derbyshire together with the pressure of breeding work has precluded any attempt to show flowers of his raising in London.

GRAY. Alec Gray is famed for his miniatures. Each year crowds gather in front of exhibits of his charming small-flowered daffodils. There are many enchanting things that are quite distinct from other types and make a welcome addition to our gardens. His little jonquil hybrids like *Bobbysoxer* and *Stafford* are grand plants as well as being perfect little round flowers. *Xit*, in its pure white form, is altogether delightful and elfin. But perhaps the most successful of his flowers in the garden is

Tête-a-Tête, the cyclamineus hybrid with tazetta blood in it. It opens very early in the year and lasts for weeks in good order with one or two or three flowers of gold and tangerine on 6 to 9 inch stems. A bulb soon produces a cluster of flower stems.

DUNLOP. W. J. Dunlop grows his flowers on the opposite side of the same valley in Northern Ireland where Guy Wilson lived. He has raised many outstanding flowers and has perhaps not had quite the full credit for his work owing to the fact that the late flowering season and the long distance make it difficult and sometimes impossible to show his things in their best condition at the London shows. He has worked with all types within the Big Three divisions, early successes coming from his crossings of the small-cupped red and whites. *Folly* × *Hades* gave among others the delightful *Enniskillen*, while *Glenwherry* and a number of other fine flowers came from the rimmed *Isola* × *Sunstar*. As he grows *Irish Splendour*, it is outstanding, probably the best *3b* yet seen. It has large flowers with broad white perianths and wide flattish cups of solid red. His bicolor trumpets have been most successful as show flowers and garden plants. I think highly of his *Ballygarvey* as a garden plant; it blooms so freely and grows so well with its well-formed white and deep chrome blooms. His *Newcastle* has for some years been accepted as the best *1b* for exhibition and it is certainly a fine flower. His *Downpatrick* with a paler trumpet is perhaps even more pleasing in form. A number of his white trumpets like *Stormont* and *Longford* are in the same class as Mr. Wilson's, while yellow and reds like *Elmwood*, *Craigyarren*, and *Holly Berry* are excellent things. The red and gold *Moneymore* is a geometrically designed flower in the deepest gold and orange red, a perfect delight to see. Some of his lemon flowers in both trumpet and large-cup proportions are cool and altogether pleasing. *Ormeau* is a large cup which has become very popular as a garden plant and a show flower in a class where *Galway* has played the dominant role previ-

ously. Ormeau is much more large-cup in character. Its form and its rich gold are perfect.

LATER BREEDERS. To Cyril F. Coleman we are very much indebted for the cyclamineus trio, Charity May, Dove Wings, and Jenny. Now we are seeing others of his raising entering the show bench competition and the catalog lists. Clown is an unusual cyclamineus hybrid in cream and deeper yellow, while Kitten is a nice gold and tangerine one.

There are quite a number of other people successfully crossing daffodils in the British Isles. Dr. Pickles, near Oxford, has devoted much of her work to the pinks and has now a series of well-colored and finely formed ones. The late G. H. Johnstone raised the pleasing *3b* Green Howard, and many most attractive flowers among which some of the best were the pinks. His Famille Rose is an excellent large-crowned kind of good size, form, and clear color. Besides being a good flower itself, it much increases its value by blooming two or three weeks before the next earliest pink. His Roman Tile, with a pink crown edged with pink red, is a distinct and attractive flower. C. R. Wootton has bred flowers of all kinds, although his jonquils Golden Incense, Tittle-Tattle, and Pin Money are the ones that have met with the greatest welcome. Sir Frederick Stern's flowers include the yellow large-cup Amberley, the *2d* Handcross which is a tough, attractive garden flower, and a series of tiny fellows that we all hope will make their way into commerce in years to come. Denis Milne has a number of reddish-petalled kinds to his credit as well as the splendid garden flowers, the gold and scarlet Matlock and the white trumpet Riber.

JEFFERSON-BROWN. My own seedling beds are mostly in early stages of devel-

opment, but we have a number of things of which we think highly. A series of bicolor trumpets looks promising; Tradition, the first of these to be shown, got an Award of Merit in 1965. We have one or two excellent Easter Moon seedlings and a yellow trumpet which is certainly the best *1a* we grow or have seen for quality. We have a charming little cyclamineus hybrid like Jenny but a very clean reversed bicolor. There are also a number of variously colored jonquil hybrids that look very pleasant growing together. At present we are working in many directions in our breeding programs, but we are, of course, using the red trumpet Brer Fox and some other red trumpet seedlings.

The breeding outlook is bright here. The stage that the pinks have reached does not allow good color to excuse poor quality. Some pinks show hints of lavender. More and more pink trumpets are appearing in the seedling beds. One or two yellow-petalled pinks have flowered. The red trumpets are here and will obviously become part of the show scene in years to come as a series of these are bred up to the highest standards of grooming and quality attained in other sections. White and red, and white and orange trumpets are obvious developments in time. But while these may be some time arriving, strains of flowers both yellow- and white-petalled will be sure to come with longer crowns. Of the smaller-flowered divisions, the cyclamineus hybrids are increasing in number steadily and these are proving relatively easy to breed. The interest in the daffodil is increasing year by year and despite the difficulties in starting to breed plants that take five years to reach flowering, there are signs that a steady flow of newcomers is taking up this most rewarding pastime.

—18— Daffodils in the Netherlands

THE OLD PERIOD

When the subject of flower bulbs in general arises one can always expect to find the Netherlands playing a role; in some instances a dominant one and in others a minor role, but always making some meaningful contribution. In the field of daffodils, Holland has had a long and rather interesting history that goes back to the 16th century. Any effort to research this era brings one inevitably to the monumental historical work of Ernst H. Krelage who himself played an important part in the development of the daffodil trade in Holland. This volume of 791 pages, entitled *Three Centuries of Flower Bulb Export*, was published in 1946 and covers the story of flower bulbs in Holland up to 1938. It would be rather presumptuous to relate the contributions of the Netherlands to the development of the daffodil bulb without at the very outset giving full credit to Ernst H. Krelage as the source.

The history of the daffodil in the Netherlands can be divided into two periods; the "old" and the "modern." When one speaks of two periods it is usually difficult to pinpoint an exact date as the end of one and the beginning of the other. Roughly one could set the date as 1880 and if we permit ourselves broad license, we can become more specific and designate 1884, the year of the Daffodil Conference in London, as the turning point.

The earliest detailed description of daffodils in the Netherlands can be attributed to Mathias de L'Obel and Carolus Clusius. The latter described the existing species with such exactness and clarity that one could, in most instances, identify a daffodil with reasonable certainty. It is de L'Obel, however, who contributed most to the early develop-

ment of the daffodil in the Netherlands.

The bulb trade in Holland, as early as the latter half of the 16th century, actively dealt with forms of trumpet daffodils many of which were native to Western Europe. *N. bulbocodium* and *N. poeticus* were also actively traded at that time.

In 1561, de L'Obel first imported *N. tazetta* into Holland from Languedoc in Southern France. Shortly thereafter a double form of bunch-flowering narcissus, Double Roman, was brought in from Constantinople where it was apparently cultivated. At about the same time Paperwhite or "totus albus" came in from southern France. Many were the varieties and related forms of "cluster" (polyanthus) daffodils that contributed to the large selection under cultivation by the Netherlands bulb growers. The catalog of Dirk and Pieter Voorhelm issued in 1739 listed 50 varieties among which were "Bazelman jaune," "Bazelman major" and Soleil d'Or.

Nine of these varieties were still offered in 1788 in a catalog issued by a successor firm, Voorhelm & Schneevoogt, who at that time listed 54 varieties of polyanthus daffodils. Apparently this was the high point for this type of daffodil because in 1791 we find J. Rosenkrantz & Son listing 137; in 1802, D. Durman & Son with 97; and in 1808, Veen Bros. with 83.

Polyanthus daffodils were ideally suited to be grown in pots and were mostly in demand in the 17th century for that purpose. This was particularly true for the Double Roman. This variety could not be cultivated in the cold wet climate of the north and had to be imported from Southern France. The first advertisement for these bulbs ap-

peared in a Haarlem newspaper on November 30, 1779. Simon Groenewoud offered "genuine new double Marseilian daffodils, clean bulbs, known for their lovely aroma, very suitable for glasses and pots, 6 Stuivers each." This, incidentally, was a rather steep price for a daffodil. The following year the price was down to 5 stuivers and when other firms such as A. & C. van Eeden and Mattheus van Eeden entered the trade the price went down still further to the "usual price" for other varieties and types. The Double Roman remained in demand up until about 1910 when it was replaced almost completely by Paper White and Soleil d'Or.

Since the tazetta was sensitive to cold weather it required substantial winter protection and was considered a rather risky plant to grow. As a result, its culture in most countries was rather limited and the Holland flower growers had the field pretty much to themselves. As could be expected prices varied substantially in accordance with the severity of any given winter.

During the latter part of the 19th century the demand for tazettas for indoor forcing began to dwindle. This was due to the fact that during the winter large numbers of cut flowers began to appear on the market from the Scilly Islands. In addition, Southern France shipped substantial quantities of Paper White and Soleil d'Or flowers to the northern countries. Other important reasons for the slackening of interest in the tazetta was the increased demand for trumpet daffodils and the introduction of the new poetaz class.

Although the use of the tazetta by florists in Holland diminished, the Dutch flower bulb trade became increasingly active in selling primarily Paper White and Soleil d'Or bulbs all over the world. In the early years of the 20th century over 50,000,000 Paper White were sold and shipped annually to the United States by Dutch flower bulb exporters.

The concentration by Holland during the "old" era on the tazetta should not imply that other types of daffodils were neglected. The most famous is, of course, the double Van Sion (Telamonius Plen-

us). This amazingly durable variety dates back to 1620 and was first introduced by Vincent Sion. Somehow, it was listed as V. Sion and it was inevitable that everyone soon forgot what the "V." signified. As could be expected V. Sion became Van Sion and for some people Von Sion.

The catalogs of the 18th century, as a rule, listed only about 6 to 10 varieties of daffodils in addition to the very large number of tazettas. Usually there would be 1 or 2 single daffodils and some doubles. In addition three varieties of jonquils (small and large flower, and double) were also to be found. Ever present were the double Van Sion, Incomparable, Albus Plenus Odoratus, and Orange Phoenix. In mentioning this last variety one cannot help but surrender to a humorous thought. (Not as humorous perhaps to the daffodil devotee as it is to the novice.) A recent article on the proper names for daffodils contained the solemn admonition that it was improper to refer to a variety as *albus plenus aurantius* or as Orange Phoenix and that the correct name is Eggs and Bacon. Perhaps there is still hope for the Average Man in the field of daffodils!

Except for the polyanthus daffodils, the early part of the 19th century saw daffodils rapidly lose public favor. In a complete handbook, such as the 1838 edition of *The Flower Garden*, only a few lines in small type were devoted to narcissus without any listing of varieties, but solely a reference to:

"Narcissus, many species and varieties, such as the Jonquil, daffodil, etc."

THE MODERN PERIOD

Although this chapter seeks to describe the contributions of the Netherlands to the development of the daffodil, it is impossible to eliminate the close connection between Holland and England. For centuries the daffodil hybridizers, fanciers, and tradesmen of these two countries have had very close connections even though they seemed, at times, to go in different directions pursuing different goals. At the outset we referred to the "modern" era of the daffodil in Holland as beginning in 1884,

the year of the first Daffodil Conference held in London. Actually, the first movement began some years earlier.

Of the many important British horticulturists in the 19th century, we can safely select two as having had the greatest effect on the Daffodil Renaissance: Peter Barr and Edward Leeds. Many readers are no doubt familiar with the famous letter of April 21, 1874 written by Peter Barr to E. H. Krelage and Son in Holland:

There lives in our country an old gentleman called Mr. Leeds. For 30 years he has been crossing and seeding Narcissus, with the view of producing new forms and to a certain extent he has succeeded, as Mr. Polman Mooy can inform you. There are bicolors, majors, poeticus, incomparabilis, all shades from white to yellow and intermediate forms between incomparabilis and montanus and many other very unique crosses. Now this said old gentleman is getting very infirm and wants to sell his collection. He has a large quantity of bulbs and they are all to be given up to the purchaser for the sum of one hundred guineas.

Now Mr. Polman Mooy has entered his name as a subscriber of 10 guineas. We have done so too and three other gentleman amateurs have likewise put their names down for 10 guineas each.

Now as Narcissus are on the ascendant, shall we put down your name for 10 guineas? We believe it will be a very good speculation and another thing, we believe that, if the collection is not very soon bought, it will be destroyed, as the old man has put it in his will, if not sold before his death, it is to be destroyed. Drop us a line.

Yours truly,
P. Barr

The result of this letter was that half of the stock was purchased by Peter Barr's firm, Barr & Sugden, and the balance by Polman Mooy of Haarlem, P. van Velsen & Son of Overveen, and three British amateurs. E. H. Krelage & Son refused to go along because they were not entirely satisfied by the proposed division of the stock. Peter Barr turned over his share of the stock to de Graaff Bros. for propagation. The van Velsen firm incidentally sold its share at pub-

lic auction on May 14, 1888 and realized around 15,000 guilders for a little more than an acre of bulbs. The result of the auction was a surprise for everyone since daffodils had never before achieved such a high price in Holland.

In the early 1880's the public approach to the daffodil improved greatly. This change of attitude was no doubt partially due to the current aesthetic movement which eliminated the prejudice against the color yellow and began to show appreciation for the natural grace of daffodils and the many possibilities for their use in gardens as well as for interior decoration. The efforts of Peter Barr and his friends to popularize daffodils were finally rewarded by the convening of the first Daffodil Conference in 1884.

The Netherlands bulb growers had prior to the Conference worked closely with their British counterparts to further the revival of the daffodil and had begun to increase and broaden their assortment of varieties. They naturally supported the 1884 Conference and sent E. H. Krelage as their representative. The *Gardeners' Chronicle* of April 5, 1884 reported:

"This meeting was entirely and unanimously in favour of giving vernacular names to what we may for brevity's sake call garden varieties. This practice was recommended by Mr. Krelage, the eminent Dutch horticulturist who advocated it in an English speech of remarkable force and fluency. Practical man as he is, he further insisted on having these names short. An excellent start in this direction was made on Wednesday, when the whole of the flowers exhibited were renamed in accordance with these principles."

Two companies were considered to be the foremost daffodil specialists in Holland towards the end of the 19th century. E. H. Krelage & Son in 1889 issued the first catalog in Holland devoted exclusively to "Narcissii." De Graaff Bros. occupied first place on the Netherlands scene so far as the introduction of new varieties was concerned. This firm in 1887 introduced and exhibited two great daffodils: the yellow trumpet Glory of

Leiden and the white Mme. de Graaff. Both were awarded First Class Certificates and offered for sale in that year at £5 each. This rather steep price was realized despite the fact that such varieties as William Backhouse's Emperor and Empress were in 1870 being offered for a mere 2/6 per bulb.

Many varieties of daffodils that were found growing wild in Holland were added to Holland growers' collections. Most of them are now completely forgotten, having been replaced by improved varieties. One of them, however, deserves special mention. This was Golden Spur which had been found in the wild state on the estate of the Prince Van Wied in Wassenaar. In 1889 the variety was registered by the daffodil committee of the Royal Horticultural Society and because of its excellent qualities for early forcing achieved the status of a leading commercial variety. Although originally prized for florist use, this variety was apparently a "natural" for garden use. Naturalized plantings of this variety can still be found thriving in such tough climates as Iowa, Nebraska, and other States in the Midwest.

By the turn of the century Holland bulb growers began to pay increasing attention to the propagation and sale of daffodil bulbs. In addition to seeking to expand their collection of varieties they concentrated on volume production of certain desirable varieties so as to adequately supply the wholesale trade all over the world. The soil around the town of Sassenheim proved to be ideally suited for the cultivation of daffodil bulbs and this aspect of flower bulb growing soon centered in that area.

THE PRESENT CENTURY

It is at this point that the Holland daffodil growers, in a sense, parted company with their British friends. In England the concentration seemed to be on the hybridization of new varieties for show purposes. The Dutch, on the other hand, sought varieties that had qualities that would make the bulbs suitable for sale in large volume in foreign lands. Both groups were eminently successful in achieving their own goals. Until

quite recently Holland daffodil growers sought to satisfy the needs of commercial flower growers. Now the emphasis is being placed on varieties for use in the garden. During the first half of the 20th century Holland secured and held the premier position as a volume supplier of daffodils on the world markets. Although the number of daffodil bulbs grown in Ireland and England increased, Holland bulbs were generally preferred for their firmness, their health, and uniform size. The difficult and trying years of 1926-38, when the United States imposed a plant health embargo, hurt Holland, but the Dutch bulb growers still remained a major factor. This, despite the fact that many Dutch growers relocated in the United States and helped build the American production of daffodils.

We can speak of the Holland bulb growers as if they were a closely knit entity, but we should not overlook the tremendous contributions made by individuals and firms. There are a substantial number of such people who, since 1900, have labored hard and well to advance the culture of daffodils. Several growers introduced outstanding varieties that could hold their own at the shows regularly held in London and other areas in England.

We need only mention a few to illustrate the point. In the area of trumpet daffodils we can cite E. H. Krelage & Son for Mrs. Ernst H. Krelage (1912); G. Lubbe & Son for Unsurpassable (1929), Rembrandt (1930), Gold Medal (1938), and Grape Fruit (1939); A. Frylink & Sons for William the Silent (1938); P. van Deursen for Mt. Hood (1937); van Tubergen for Mulatto (1931); and for the closest rival to King Alfred, Warnaar & Co. for Golden Harvest (1927).

So far as the other classes are concerned, we should particularly note the following firms for introducing varieties that were true landmarks:

De Graaff Bros.	—February Gold (1923)
	Shot Silk (1931)
	Kentucky (1928)
	Moonshine (1927)

M. van Waveren & Sons	—Thalia (1916)
R. A. van der Schoot	—Cheerfulness (1923)
J. B. van der Schoot	—Geranium (1930)
G. Lubbe & Son	—Actaea (1927)
P. van Deursen	—La Riante (1933) —Verger (1930)
Warnaar & Co.	—Aranjuez (1933)
Albert Vis	—Laurens Koster (1923)
J. W. A. Lefeber	—Selma Lagerlöf (1938)

The story of Holland's contribution to the culture of daffodils would not be complete without paying tribute to the "grand old man" of the Holland flower bulb industry; that gruff but kindly gentleman easily spotted by his beret and his beard; Prof. Dr. Egbertus van Slogteren. The professor began his professional career in 1917 and his very first assignment was in connection with a daffodil disease. Under his leadership the Flower Bulb Research Laboratory was established at Lisse, Holland and grew over the course of years so as to achieve an international reputation in the field of bulb research.

The Royal Horticultural Society of England awarded him the Peter Barr Memorial Cup in 1938 for his work with daffodils. In 1955 the American Horticultural Society honored him with its citation and in 1959 the American Daffodil Society bestowed on him its first Gold Medal. Willis H. Wheeler, on behalf of the Society, presented the award to the Professor in Holland on July 30, 1959. Some of his words on that occasion bear repetition:

"Outstanding among the contributions to the horticultural success of this nation are the things Prof. van Slogteren has done for the daffodil and the genus *Narcissus*. In the earlier years of this century the bulb and stem nematode threatened the daffodil cultures of this and other lands. The professor met this challenge and today the hot water treatment of daffodil bulbs is a standard procedure that gives us Dutch

daffodils free of eelworm and certain other pests.

"Later the professor and his staff turned their attention to other disease problems of the daffodil. For many years certain daffodils showed abnormalities of the leaves and flowers believed to be caused by virus infections. Various phytopathologists in several countries worked on this problem without definite success, but in the 1940's Professor van Slogteren and his laboratory gave us the answer. He was able to demonstrate by long and patient work that the diseases were caused by certain viruses, and he showed that they were aphid-transmitted. With this knowledge the bulb growers were better able to take the necessary steps to eliminate the trouble."

The work done by van Slogteren from 1917 until his retirement in 1958 contributed greatly to the development and preservation of daffodils not only in Holland but in every country where they are cultivated.

We are now well into the second half of the 20th century and Holland continues to play a major role in the daffodil culture. As in the first half of this century, as well as in previous centuries, the Netherlands pursues its goal of being the "flower bulb basket" of the world. It sees its function as that of providing a sufficient volume of commercial varieties needed and wanted by florists and gardeners in all countries. This does not mean that there are no longer Krelages, de Graaffs, Lubbes, and Warnaaars seeking new and better varieties. That work will always continue because in most instances it is a labor of love and not motivated solely by a desire for profit.

Many articles have been written on the need for better garden varieties and we have no doubt they will appear. When they do, we can safely say that the Netherlands will again seek to produce enough of a volume to supply the gardens of the world. This, in essence, is the past and future of the Holland flower bulb industry.

—19— Daffodils in Australia

When Mrs. J. Lionel Richardson was conducting her tour in Australia and New Zealand last year, she described daffodil growing as a rich man's hobby. Most of us would subscribe to this contention. Indeed, our records reaching back for half a century indicate just how much the hobby has enriched the lives of those who have pursued it, but not necessarily those having well-lined pockets or substantial financial resources. A few were well off, and to them we are deeply indebted. They were able to replenish our stocks with the best and latest of the overseas creations and being men of generous disposition, they distributed their treasures far and wide. An attempt will be made to place on record the names of those who have contributed to the place which the daffodil occupies in the hearts of so many as our No. 1 spring flowering bulbous plant. "There be of them that have left a name behind them that their praises might be reported; and some there be which have no memorial." As one who has spent some time in research and examination of the records, I regret any oversight.

Few countries are the natural habitat of the daffodil and Australia is no exception; we have no wild forms. Much of this great continent consists of inhospitable open deserts—vast, dry, desolate, sunburnt, and waterless. Another great area is the salt and blue bush plains, windswept and exposed. Daffodils are grown extensively in Victoria and Tasmania; to a much lesser extent in South and West Australia and only in well-sheltered spots in New South Wales. I know of no plantings in Queensland. Tasmania is much farther south than either Adelaide or Melbourne and so is ideally situated for the production of high-quality blooms. Victoria ranks next with a more favorable climate than ours

in South Australia where we have a grim struggle against adversity. Our friends in Perth have even greater problems. In short, conditions limit the growing of daffodils to the southern half of the continent, especially the southeastern corner and the offshore island of Tasmania.

Little use is made of daffodils as bedding plants in our botanic gardens, public parks and private gardens. Most people grow a few and some occasionally surprise us with a planting of Malvern Gold, Pilgrimage, Bodilly, or King Alfred. The red-cups are not used at all unless in some sheltered and well-favored locality. All such varieties burn very badly and so are disappointing. Here in the ranges, I am able to leave those with color on the plant when conditions are overcast. On the whole, my show flowers are opened under boxes or indoors.

Two plantings "in the grass" have come under notice. One is at Mount Lofty in the Adelaide Hills where several thousand Emperor and Empress have flourished almost unattended over a period of 20 years. They get filtered sunlight through, and later protection from, the strong-growing silver birches nearby. When I last saw them, they were providing a dense carpet of color, although the individual blooms were thin and weak. At Meadows in the southern hills, a planting of mixed seedlings and named sorts was made 25 years ago. The bulbs were from the suburban garden of the late G. Brookman. When he passed on, his brother lifted the stock and lined them out in his fields at Meadows; the planting covered about an acre. The memory of one of our first seedling raisers is perpetuated every year when the daffodil field is thrown open to the general public. A silver coin for the funds of Red Cross entitles each visitor to pick

as many flowers as are wanted. No doubt there are larger plantings in Victoria and Tasmania, but it had not been my good fortune to see them. Several catalogs list "varieties suitable for planting in the grass" and I understand that a ready demand exists for them. Our worst enemy is the hot, northerly wind which, at flowering time, sends the temperature over 80° and, after such an ordeal, there is little left of the daffodil bloom.

By the early 1920's, the growing of daffodils for exhibition had gathered momentum. In Victoria, West & Fell had established large plantings of both named varieties and their own seedlings at Casterton in the Western Districts. This was an ideal spot and they had ample country available. As the daffodil does revel in freshly ploughed grassland, their extensive stocks thrived and the firm was entrenched as the leading commercial undertaking in the Antipodes. When West passed on, the business was conducted by his son-in-law, Hubert Fell. He was a pleasant fellow and wrote encouraging letters to his many satisfied customers. I was one of them and my first purchases were from the "Swanley" gardens. Thousands of seedlings were raised here, some of them reached world fame: Golden City, Renown, Mortlake, Valencia, Jean Hood, Melva Fell, Ivo Fell, David West, Swanley Peerless, and Telopea. One of their first catalogs lists over 500 varieties, including 22 poeticus and a similar number of doubles. Among the named sorts are many of the novelties of that time and at very high prices—at least, such would seem to be the case—Fortress 80/-, Principal 80/-, Slemish £8, Caerleon, Aladdin's Lamp, and Carbineer, all at £6. Hugh Poate was available at £10 and King of Hearts for £15.

At Fern Tree Gulley, much nearer Melbourne, the late H. A. Brown was in hot pursuit as a commercial grower. He had chosen a well-favored and sheltered spot. He was a keen and zealous exhibitor and businessman and traveled to all the capital cities with displays and exhibits. On one occasion, he swept down on Adelaide and carried all before

him, including the Centenary Cup, valued at £50. His best flower was Rubra, a 2*b* seedling which has been grown successfully all over the world. Others of his own raising to gain distinction are Lord Melbourne (1*a*), Lady Bonython (1*c*), the attractive Leedsii Canterbury Belle (2*b*), and the pink trumpet Pink-a-dell (2*b*). When Brown retired, he sold the property to Mr. and Mrs. J. Hancock. It has since become a dense housing area. The Hancocks bought the entire stock and moved to Kalorama in the Dandenong Ranges. The business has grown tremendously, and son Bob has taken over. With the help of his aged mother and casual help, the cut-flower market is supplied on a large scale, and their catalog lists over 1,000 varieties. The Hancocks have given us many outstanding flowers and the best of them in my garden are Isobella (2*c*), First Frost (2*c*), and Shiralee (2*b*). Scott Morrison and his friend, C. A. Nethercote, are no longer with us. The Morrisons have a commercial farm at Wandin which is under the direction of a son, Travers Morrison. The Heathcote seedlings are widely grown and a couple to have done well in my garden are Derrinal (1*a*) and Pyalong (1*b*).

Canon Rollo Meyer is credited with having produced the first pink, Maiden's Blush, but some years earlier the late Alister Clark of Glenara, in Victoria, had discovered a true pink which he named First Blush. This was the foundation of a tremendous family of pink-tinted flowers grown at Glenara. In 1948 Clark was awarded the Peter Barr Memorial Cup by the Royal Horticultural Society for his work among daffodils. He told me that he would have liked the citation to have said "pink daffodils." I saw hundreds of pinks in the Glenara gardens when I visited Clark in 1947. They were the pride and joy of his head gardener, John Sharp, who still takes an active interest in the daffodil. Clark was generous in his gifts of bulbs and among the best I have grown were Mabel Taylor (2*b*), Shot Tower (2*b*), Hugh Dettman (2*b*), and Better Half (2*b*). Another of his creations, Glenara Caramel (1*b*), was the outstanding flower both

for exhibition and the garden for many years.

The late Oscar Ronalds was the leading amateur in Victoria. Few of his seedlings were registered, but among the best were Golden Coin, a 1a similar to Kingscourt, Bridal Day (1c), Marble Queen (1c), and the wonderful pink cup, Tarago Pink. The late Group Captain Fairbairn raised many fine seedlings on his well-known grazing property at Skipton. His red-cups were of astonishing color and substance, and I was fortunate to receive many gift parcels from him. According to reports, he used new soil every year for his plantings and no doubt this would account for the quality of his blooms. He was one of the first to take blooms from the mainland to the Hobart (Tasmania) Show and was successful with them. The best of his seedlings in my garden have been C. O. Fairbairn (2a) and the remarkable Dawn Fraser (2c). Within a short space of time, Victoria had lost most of its leading exhibitors: J. Hancock, Alister Clark, Harold Alston, L. Brumley, and others who had helped to make the Melbourne Daffodil Show an institution. Michael Spry and Murray Gardiner have helped to fill the gaps and the former is said to have the best collection of seedling trumpets in Australia.

The late William Jackson arrived in Tasmania in 1898 and by 1924 he had put together a fine collection of daffodils. He was an acknowledged authority on all branches of horticulture and was a perfectionist. His contemporary and colleague was the late C. E. Radcliff. Together, these distinguished and eminent gentlemen quickly put Tasmania on the map and quality seedlings from their gardens began to dominate the shows. Jackson sent me his Corlo and Chromis, described as "short yellow trumpets" and in process of time, they, with Royalist, gave me a magnificent line and family of self-yellows. Radcliff was an excellent correspondent and wrote a weekly bulletin of news during the daffodil season. His Bonnington (1b) was our leading bicolor for many years. Bungana was an excellent 1a, Palmer a 2a resplendent in color, and, of course,

there was his wonderful family of pinks: Dawnglow, Rosario, Karanja, (a bulb of which was sold for £50), Roselip, Pink Nautilus, Roselands, Woodlea, Rosebowl, and a host of others. He was awarded the Peter Barr Memorial Gold Cup in 1946 for his work in connection with the raising of pink daffodils. Other outstanding flowers raised by him were Nautilus (2c) and Portia (2b). At one time I had over 50 of his seedlings growing in my fields.

The son, William Jackson, Jr., has continued with his father's work at Dover, Tasmania, and has concentrated on the pink double. His 78/64 is described as "A full pink double without anthers or stamen. It has a pure white perianth with a deep pink, full double center which covers about $\frac{3}{4}$ of the perianth. Interspersed among the small pink petals that form the center are miniature white petals."

Tasmanian daffodils are absolutely magnificent in a good year. The favorable climate and long growing season, together with the years of patient effort on the part of breeders, have helped to bring the standard of their seedlings to the highest state of perfection. Breeders and exhibitors who have passed on and who contributed to the breeding program are J. H. Hinsby and the two stalwarts already mentioned. Others known to me are Campbell Duncan who gave us a host of fine seedlings; A. O. Roblin, raiser of the 1c Kilpa and the almost unbeatable 3b Caleen; S. J. Bisdee, for years one of the leading amateurs, his red and white Pirandello is one of the most colorful daffodils in my beds and his pink Lady Binney is winning in most of the shows; J. Erp who bred the now-famous pink Bon Rose, the highest-priced bulb in commercial lists; T. H. Piper up on the Northwest Coast who, with J. Radcliff, has dominated the Ulverstone Show with fine seedlings; and K. H. Heazlewood, the leading grower in Launceston.

It is just thirty years since I had my baptism into the Daffodil Show. I had watched a very old gentleman staging his blooms at the Royal Show and two of his flowers attracted my attention in a

stand of "36 Distinct Varieties." The flowers were Royalist and Beersheba and the gentleman, the late W. L. Summers. He exhibited daffodils for over forty years and had sown seed the year before he died in his 82nd year. I asked him how much a collection of bulbs would cost. His reply: "A small fortune, m'boy, a small fortune." Five years later I had a small collection and in 1940 I got my first major award, the Grand Champion of the Adelaide Show with Leedsii Grayling. At that time W. L. Summers, F. H. De Rose, H. Friebe (all these gentlemen have passed on), J. M. Peattie, Harold Parsons, T. Martin, and Bowley were the prominent exhibitors. The ranks have thinned tremendously, and the writer, with a neighboring orchardist, K. Jacobs, and H. Parsons, put up most of the flowers now. During the past two or three years, we have had one newcomer to the ranks in W. M. Blenden, a gentleman who has gained world fame as a raiser of gladiolus.

We named this property "Anstie Farm" after the old English estate at Holmwood, Surrey, where I was born. The Anstie Farm seedlings have given me cause for much rejoicing. Queen Ki (1*b*) has seldom been defeated on the show bench. Others are Cherette and Chemere, short trumpet 1*a*'s; Dalai, a classic 2*a*, and Prince Ki, a noble 1*a* on tremendous stems up to 30 in. in this climate and a wonderful garden plant. I might also mention My Valentine (2*c*) and a number of delightful white trumpets, including L. Lucas (after the Australian poetess), the successor to Cantatrice; and White Ki, a much larger and better Beersheba. I grow about 400 selected seedlings and 500 named varieties at Anstie Farm in washed-out, grey, gritty soil made fertile with liberal dressings of deep litter from the hen houses.

The late Guy Wilson was one of my many benefactors and told me of the importance of Royalist and Guardian in the breeding program. Nearly all my good things have resulted from the use of these two flowers, both as seed and pollen parents. Both give quality and purity of color. P. Phillips of New Zealand has kept me well supplied with all the

good things from the Dominion, including the wonderful Kanga (1*a*) and the unique red-cups Rawene and Park Royal. This year he sent me Debutante, Easter Moon, Ark Royal, Vulcan, and a number of other recent introductions from overseas.

My daffodils have flowered much earlier in recent years. One cannot offer any explanation for it apart from soil temperatures at planting time. Varieties I once exhibited in early September are now well finished in mid-August.

Among overseas varieties prominent on the show bench here today are Kingscourt, supreme and overflowing with quality, but temperamental; Ludlow because of its poise, substance, and purity of color; Snow Dream, aristocratic and vigorous; Revelry, tall, upright, and colorful; Arbar, standing alone among the red and whites; and Salmon Trout. A magnificent example of this variety at the last Royal Adelaide Show confirmed it as the best pink ever seen here.

The records of our now famous Town Hall Show register the Grand Champion Daffodil for each successive year. Beersheba has taken the honors three times, Royalist, Grayling, and Queen Ki twice, and the following varieties once each: Camberwell King, St. Egwin, Good Dawning, Rewa, Principal, Cantatrice, Kingscourt, Maharajah, Cotopaxi, Narvik, Chemere, Dalai, Cherette, Robert Montgomery, Goldcourt, and the others, South Australian seedlings. This show has now been discontinued because of lack of support. It was a great disappointment to our Secretary, H. Kneebone, who held this thankless task for over 30 years and demonstrated his wisdom and skill as both promoter and organizer. He is now President of our Society, the Carnation, Daffodil and Sweet Pea Society, the oldest floricultural society in South Australia.

The Royal Adelaide Show is now the mecca for daffodils in Australia and generally considered to be the best flower show in the Southern Hemisphere. The exhibition continues for a week and fresh exhibits are made every other day. There are several suburban shows in South Australia where the blooms are

finished by mid-September and more numerous shows in Victoria where the season continues until the second week in October. Skipton is the best of the suburban shows.

In the 1946 *Daffodil and Tulip Year Book* of The Royal Horticultural Society, William Jackson wrote: "Each and every decade has its own joys and pleasures as

well as its sorrows and disappointments. Among the joys and pleasures, I rate the raising of seedling daffodils very highly." I am in complete agreement with him and I trust that this account of daffodils as they are grown halfway around the world will help to sustain interest and enthusiasm among our most gracious and esteemed friends in America.



PLATE 53

LILIAN A. GUERNSEY

SPECIES *minor* VAR. *conspicuus*
Lobularis of the trade.

—20— Daffodils in New Zealand

It is difficult to say when daffodils were first grown in New Zealand as a serious activity, but it was in the 1890's that Sir H. Heaton Rhodes of Tai Tapu, just south of Christchurch, took up the pursuit in what was then a big way. His gardener, the late Arthur E. Lowe, commenced raising daffodils in 1895 and it was a seedling of his—Silver Plane, a flat-crowned Leedsii (3*b*) which was given to the late Guy Wilson when he visited New Zealand in 1929—that led to the great advance in the development of small-cupped daffodils. Wilson used it as a seed parent and from its seed produced Chinese White, that lovely flower which has been responsible for many of the small cups of today.

Early in this century, Robert Gibson of Manaia in the North Island was carrying on a commercial business in daffodils and, even with the poor transportation in those days, attended many shows and staged displays to create interest. On his death, his collection passed to his nephew, Alan Gibson of Marton, who became one of this country's greatest exponents of the daffodil. He attended every National Daffodil Show in both islands for over thirty years and was well known for his outstanding displays, both competitive and non-competitive. In addition, Gibson raised many fine daffodils including Milson and Harewood, two fine yellow trumpets, and Naples and Tekapo, two bright red and yellow large cups, the latter having a red-stained perianth. Gibson's stocks were later taken over by his manager, Ron Hyde, who continued until recently when poor health forced him to sell out, and his stocks passed into several different hands.

Two other growers of note commenced raising daffodils after the First World War: J. T. Gray who started in

Dunedin, and George Lewis of Christchurch. Both achieved marked success and were at one time the leading raisers in this country. Gray introduced many fine daffodils, but his best known are Kanga and Lochin; the former a fine yellow trumpet which is still seen on the show benches, the latter a large white trumpet which was a big advance in this division but has now been replaced by some of the newer white trumpets which are equally as large and a purer white. Lewis was a great showman and won most of the principal classes in the South Island for a good many years. He was blessed with two large thumbs, and when he put his thumb on the perianth of a daffodil, it went flat and stayed flat. His flowers were large and well grown, and he spared no effort to give them the attention required to produce the finest show blooms. He had a large cellar attached to his bulb store in which he could store hundreds of flowers and, with the assistance of a refrigeration unit, was able to hold them over a long period. This gave him a big advantage over his less fortunate rivals at the shows.

When Lewis sold his stocks in 1943, nine men were employed in lifting and dispatching the orders, but the bulk of the better lots went to Davis S. Bell, also of Christchurch, who continued on similar lines and with equal success and is now raising daffodils in the country south of Christchurch. Bell uses no artificial fertilizers on his bulbs; all the beds are sown to green crops and this is dug in well before planting time. His flowers are large, of good quality, and are well staged on the show benches.

Others who have left their mark with seedlings they have introduced, include C. Goodson of Hawera, A. H. Ahrens of Masterton, and C. W. Pierson, a chemist of Te Aroha, who raised Malvern City—

one of the earliest and best market flowers in the world today. It is a fine yellow trumpet with an excellent stem, and it blooms as early as Magnificence and forces very well. It is believed that this was raised from Malvern Gold \times Golden City, two Australian-raised varieties; the former a yellow large-cup and the latter a yellow trumpet. Both are early, but Malvern City is considerably earlier than either. Ahrens raised some very high quality flowers, probably his best known being the grand bicolor trumpet, St. Saphorin, which has won many prizes. Following Ahren's death in 1954, the bulk of his stock was acquired by J. S. Leitch of Masterton, who has produced some good flowers that have won in the seedling classes at the National Shows.

In the South Island, the late S. C. Gaspar at one time had a large area in daffodils and raised many good novelties; his stocks passed to Ron Abernethy of Mosgiel, who is continuing but in a smaller way. Not many women are credited with raising daffodils on a scale equal to that of the men, but Mrs. M. Moorby of Wanganui has been raising daffodils for over 35 years and has produced some excellent flowers. Unfortunately, very few have ever found their way into commerce and they have not received the recognition they deserve. One of her best is a large, saucer-shaped pink-cup by the name of Rosewynne. The crown of this flower is over $2\frac{1}{4}$ in. in diameter and has a wide frilled band of an attractive shade of pink. It is a most unusual flower and ideal for floral decoration.

New Zealand has been very fortunate in having a supply of the latest and best varieties from overseas with which to work, since the latest British introductions have always been regularly and promptly imported. At one time New Zealand was the best customer of the well-known Irish growers and at the same time had ready access to introductions from Australia and Tasmania where some of the best pinks have been raised. This factor, plus the number of enthusiasts, both amateur and commercial, who have raised seedlings here, has

resulted in interest being maintained and has produced some very fine flowers.

In addition to the flowers already mentioned, the following have performed well for some time. The trumpets are represented by Palmino, a large golden-yellow flower raised by Ahrens. This is of smooth substance and good quality and has been a frequent winner at recent shows. Ken Burns of Timaru raised Clandeboye, a large white trumpet with a neatly formed roll at the mouth. In addition to St. Saphorin, Ahrens raised Kintamani, a fine bicolor trumpet which develops a cheesy-buff color in the trumpet as it ages. This is especially fine when grown in pots and opened in the greenhouse.

Gold Script, raised by Parr's Nurseries of Hobsonville, Auckland, is an all-yellow, large cup which has been one of the leaders in this division for some time. It is large, smooth, and of very thick substance with a conical-shaped, three-quarters' length cup with a straight edge. The whole flower is lemon yellow. Red and yellow large-cups have been plentiful, and Hyde has given us three noteworthy ones. Rawene has a bright red, open crown and lemon perianth; it has been most consistent. Park Royal has an overlapping yellow perianth of splendid substance and a very neat bowl-shaped crown with a one-eighth-inch band of cherry red at the edge. It is most useful in a class where red coloring is not predominant. Matamata is a very attractive pink-crowned *2b*. The crown is an even shade of soft pink; the throat straight sided, slightly expanded, and neatly frilled at the mouth. The white perianth is smooth, overlapping, and of good quality. A more decorative and very striking pink raised by the late Alf Clark of Ashburton is Fontanalis, a round flower with large, flat white perianth and a large saucer-shaped crown with a wide band of pink around the margin. Although not a first-class show flower, it is an excellent cut flower and is most striking in a collection.

Two small-cups that have been performing well on the benches are Hampstead and Anacapri, the former raised by Clark and the latter by Bell. Hamp-

stead is a round flower with first class white perianth and a flat lemon cup banded with a narrow line of red. It has a good stem and shows itself off well. Anacapri is an equally large flower with more pointed perianth segments and a smaller cup with a wider band of red that is more frilled at the edge of the cup. Two decorative 2b's raised by Goodson are Fairy Maid and Fairy Wonder. The former has a white perianth with saucer-shaped crown widely banded apricot salmon, and is most attractive. Fairy Wonder is earlier flowering, shorter in the stem, and has a pointed, milk-white perianth and a neat bowl-shaped crown that has a narrow band of apricot around the edge.

Contrary to popular belief, the reversed bicolor Binkie was not raised in New Zealand but may have been sent to America from here. It was raised in Tasmania by W. Wolfhagen from seed sent to him by Guy Wilson. It is fairly extensively grown here but is being ousted by improved additions to this division.

Double daffodils have not been easy to raise, at least until the advent of Falaise, although Pet, raised by S. C. Gaspar, is a very useful flower. It is well-formed, fully double and has pure white outer segments and small central white segments interspersed with bright yellow. Temple Bells, raised by Bell, is a very large, heavy flower with alternate rows of white and buttercup-yellow segments and is rather like a much-improved Irene Copeland. The highly scented Erlicheer has several, sometimes as many as 16, florets to a stem which are milk white and interspersed with small cream segments. The stem is thick, prominently fluted, and hollow. It is in demand for weddings as the florists thread the florets and use them for streamers for bouquets and other accessories. It lasts well and has a long flowering period; the foliage is usually the first to emerge and the last to die down.

The foregoing are but a few of the many good flowers raised here. Several more recent and higher-priced introductions are probably better flowers, but they are not yet generally available.

Daffodils are grown in practically all areas of New Zealand. There is hardly a place where a garden can be made that they will not grow, and practically every town and district has its annual spring daffodil show. These fall into two groups: those conducted by horticultural societies and those held by religious organizations. The latter are usually fund-raising events, and the welfare of the exhibitors and their flowers is of secondary importance. The horticultural societies generally conduct very good shows which have been well patronized in the past, although public attendance seems to be falling off, even if the enthusiasm of the exhibitors is not. The principal shows are the North and South Island National Shows which are held in September and rotate on a roster system to a different place each year. These shows are of a very high standard and are attended by a large percentage of the 400 enthusiasts who are members of The National Daffodil Society. There are four sections in these shows:

1. Open Classes for Collections.
2. New Zealand Seedling Classes—Open to All.
3. Single Bloom Classes—Open to All.
4. Amateur Classes for Collections.

The awards are numerous cups and bowls, medals, certificates, and cash.

Flowers may be put up before a panel of judges for an Award of Merit on a basis similar to the awards made by the Royal Horticultural Society. The Society publishes a year book which includes the results of the previous year's shows. These give the names of the prizewinners and the names of the flowers exhibited in each class, together with the number of entries. Articles of interest to daffodil growers are published when available and the proceedings of the annual meeting are also reported. A panel of judges is published and those on the list are expected to serve in their own districts as judges at smaller shows. Judges work singly rather than in teams.