

BARTLETT TRIPP.



OSCAR S. GIFFORD.

important commercial marts and railway centres of South Dakota. Each city has excellent schools, fine churches, a splendid water-works system, and the various public buildings and business enterprises of a metropolis.

The present Governor of Dakota, Louis K. Church, was born in Brooklyn, New York, December 11, 1846, and is a lawyer by profession. He was, in 1885, appointed Associate Justice of the Supreme Court of Dakota, and immediately removed to the Territory, where he fulfilled the duties of Judge of the Fifth Judicial District in a manner highly satisfactory to the people.

Before the expiration of his term on the bench, Judge Church received the appointment of Governor of Dakota.

Hon. Oscar S. Gifford, Dakota's Delegate in Congress, also a native of New York, has resided in the Territory seventeen years. He is now serving his second term in Congress.

Hon. Bartlett Tripp, one of the most able lawyers in the Northwest, and Chief-Justice of the Supreme Court of Dakota, is a native of the State of Maine. He removed to Yankton, Dakota (his present residence), in 1869. In November, 1885, he was appointed Chief-Justice.

## BULB GARDENS IN-DOORS.

BY JOHN HABBERTON.

THE "Dutch" bulbs take their name from the country in which most of them are propagated for the trade; they thrive in the entire temperate zone of any country. As a veteran florist once said to the author, a Dutch bulb can snap its fingers at the stupidest amateur alive, and grow and bloom in spite of him, whether the house be dark, light, hot, or cold. Its structure is so simple and complete that the bloom is not dependent even upon soil to develop flower buds, for these exist before the bulb is planted. All that is absolutely demanded of the cultivator is plenty of water.

Among the Dutch bulbs the hyacinth is the most satisfactory to persons who have room for but few plants. A single hyacinth fully developed is a flower show

in itself, so luxuriant is the foliage and so abundant the bloom, color, and fragrance. More variety and quantity of color may be found in a dozen pots of hyacinths, "dealers' selection," than in a large bed of ordinary garden flowers. They are as far superior in effect to the historic "lilies of the field" as these flowers were to "Solomon in all his glory." A single "spike" of hyacinths is as showy as a large "self"-colored bouquet, and "composes" better, nature being still superior to art in arranging flowers. The bloom remains undecayed much longer than that of roses, carnations, or geraniums. The natural symmetry of the plant is frequently marred by the heat and dryness of houses heated by furnaces, so the leaves bend and droop instead of giving



the flowers their natural setting, and the stem becomes so long and soft that it is unable to bear its weight of bloom without tving; even then, however, the mass of flowers is large and gorgeous. Hot dry air is likely also to start the bloom too rapidly, so that the buds at the tip of the spike open and decay before those at the base have fully emerged from the bulb. Grown near the glass of the window in a room the temperature of which does not exceed 70°, and never falls to freezingpoint, the fleshy, semi-transparent leaves remain upright, and the stem becomes just long enough to enable the bloom to appear above the top of the leaves.

The work of selecting hyacinth bulbs from a dealer's catalogue is as bewildering as to choose from a jeweller's case at which one has carte blanche (as maidens often

have in novels). Each amateur grower of hyacinths has a few favorites which he knows by name, but the novice will do well to leave the choice to the seller: if to select at will from a long list is too great a luxury to be denied, it will be well to avoid those varieties described as "very deep" or "yery dark," and give the preference to those said to have large bells. As a rule, the larger the bell, the more spreading and showy the spike; the darkest reds and blues are out of harmony except with a great variety of bloom. A single floret or bell of the hyacinth is quite effective as a boutonnière, and a spike may be robbed daily for a week without the loss being perceptible to any one not an expert. There are two varieties of hyacinth, appearing in catalogues



ROMAN HYACINTH.

as "Roman" and "Parisian," which are grown specially for cutting; the bloom, instead of being restricted to single spikes, as in the more noted varieties, comes on several spikes in succession, each bearing a few small single florets, loosely disposed. The colors of these varieties are red, white, and blue, a single tint of each, and the bulbs have two virtues peculiar to themselves among hyacinths: they bloom earlier than any others, and are much cheaper.

The hyacinth must bloom when its time comes; it can scarcely die, except of thirst; it struggles nobly, and generally successfully, against abuse, returning good for evil with a persistency which should gain

it a place among the emblematic flowers of religion; but it clings stubbornly to its own ideas of propriety, one of which is that precocity is unnatural, and another, like unto it, is that the forcing process always induces imperfection. After planting, it insists upon having several weeks of retirement in entire darkness, in which to develop an abundance of roots; if brought too soon to the light its leaf growth will start, perhaps preceded by the flower buds; but the growth will be irregular, and the flowers will be less

perfect and enduring than when allowed to take their own time. Florists often hurry hyacinths and other Dutch bulbs into bloom, and gain special profit by so doing, but the full-blown specimens are never as fine as those grown by the cook in her kitchen window, or the sewing-girl in her attic.

Good hyacinths were quite expensive a few years ago, a single bulb costing as much as a good potted rose-bush in bloom, but now the amateur can obtain delightful results from bulbs costing fifteen or twenty cents each: a peaceful invasion of American markets by Dutch growers several years ago may have been influential in bringing about the change. New varieties at high prices appear each year, but they are seldom more satisfactory than those catalogued as "old standard sorts."

After the hyacinth, the narcissus is the most satisfactory bulb to grow in-doors, and it appeals to the masses by its cheap-

than sixty cents per dozen, or four dollars per hundred. Like the hyacinth, the narcissus has leaves shaped like blades of grass, very long and thick. The class known as polyanthus (many-flowered) is the most satisfactory for in-door culture; the flower stem, starting from the centre of its sheath of leaves, grows heavenward at a rapid rate, its lanceolate tip containing ten or twelve buds. As the stem grows, the color of the tip changes from green to yellow, and finally to the dismal gray of dead grass. About this time the novice thinks the buds dead, so dry and shrivelled is their envelope, but suddenly the magic of the chrysalis is reproduced, for the tip bursts and the buds open, generally one a day, until there is a handsome, fragrant cluster of flowers, yellow or white, and each an inch or more in diameter. The narcissus is the most generous member of the bulb family; the hya-

cinth sometimes sends up a second spike, generally at the expense of the first; frequently, however, a narcissus bulb which gave no special promise at the start will send up several handsome clusters in succession. Among bulbous plants the polyanthus narcissus is the most picturesque; the wide low windows in paintings of old English cottage interiors, over which young ladies go wild at picture shows, owe much of their effect to

the pots of narcissus with which they usually are abundantly supplied.

The narcissus family is large, and so old that many of its members have taken new names, some of them being accounted plebeians; all, however, are neat, pretty, and abundant in bloom. The daffodil, the "pheasant-eye," and the "hooppetticoat" are all narcissuses, and bloom freely in-doors. The flowers of some of the daffodils are large and double as roses; the only objection to them in-doors is that a greenish hue in their petals becomes obtrusive except in very bright light. The campernels, beloved of early English poets, also are narcissuses, and in growth they combine ruggedness and luxuriance in a manner that should endear them to all who yearn for something truly and typically "Early English."

The most delightful, however, of the narcissus family are the sweet-scented jonquils. They are the tiniest of their race; mere babes, indeed, beside even the small-

ness, good mixtures seldom costing more than sixty cents per dozen, or four dollars per hundred. Like the hyacinth, the narcissus has leaves shaped like blades the combined remainder of the family. Their leaves are as round as broom straws,



TULIPS, JONQUILS, AND DAFFODILS.

and not much thicker, their florets are small, and of no color but yellow, but their perfume is sweeter, more delicate, yet more pervasive, than that of any other bulb of the Dutch division. The perfume of the hyacinth, though often strong enough to be overpowering to any one within a foot of the plant, is seldom perceptible a few feet away, but a single pot of jonquils will



perfume an entire room without giving offence to persons most sensitive to odors. Like all other narcissuses, the jonquils are delightful flowers to wear, and when cut and put in water they will retain their color and form after several successive clusters of roses have become unsightly.

JONQUILS.

In fifteen years of wide and continuous acquaintance with the hyacinth and narcissus the author has not once seen an insect on either—a fact which should endear both at once to all persons who have at-

tempted window-gardening. Would that as much might be said for the tulip, for then the flower whose beauty once set phlegmatic Holland acraze, and sent the price of a single bulb up to thousands of dollars, might

brighten many a dark winter day in-doors. The small, green, pretty, but voracious insect so well known to all persons who

have grown roses and carnations in dwelling-houses is of the firm impression that the tulip was created for his special delectation, and he acts accordingly. Where this graceful, remorseless insect comes from, nobody

knows; thousands of religious persons are sure that his kind never would have been saved from the flood had Noah ever attempted to

raise tulips in his city residence; thousands more have departed from the faith far enough to believe with Tyndall that matter

in itself generates life, for however carefully selected the soil, however recently the pots come from the life-destroying heat of the kiln, the insect appears almost as soon as the leaves of the tulip see the light. A single experience with him generally convinces the in-door gardener that he can be destroyed only by destroying the tulip also. He does not seem to mind such tobacco-smoke as may be raised without making the room unten-

able, and to brush him and his friends from the leaves and throw them out-ofdoors is only to make room for a new detachment, which arrives almost at once. This insect may be discouraged, however, by spraying the leaves once a week, before the flower appears, with a weak decoction of tobacco water, and his first attack can be delayed by keeping the bulbs, for six or eight weeks after potting, in a dark cool place, for the stronger the roots, the better

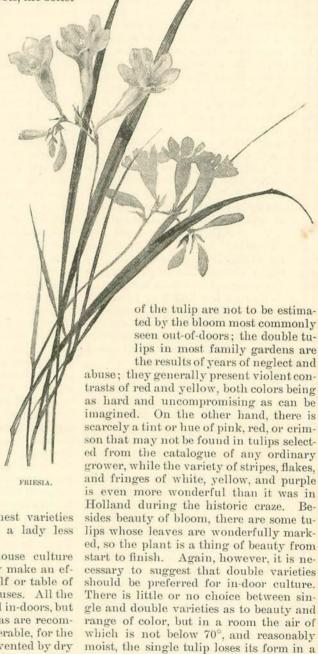
the leaves seem able to resist an onslaught. Even when the parasite gratifies the desire of his heart upon the foliage, he spares the flower petals, and the tulip's bloom is so brilliant of color as to almost make the persistent cultivator forgive the thief that takes so little when he leaves so much.

Like many another repntable being of ancient lineage, the tulip has suffered unjustly for the faults of some members of its family. In the tulip world, as in the human species, some first families have "run out" sadly, either through over-stimulation or by being transplanted among uncongenial surroundings. After first meeting the tulip in an old neglected doorvard, nobody cares to prolong the acquaintance; but properly nurtured tulips, such as may be bought of any dealer, are still as healthy and fascinating as their ancestors which sold at a thousand times their weight in gold. Several fine tulip bulbs can now be bought for the price of a common cigar,

and a half-dozen of the finest varieties sold in America will cost a lady less

than a cheap pair of gloves.

As most tulips fit for house culture bloom close to the soil, they make an effective foreground for a shelf or table of potted hyacinths and narcissuses. All the early single tulips bloom well in-doors, but such of the double varieties as are recommended for forcing are preferable, for the single tulip is sometimes prevented by dry air from entirely opening the tip of its bud; but the numerous inner petals of the double varieties keep up a pressure which generally results in liberty. It is again proper to say that the possibilities



day or two, particularly if exposed to the sun's direct rays. The double tulip, with

several times as many petals, proves that

"in union is strength" by retaining its

form much longer.

Many dealers recommend the crocus for in-door growth, and the flowers, although restricted in color to white, yellow, and purple, fully deserve all the praise they have received. The blooms of a wellgrown crocus are as large and handsome as small lilies or amaryllids, and although the flower lasts but a day, it is easily removed, with a certainty of several successors. The bulbs are wonderfully cheap, being less than a dollar per hun-The only objection to them is that the insect which dotes on the tulip has discovered that crocus leaves also are edible; as the bulbs must be set thickly to secure a good display, it is not easy to properly sprinkle the leaves with tobacco water. Nevertheless the crocus fully repays whatever attention it may receive.

A number of minor bulbs deserve more prominence than florists' catalogues give Among these is the friesia, of which there are several varieties, each with its distinctive perfume, which is strong yet delicate. The friesia seems to have been designed by nature for wear in a lady's hair, at her throat or breast, or in the button-hole of the ruder human being. Six or eight florets, trumpet-shaped, and about an inch long, appear close together at the end of the stem, but instead of being clustered, they grow in a row. The stem bends at a right angle just where the first floret appears, so no matter how carelessly the stem is thrust into coiffure, dress, or button-hole, it hangs as if on a hook, and makes the greatest possible display of its bloom. Two or three sprays of friesia worn at a party or theatre will give occasional relief from close air, and a little cluster of it in water will retain bloom and fragrance for a fortnight, the unopened buds all coming into bloom as the older flowers decay and fall. Like most other flowers unusually delicate and sweet, the friesia is seldom to be found where cut flowers are sold.

Another tiny bulb of great value is the oxalis; it remains in bloom longer than any other bulbous plant, a pot of it producing many scores of pendent clusters during the season. To bloom freely it requires more sun than winter bulbs in general; but even for its foliage it deserves a place in all windows, for its clover-like leaves, on long drooping stalks, add pleasing variety to the upright grassy stems which are the rule among Dutch bulbs. Some members of the iris family

do well in windows, among them *I. susiana*, the flower of which sets even the professional florist wild with delight. The cyclamen is quite a satisfactory plant for in-door cultivation, the foliage being showy and the bloom abundant. Some bulbs of the cyclamen are so anxious to bloom that they do not await the formality of planting, but throw up flower stalks while still in the dealer's boxes.

To give farther diversity to the foliage of a window full of bulbs it is well to plant the anemone and ranunculus; these are tuberous instead of bulbous, but are to be had of all dealers in Dutch bulbs. Both can produce beautiful flowers when they like, but it is unsafe for any amateur who values his reputation for veracity to pretend to have ever had a plant in bloom unless he has several witnesses to support his statement. One of the most experienced and successful American flower-growers, the late James Vick, said several years ago that there seemed to be no soil or climate in the United States that suited the ranunculus. After some years of failure to coax anything but leaves from this tuber, the present writer borrowed some soil from a wild columbine that had bloomed finely in the spring, and succeeded in displaying a few good blooms to sceptical amateurs and The earth which kindly professionals. rewarded his confidence was a black. heavy, leaf mould. A subsequent attempt to improve upon nature by lightening the soil with sand was unsuccessful in the extreme, the roots losing their substance and disappearing entirely, with corresponding results in the foliage. A single success with the ranunculus will make amends for many failures, for the flowers are as gorgeous of color as tulips, although entirely different in form.

Obliging and adaptive though the Dutch bulbs are, they have decided preferences as to the soil in which they shall be planted, and they unite in abhorring earth from the greenhouse heap or the rich garden bed. Many amateurs in bulb culture have had their natural conceit enhanced by the superiority of their hyacinths and tulips to those seen in florists windows; the florist usually pots his bulbs in the soil prepared for woody plants or those of rank growth, and the manures in this are too stimulating for the roots of bulbs, which are about of the size and softness of the most thread-like

great bulb plantations in Holland is light and spongy, being a mixture of sand and vegetable mould, the only fertilizer being from the cow-yard, and carefully rotted before used. Similar soil may be prepared anywhere in the United States; in stony regions leaf mould can be found in the crevices of rocks in the forest, and in ravines and gullies anywhere that leaves

pits are nothing but vegetable mould. A good substitute may be made with little trouble by paring sod an inch or two thick from any thickly grassed surface, piling it to rot, and chopping and turning once a fort-

macaroni after soaking. The soil of the nure will increase the size of plant and flower. The rich brown soil of the prairie States will answer equally well, but if it is heavy it should be tempered with sand. Unless the soil for bulbs is light, the roots cannot penetrate it at all, and as hyacinths and narcissuses for house cul-



ture are not buried, but only partly covered, the effect of planting in hard soil is that the roots push the bulb upward until it looks like a small squatty lighthouse on a forest of piles. The smaller bulbs are usually covered to their crowns, so they cannot be forced out of the ground, but they show their dislike for hard soil by sulking to death. The spongier the soil, the better the chance of success with bulbs of any kind. The steady deterioration in size and perfume of hyacinths planted out-of-doors is generally due to heavy soil.

When potted according to the directions printed in any dealer's catalogue, the bulbs want to be left in the dark for several weeks, asking only that they be not allowed to become dry. A sprinkling such as would satisfy roses and geraniums will not suffice, for while the roots of these plants will retain life in soil containing the least particle of moisture, the roots of bulbs die outright as soon as the earth ceases to be damp. When brought to the light and warmth of the window, bulbs should be freely watered several times a week, and while in bloom the saucers under the pots should never be without water. Many housewives who have coaxed geraniums, fuchsias, and even roses to bloom in-doors during winter have complained to the writer that at the same time their bulbs, receiving equal care, did poorly or died outright. The trouble could always be traced to insufficient water.

Absolute insurance against drought may be secured by planting bulbs in water only, but this method makes the bulb unworthy of subsequent consideration. As already explained, the plant in all its parts is complete within the bulb; moisture and light are sufficient to develop the leaves and flowers, but the bulb itself can obtain no nourishment and strength from water alone. Glasses are made specially for the hyacinth and narcissus, and these bulbs will do equally well if imbedded in a coarse sponge or a handful of moss in a bowl which shall always contain water almost up to the base of the bulb. The narcissus, which the Chinese call their "holy flower" or "luck flower," is always placed among stones in a saucer of water. The amateur, however, will seldom use glasses more than once for his bulbs, for a tall plant does not compose well with a tall glass, and the bloom will not be as

fine as that from soil. If water culture is desired, the low glasses brought out recently should be used, and the low-growing hyacinths selected. The water should be changed at least once a week, and, like that for the potted plants, should not be colder than the air of the room.

A common complaint of beginners at bulb culture is that the bloom comes very late, generally not until February or March. Could the bulbs themselves be consulted, they would probably quote the old saying, "Late beginning makes late ending." Until fond enough of the bulb family to greet it at its earliest appearance, and extend to it the most cordial and intelligent hospitality, window gardeners are likely to delay planting until all out-door flowers are gone. Veteran growers plant as soon as the bulbs can be procured-generally in the first half of September; some of the pots may thus be sufficiently advanced to be brought to the light in mid-October. Treated thus, the Roman hyacinths and the earlier narcissuses may be had in bloom by Thanksgiving Day, and some of the others will follow speedily. The period of bloom may be made to extend from Thanksgiving to May-day by bringing pots from cellar or closet at intervals of ten days; to make assurance doubly sure, delay potting part of a collection until late in November. To know which plants are first fit to be brought to the light, turn the pots upside down, supporting the top earth by the fingers of one hand, and strike the edge of the pot gently on something hard; the entire ball of earth will come out unharmed, if properly moist, and if growth is sufficiently advanced, a number of white roots will be seen coiled around the bottom soil.

Most printed directions are at fault in indicating pots smaller than should be used for bulbs. A pot five or six inches in diameter at the top is as small as should be used for a hyacinth or narcissus; such a pot will accommodate three Roman hyacinths (which are small), as many tulips, six or eight jonquils, or a dozen crocuses. These smaller bulbs may be grown in smaller pots, with corresponding decrease of number; with smaller dimensions, however, comes increasing risk of dryness. The common red clay pot is the best, and the handsomely glazed pots the worst, for bulb culture; but the porosity of rough red clay makes countless avenues of evaporation. On the other hand, through the pores the roots manage to obtain much desirable nutrition or stimulus from the This last-named benefit is withheld when the surface becomes incrusted in dust, as it frequently does in rooms where the broom is properly used; to obviate this discouraging influence it is well to bring to the window about once a fortnight a pail of lukewarm water, in which the pots can be successively immersed, and have their faces scrubbed. After the common flower-pot, a wooden box is preferable to any earthen, glass, or metallic vessel; if empty fruit cans are the only available substitutes, they can be improved by punching a number of tiny holes in their bottoms.

When the flower decays, the stalk should be cut away. About this time the leaves attempt to make good the beholder's loss by increasing the luxuriance of their growth. Usually they are pretty enough to be cherished for their own sake, but if they occupy space needed by plants coming into bloom, the pots can be removed to cellar, attic, or any room in which the thermometer does not fall below freezing-They should not be watered as freely as before, and in mid-April they may be turned out-of-doors, in some shady place, and allowed to ripen. When the leaves have entirely decayed, the roots also will be dead. The pots may then be emptied, the earth shaken off, and the bulbs placed in a dark, dry place for use in the following season. The hyacinth is not as good the second season as the first,

but tries to atone for its deficiency by blossoming earlier; the narcissus is generally better the second year, for it will have increased by offsets, which should remain attached to their parents as long as they The hyacinth's offsets are robbers. and should be removed, but they may be grown to full-sized bulbs in two or three years if their attempts to bloom are discouraged by pinching out as soon as possible any flower stems that may appear. On breaking the rusty outer coat, when entirely dry, of a tulip that has bloomed. the owner is generally gladdened by the sight of two bulbs, each as clean and glossy as a chestnut just escaped from its husk.

In ordering, the beginner will save money and lose nothing by not attempting to make his own selections from bulb families. "Best mixed varieties" is an expression found in all catalogues, and indicates plants good enough for any novice. Additions of named sorts may be made from year to year, but value should not be assumed from high prices, for the more costly varieties, as a rule, are merely the newest; the bulb dealer, like the merchant in any other commodity, has the habit of putting a high price on "novelties." In each variety there is room for choice among the bulbs themselves, the heaviest (which are not always the largest) yielding most bloom. Most of the dealers advertise in-door "collections" which are better than any beginner can select for himself.

## THE WAY. BY ANNIE FIELDS.

There is a noble truth concerning the way which leads to the destruction of sorrow. - Oriental Books,

I LAY within a little dusky wood,
Withdrawn from men; the noonday sunlight faint
Peeped rarely down through the o'erhanging hood
Of interlacing boughs; yet there the saint,
He who has passed beyond sensation's bound,
Beyond ideas that haunt our earthy round,
Came from the dim unknown to visit me.

"How shall I find the way?" I said to him:
Thus without words my heart o'erfreighted spoke.
He answered: "In the tide of being swim,
Borne by its waves, thy every anchor broke;
Thus, far beyond self-feeling and self-thought,
Into the mighty peace of spirits brought,
Ye shall behold new mornings and be gfad."