

and the water will soak upwards by capillary attraction through the drain-mulch, leaving the soil moist and friable. Another practice in horticulture is to mulch large trees for the purpose of keeping the soil moist. This practice, I claim, can be made use of for every plant—large or small—to which mulching can be applied. For instance, in a lady's boudoir, two semi-circular bags holding the mulch can be made as ornamental as ladies know how, dipped in water and placed on the soil. This practice of mulching and drain-mulching can be applied to the propagation of plants from seed or otherwise. I am under the impression that in course of time this system of propagation and cultivation of plants and trees will quite revolutionise horticultural practice; which revolution will be slow and silent in its course, also permanent, and come to be of ordinary practice. Not being a trained horticulturist there may be flaws in the foregoing representations unseen by me, and it is with some trepidation I submit them to public criticism.—I am, etc.,

GEORGE TURNER.

St. Andrew's, Blenheim.

Black-eyed Susan and the Other Rudbeckias.

I believe the rudbeckias to be the easiest grown perennials. They will thrive in almost any situation in the garden, provided they have direct light for part of the day. It does not make much difference what the soil is, they seem to thrive even if it becomes quite dry, but the best flowers are grown in a rich, moist loam. The rudbeckias are more popularly known as cone-flowers and probably the most familiar of them all is the Black-eyed Susan, because of the fact that it grows wild over the greater portion of the United States. In the East it is more commonly known as the ox-eyed daisy, while in the West it is frequently spoken of as the "nigger-head." The Black-eyed Susan is a biennial and can be cultivated in any garden. It has a flower about 2 or 2½ inches in diameter. The centre is a brownish black while the ray-flowers are a golden yellow.

Golden Glow, the most common of the cultivated cone-flowers, is a double form of Rudbeckia laciniata. It is a rapid grower, profuse bloomer and can be easily increased by dividing the roots, and is a perennial.

In addition to the Golden Glow, there are several kinds of the cone-flowers offered by the seedsmen or nurserymen. One of the best of these is R. Newmanni, which grows about 3 feet high and has orange-yellow flowers with a dark purple cone in the centre.

There are a couple of forms of R. nitida, well worth a place in the garden—Autumn Sun and Autumn Glow. These grow from 5 to 6 feet high and produce a profusion of single primrose-yellow coloured flowers.

There is also a good annual, R. bicolor. It grows 1 to 2 feet high and is a mass of flowers during the summer. The variety Superba has slightly larger flowers than the type—about 2 inches in diameter.

To me, one of the most interesting of the rudbeckias is R. maxima. It grows tall—5 to 6 feet—and usually produces only one or two stalks. The leaves are large, glaucous green. The ray-flowers are broad and yellow, and the cone is large, sometimes as much as 2 inches high.

The giant purple cone-flower is usually sold by the nurserymen as R. purpurea, but it is really Echinacea purpurea. The cone of this is much rounder, having less of the true cone shape than the rudbeckia, and the ray-flowers are reddish-purple, and droop. Under favourable circumstances, these flowers are sometimes 4 inches in diameter, but usually they are only 2 inches across.

All these cone-flowers are easily perpetuated in the garden. The seed may be sown in the fall. Such as do not produce seed can be easily propagated by division.

T. B. PARKER.

MENDEL'S LAW AND SWEET PEAS.

Edward W. Badge, of Carnarvonshire, writes in "Gardening Illustrated":—"Towards the end of 1907 I received a beautifully printed sheet, on which was depicted a group of lovely sweet peas. The central and most attractive flower in the group, I found, was named Evelyn Hemus. I had not previously heard of it.

variety has, unfortunately, failed this year, but will be ready for 1909." In July last year while spending a holiday at Malvern, I met with the name of Miss

quantities, which appeared to me as being thoroughly first-class in every respect and as near to being perfect as any sweet peas I have yet seen; and I may add that they all of them beautifully waved, some of them quite exceptionally so.

1. Evelyn Hemus is a large, well-shaped suggestedly Orchid-like, beautifully-waved flower, the ground colour being a warm, rich cream, with a shading inclining towards yellowishness, finished off by a delicate Piceote edging of terracotta pink.

2. Paradise Ivory.—This is an exceptionally well-waved flower, the colour and appearance of which are similar to those of old ivory. This has recently been placed by the N.S.P.S. at the head of the cream section of sweet peas.

3. Paradise Carmine.—This is a variety after the style of George Herbert, but the colour struck me as being brighter and more pleasing.

EARLY APPLES.

We are now fairly well off for good varieties of early-ripening apples. No matter what other kinds of fruit we may possess apples are always welcome, either for the kitchen or for dessert. The Irish Peach is still a great favourite with large numbers of consumers. It is generally a good bearer and comes in very early. The tree is of rather a straggly habit of growth, but very hardy and does well in most localities. River's Early Peach, bears fruits similar to Irish Peach, and the trees are of good habit, but we are not so sure if it crops so well. A locally-raised seedling named Marjorie Hay, sent out by Messrs. D. Hay and Sons, Parnell, is, we believe, a promising sort. It is blight-proof, the trees grow upright, and are vigorous in growth. It is a dessert apple of the best quality; skin clear yellow, striped and mottled with red. Williams' Favorite is generally catalogued as a dessert, but we prefer to use it for the kitchen, as in our opinion it is more suitable for cooking than dessert. It is a large apple of good colour. One of the very best early dessert apples is known as the Welcome. It is a small fruit, but of the finest quality, extremely juicy and sweet. The trees bear when quite young. It is a regular and heavy cropper, and seldom shows much evidence of the codlin moth. It is an apple we delight to pick off the tree and enjoy as we stroll round our garden. It was ripe this year on the 30th January, but, speaking generally, it is in season the first ten days in February. Mr. Gladstone is a very good kind and bears fairly well; ripens in January; and the tree is blight-proof. One of the most attractive apples we have seen is called Coldstream Guards. We procured a tree from Messrs. Morrison some two or three years ago, and it is a perfect picture at the time of writing. The apples are of good size and of the brightest colour—just the apple to take the eye. We fancy this would be a good apple for marketing. It is very hardy and a heavy cropper, and of very fair quality—usually termed a dessert.

VERONICA.



The Golden Glow.



The Annual Cone-flower, Rudbeckia bicolor, Not Often Grown.

The Black-eyed Susan, Erroneously Called Ox-eyed Daisy.

Its form and colour were so dainty and charming that I at once decided to grow it in 1908. But, looking down to the description to ascertain the price, I found this intimation, "The crop of this

Hemus, Holdfast Hall, Upton-on-Severn. This name at once recalled to my recollection the beautiful flower which had so attracted my attention a few months previously. "Surely," I thought, "this is probably the raiser of that flower. I will write and inquire if I may be allowed to see her sweet peas." That is what I did, and in reply had a courteous invitation to pay her a visit.

"After some interesting conversation, and the inspection of several acres of well-grown and beautiful sweet peas, most of which were quite new to me, I was convinced that Miss Hemus was not the mere lady gardener who grows and delights in beautiful flowers, but knows only a little superficially about them; on the contrary, I found her to be well versed in Mendel's law, and a thorough believer in it. There cannot, I think, be a doubt as to the success she has already achieved being due to sound scientific knowledge guiding her practical skill. Her pedigree sweet peas have not been raised by haphazard hybridising, but with a fixed and well-thought-out method of procedure, and a well-considered purpose.

It seemed to me, when I came to reflect upon what I had seen and heard during the two visits I made at Holdfast Hall, that, much as Miss Hemus has achieved during the few years she has been working among sweet peas, very much more may be expected from her in future years.

I will mention only three of her named seedlings, that I saw growing in large



The Giant Purple Cone-flower.