A CACTUS CORNER IN THE MISSOURI BOTANICAL GARDEN.

The garden maintained for many years in the private grounds of the late Henry Shaw, at St. Louis, is known to most people who have passed through that city, and few people traveling for pleasure have stopped there for a day without a visit to Shaw's Garden. At the death of Henry Shaw, in 1889, this garden was left in the care of a board of trustees, to be maintained as a botanical garden, and is endowed with practically the whole of his large fortune.

The accompanying view is from the first report on the garden under the management of the trustees, and represents one of the several groups of large cacti which are set out during the summer. Many of the specimens of Opuntia and Cereus are large and old plants, and possess historical interest for students of this group of succulents, since they came originally from Prince Salm Dyck, one of the greatest authorities on the cacti, and were closely observed by Dr. Engelmann, whose studies laid the foundation for the knowledge of our own species. The collection in this group is believed to be one of the largest and most complete in existence, and the library and herbarium of the garden are also very rich in material referring to the cacti. The managers desire that every species of cactus growing in the United States, as well as Mexican species, shall be represented in the near future. For botanical study, as well as popular observation, St. Louis is likely for some time to come to be the cactus center of the country.

In Southern California, however, the cactus is more at home, and the Arizona garden at Monterey famous among travelers. A large private collection is at Pasadena, comprising about two or three hundred species, and is in thriving condition. The proprietors of the Hotel del Coronado planted about five hundred varieties, furnished by the writer, who has personally collected, or received from correspondents, more than half the varieties as yet known to botanists. Nearly twelve hundred species have been described, of which many will doubtless have to be, ultimately, referred to synonymy.

The writer has recently added nearly two hundred species to his collections, including some new and many rare ones from Mexico and other localities, and hopes ultimately to have the most complete private collection in the world. C. R. Orcutt.

APRIL FLOWERS IN NORTHERN CALIFORNIA.

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The middle of April, in California, north of San Francisco bay, finds the wild flowers, in hundreds of species, and often in vast quantities, covering acres on acres of ground. As yet the height of
the season is not reached. The San Joaquin valley and Monterey are fully three weeks earlier, and Southern California earlier still. A month ago our common Buttercups, Ranunculus macranthus, were few in numbers; now the roadsides are yellow with them, and pastures are covered with them by the acre. In wet places R. Bloomer takes its place with equal profusion. Yellow seems a favorite color here, and it is always seen in masses. In places a low-growing Enothera, in profuse flower, shows the richest of yellows for a long period. Then the Eschscholtzia fairly monopolizes some vacant lots in this town where there is a deep gravelly soil. These beautiful Poppies appear, not in dozens or thousands, but turn whole acres into billowy masses of splendid orange; other acres glow with the darker orange of Amsinckia or the purple-blue of Lupines. The Eschscholtzia foliage is especially rich this season in scarlets and bronzes, which, if they could be relied upon as permanent, would make it an interesting foliage plant.

Nemophila are largely used by nature as bedding plants here. N. insignis, Blue Eyes we call it, is everywhere in single plants or in beds, a few yards in extent, and occasionally by the solid acre. Gilia tricolor is another plant which now covers entire hillsides. Platystemon Californicus, another member of the poppy family, is also a favorite with nature. The flowers are a creamy yellow, borne separately on long stalks. In dry fields it covers large areas. White is the rarest color in these natural parks. Several species of Eri- trichium are here, with delicate, white flowers. Limnanthes Douglasii, long in cultivation, forms large white masses in moist places. Scarlet does not yet appear in abundance, although Calandrinia Menziesii, another cultivated species, is everywhere.

Mendocino county and the region around the base of Mount Shasta have the richest flora in California. The Sierra Nevada range is largely volcanic. In the coast range clays prevail, with here and there volcanic projections. At Shasta these two ranges meet, giving in a small space great variations in soil, altitude, exposure and moisture. The rainiest spot in California is closely adjacent to a lava desert, so at Mount Shasta the conifers have a wonderful development in species, and the flora as a whole is very rich. In Mendocino county the redwood forest furnishes shade and moisture. The dry Chemisal region is close at hand, giving the prevalent flora of the coast range. Elevations of 5,000 to 6,000 feet give alpine conditions, while isolated volcanic points add variety to soil. Add to this narrow valleys and deep canyons, and the variety of vegetation is not to be wondered at.

Among shrubs the various Ceanothus are common, going far to
make up the unbroken growth, from six to fifteen feet high, which, in an almost impenetrable thicket, clothes many of the mountain sides of the coast range, and gives them a smooth, Heath-like appearance. The local name for this low growth is chesmal when the shrub Adenostoma fasciculatum predominates; chappraral, if the growth is largely mixed. In the aggregate vast areas are so covered. One continuous belt is sixty miles long by eight or ten wide, with very small breaks in timber or grazing land. Ceanothus divaricatus is one of the commonest elements of chappraral, and is now in bloom. In the open Redwood C. thyrsiflorus, a fine shrub, often fifteen feet high, with flowers much like a lilac, and fully as beautiful, covers large areas in an almost impenetrable thicket.

In my garden Erythronium grandiflorum is beginning to fade. It gave fine satisfaction this season, planted in chip mold, and rather shallow. E. giganteum, from Oregon, bloomed for the first time this year. The bulbs were strong and produced large blossoms, four to six to each, and several three inches across. Close observation shows some difference between this and E. grandiflorum, but the distinction is not well enough defined to be satisfactory. The yellow of the flowers of E. giganteum has a slight greenish shade, while those of E. grandiflorum shade from light straw at tips to rich yellow near the centre, and occasionally with markings from light brown to very dark. E. Smithii lacks the elegance of form of the two former, and is one-flowered. Its color, at first, is white, with a pink tinge, and becomes pink-purple. E. Howellii has a straw-colored flower with a peculiar pinkish orange centre. With me it was quite small, but the bulbs may not have been strong.

Brodiea multiflora and B. congesta blossomed together, and very beautiful they were. They were planted in shallow boxes, the top soil mold and clay with a light dressing of sand. The first Calochortus to flower was the dainty little C. caeruleus. It was closely followed by C. lilacinus. The first is doing well in a common clay loam. Fritillaria lanceolata seems to run to many forms, which, to the gardener, would be good varieties. The prettiest I had this year was a light yellow one. They were in shallow boxes about three inches deep, in clay loam, and shaded in the afternoon. Considering the quality of the bulb the flowers were as good as I have seen in the very best natural wild growth. There is a variety of F. recurva which is unusually fine. Some racemes were sent to me with five to nine blossoms, and I have heard of one with eighteen.

Carl Purdy.