

ordinary stove house would be suitable to grow them in. Many persons object to them because of absence of leaves at the time of flowering, but this is an evil easily remedied by arranging them amidst dwarf Ferns.—S. G.

**A NEW TESTIMONIAL FOR THE EARTHWORM.**

It had been already shown conclusively by several naturalists that the common earthworm is a creature which really renders services to horticulture that quite overbalance the small amount of damage it is occasionally guilty of. To the illustrious Dr. Darwin it has offered a subject that is particularly suited for his patient inquiry and shrewd observation, the results of which, embodied in his little work upon "Vegetable Mould and Earthworms," offer a final testimonial in behalf of a despised, or sometimes persecuted, annelid. The main facts, however, are new. We were aware that earthworms are of utility, because in the course of their life they consume decaying vegetable matter and convert it into humus or mould; also that by their burrows they help to bring about a wholesome drainage, preventing the surface becoming caked or hardened. Dr. Darwin, with an enthusiasm that we cannot wonder at, believes it is to the earthworm principally that the destiny has been assigned of renewing the face of the earth from year to year, and from age to age. In a single year, so he reckons, where the earthworms are in their average abundance, they deserve the credit of producing about ten tons of good mould upon an acre of land. This represents labour performed during only half the year, for earthworms do not generally busy themselves during the severe weather of winter; and of the ordinary day they devote the larger portion to repose, night being their time of activity. A scorching sun of all things they appear to dread, and in dampness they particularly luxuriate.

The earthworm, so this naturalist fancies, has its share of intelligence lodged somewhere, perhaps in the cerebral ganglia he has examined, for it constructs and lines its burrows in a very methodical way, shows also much judgment in the mode it adopts of drawing leaves into these according to their shape and size, and it has preferences for certain foods. They eat much, digesting what they swallow by the aid of a singular alkaline secretion, then ejecting the most of it for the benefit of the soil. Everyone is aware that stamping upon the ground makes the worms quit their holes, but, nevertheless, Dr. Darwin thinks they are deaf as well as blind, they are alarmed through the sense of touch. The popular belief that associates worms with the decomposition of dead bodies has nothing of fact to support it, their food being purely vegetable. "They remove decaying leaves, facilitate the germination of seeds and the growth of plants, and create for us most of our wide, level, turf-covered expanses."—C.

**RESPONSIBILITY OF GARDENERS.**

YOUR correspondent "SINGLE-HANDED" is quite correct in stating, on page 341, that plants are easier to cultivate when planted out than when grown in pots, but it does not follow that the reason he gives for plants in pots in a large garden mentioned not being so healthy as those planted out is the correct one. It would be quite as sensible a proposition to state that because the pot plants in many small gardens are not well grown, nor the gardening generally high class, that there is too much to do for one pair of hands; and that, therefore, the gardener who has a large place to superintend with a sufficient number of hands to carry out his orders can do the work in higher style. Some of the very best gardening is to be found in large gardens, the very worst in small ones. Selecting isolated instances is a loose manner of discussing a question. If it is granted, then, that the highest class gardening is to be found in large establishments, and that the average is higher in these than in small places, there is a reason different from that your correspondent finds. A gardener in a small place who passes everything through his own hands, if attentive to his work, must of necessity grow plants well. A gardener in a large place, as attentive to his work as the man in a small one, will be quite as successful and have much more to show for the labour he expends.

Personally I should find it much easier to do everything myself were I able to overtake the work than entrust it to subordinates, as I am obliged to do; but I do not imagine the work would be

any better done on the whole than it is at present. The task of superintending a number of men is very wearying and not so interesting as engaging in it oneself; nevertheless, it is the work which falls to gardeners in large gardens, and I think it is in that many gardeners fail who otherwise are quite competent. I make a point to show the workmen how I wish work done. I would as willingly take a shovel and show a young man how to stoke a boiler furnace, or the furnace of a flue, as I would show him how I require Grapes to be thinned. I have everything, to the planting of Cabbages, performed according to my own instructions; and although this requires much interference with the work, which I have no doubt young men often do not like as appearing to them only slight and trivial, it is upon doing these trivial matters well that all successful gardening depends. Had your correspondent's labourer been thoroughly drilled to the work the said poundsworth of Orchids would have been saved.—A MANY-HANDED GARDENER.

**PLEIONES.**

PLEIONES, or Indian Crocuses as they are sometimes termed, will very shortly assist in rendering the Orchid house gay. The three species that are most popular and the easiest to cultivate are *P. Wallichiana*, *P. lagenaria*, and *P. maculata*. They will have shed their foliage, and the flowers will have advanced, springing up as they do from the centre of the young growths. Pleiones are generally grown in shallow pans, and it is surprising how pretty those pans can be made to look with the assistance of a few seedling Ferns. I have practised this method for some seasons.



Fig. 61.—*Rondeletia anomala*. (See page 374.)

When the foliage has fallen from the pseudo-bulbs I collect some small seedling Ferns, such as *Adiantum cuneatum* and *Pteris serrulata*, and prick them in amongst the Pleiones, and in a few days the Ferns look quite fresh, provided they have been taken up carefully. After the Pleiones have flowered the Ferns can be removed. These small Ferns answer two purposes—first they conceal the material in which the Pleiones are grown, and secondly they show the flowers off to greater advantage. *P. Wallichiana* is the first of the three to flower; the flowers of this species are very pretty, but only second-rate compared with the two latter. The flowers are extremely useful in bouquet-making, and anyone that has visited the central avenue in Covent Garden about this time of the year could not fail to admire the way in which the charming little flowers are employed in making elegantly arranged bouquets. Like many other plants as well as