

THE CYCADS.

The *macrozamia plumosa* is certainly one of the most graceful of all cycadaceous plants for general decorative purposes, its green feathery leafage possessing all the freshness and beauty that belong to the most elegant of ferns, combined with the permanence and stately aspect of some of the palms. This fine cycad grows well in a moderately warm greenhouse or conservatory, where, intermixed with other plants, it will prove to be of the utmost service. It has been recently imported from Queensland into England by Mr. William Bull. From a small ovate stem, the scales of which are woolly, rise the erect spirally twisted leaves, which are from 2 to 2½ feet long, and have a flattened petiole. These leaves are furnished nearly to the base with narrow linear leaflets, which are set at intervals of about a quarter of an inch, and are from 6 to 8 inches long. The plant is remarkable for its distinct and elegant character, and will be admired by all our readers.

Improvement in Soldering.

Dr. A. W. Hoffman thinks it possible that oxygen blowpipes or apparatus might be invented, whereby the soldering of metals, without alloys, can be done. He says: "It would be useful to turn our attention to the autogenous soldering of metals with the aid of the oxyhydrogen flame, a principle which has achieved such signal triumphs in the treatment of two essentially different metals. Should it not be possible, by the same means, to solder every metal and every alloy with itself, as tin with tin, copper with copper, brass with brass, silver with silver, gold with gold, and even iron with iron, just as we already solder lead with lead, and platinum with platinum? The probability is present, and the advantages of such a procedure are manifest. Let us try to conceive the neatness of a workshop in which soldering is performed, not as heretofore, with the soldering iron or at the forge, but with a light, elegant gas burner. Imagine the artisan no longer annoyed by radiant heat and by the fumes of charcoal, and able to produce in a moment any temperature required, even the very highest, and again to put an end to it by simply turning a cock. Conceive the solidity of the soldering which no longer depends on cementing two pieces of metal with a foreign matter, but on an actual interfusion of two portions of one and the same metal, and which involves the utmost economy of materials and dispenses with all subsequent work, such as trimming the soldered place with a file. Such evident advantages must overcome every prejudice, and prompt us most urgently to commence a thorough experimental investigation of the question."

THE FIGARIA.

The common ficaria of our woods, with its myriads of polished golden flowers in spring, is well worthy of garden culture. Still finer, however, inasmuch as it is twice as large, is the as yet uncommon ficaria or *caltha grandiflora*. This fine species is a native of southern France, and was introduced some years ago by a gardener, who gave some plants to Mr. Parker, of the Exotic Nursery, Tooting, England, who has since increased it abundantly, and cultivated it with success as a border flower. It is quite hardy, and thrives to perfection in ordinary open border soil. It is, according to a writer of the *Revue Horticole*, as valuable a plant as the spring adonis (*a. vernalis*). Mr. Parker's plants were, during the past spring, 15 inches high, and densely covered with large showy polished golden flowers.

Dull Times in Great Britain.

The English manufacturers are greatly alarmed at the sluggishness of trade generally. The hardware trade, as well as the iron manufacture, seems to be very slack throughout England, and some of the newspaper writers, in complaining of the lack of orders from the United States, warn their manufacturers against expecting as many orders from this side of the water as formerly, and suggest that they find new markets for their products. One of our English cotemporaries mentions Japan as a good market for their hardware, remarking that the Germans and French now monopolize most of that trade. "In Staffordshire," says one of our exchanges, "the market possesses an element which militates against its general healthiness. In many branches makers are experiencing very keen competition from foreigners. The United States is a formidable business antagonist. By Pennsylvania, padlock and currycomb makers in particular are very hotly pressed, and transatlantic firms are underselling us in bright-headed bolts and nuts to the tune of 20 to 25 per cent. By Belgium we are being undersold in railway spikes to the enormous extent of \$25 to \$40; and Barcelona (Spain) makers are turning out door locks and hinges at rates which, on this side,

seem mythical. And the competition we experience is not restricted to other countries. As in the minor industries, so likewise in the heavier trades, sharp rivalry is seen. Notably, the steam and boiler tube makers are being hard pressed by those of Scotland."

The Foreman.

The duties of the foreman are (like the busy housewife's work) never done. If he is alive to the interests of his em-

ployer, the success of the manufacturing portion of the business devolves wholly upon the foreman. Not only is he held strictly accountable for the superiority of the work, but he must ever tire his never resting brain in producing fresh novelties: novelties which will bring the work to a greater state of perfection, and novelties which will cheapen the production, without lessening the wages of the operatives. If it becomes necessary to reduce force, to the foreman belongs the unpleasant task of saying: "We will have to dispense with your services." If a reduction of wages be determined upon, the foreman becomes the agent for promulgating the same, and if he is not possessed of the necessary amount of tact and eloquence to present the same in such a phase as to prevent the immediate withdrawal of a part or the whole of the operatives employed, his fate is *anathema*.

To become a thorough foreman does not necessarily imply that he should be a thoroughly practical mechanic, or thoroughly skilled in that branch of handiwork over which he is to preside. That he must have a thorough theoretical knowledge of the same is absolutely necessary. He must be intelligent, affable, and favored with an even-tempered disposition. In fact, he must be so favored with all the features that make up the character of man, which will allow him at once to be the engineer, general preceptor, counsellor, judge, spiritual adviser, and friend. He must be above temptation of every kind. His disposition must be such as will allow him to chide a man gently for any fault unwittingly done. He must have firmness enough to demand that justice be done his employers, and courage enough to defend his subordinates against encroachments by his employers. He must be generous enough to advance others' claims or inventions, without coveting them or stealing them. He must be wise enough to know right from wrong, and impartial enough to deal justly by friend or foe. He must be frank in all things, and liberal in all his expressions, and must be humble enough to be as courteous to his most humble subordinates as he is to his employer. Such are the duties and attributes which belong to a foreman. How many have them must be determined by others than ourselves.—*The Carriage Monthly*.

Management of Pot Plants.

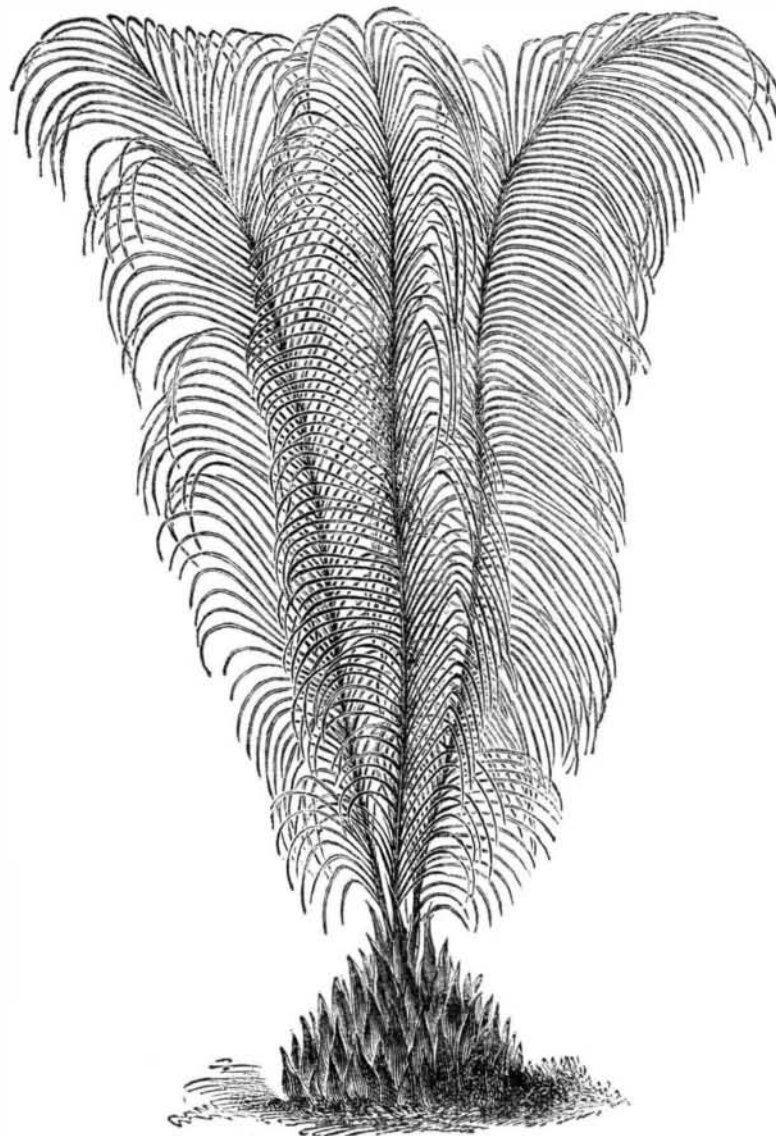
The best directions for potting plants we have ever seen published are found in the *Western Rural*:

Amateurs are apt, in repotting plants, to make the soil too rich, under the impression that, because the roots are confined within a small compass, necessarily the soil must be very fat. Such is not the fact. Flowering plants should not have the soil over rich. They do better in pure soil, free from an excessive quantity of manure. What is used should be the most thoroughly digested compost. The successful florist understands that the soil requires only to be in the normal state to insure perfect and continuous growth; and therefore, instead of making the soil in the pots over rich, he depends upon stimulating, when wanted, by means of liquid manure.

A mistake generally made in shifting from one pot to another is the use of too large pots as the plants increase in size. In changing, use pots only one size larger than the plant was in before. To do this in the best manner, put some drainage in the bottom of the pots, say half an inch of broken flower pots for four inch size, being careful to close the hole in the bottom by laying a piece thereon; on this place a little rich compost mixed with one half its bulk of sharp sand. Then place a pot one size less than the one containing the plant to be moved. Fill in around this with the same material pretty finely packed. Lift out the pot and fill with soil, just so that the ball of earth in which the plant is contained will reach to about half an inch of the rim of the new pot. Now set the plant in and cave the earth about it from the sides, and fill up level with more soil.

Chloral Hydrate in Neuralgia.

The intimate mixture of equal parts of chloral hydrate and camphor will, it is said, produce a clear fluid which is of the greatest value as a local application in neuralgia. Dr. Lenox Brown states, in one of the English medical journals, that he has employed it in his practice, and induced others to do so, and that in every case it has afforded great and in some instances instantaneous relief. Its success, he says, does not appear to be at all dependent on the nerve affected, it being efficacious in neuralgia of the sciatica as of the trigeminus; it is of the greatest service in neuralgia of the larynx, and in relieving spasmodic cough of a nervous or hysterical character. It is only necessary to paint the mixture lightly over the painful part, and allow it to dry. It never blisters, though it may occasion a tingling sensation of the skin. For headache it is also found an excellent application.



THE MACROZAMIA PLUMOSA.

ployers, he is not the last man in the factory in the morning, neither is he the first one out at night. To him belongs the duty of knowing that every operative is at his work in the morning. To him belongs the duty of knowing that every operative renders unto his employer a just and equitable day's labor. To him belongs the duty of knowing that every operative performs his work to standard perfection. To him belongs the duty of arbitrating justly and fairly between employer and employed, and not unfrequently does it become incumbent upon him to settle various disputes between operatives; in fact, he is or must be, as nearly as possible, an



FICARIA GRANDIFLORA.

omnipresent *factotum*. He knows of all the little domestic troubles of his subordinates, and has to advise and suggest means of bringing about (amicably) the marital relations of more than one of those under his control; not sufficiently burdened with his own troubles, he carries the troubles and secrets of subordinates securely locked within his own breast. If any of the operatives in his department meet with reverses, he is the first one appealed to; he is the first to add his name to the subscription list for a certain amount; no matter whether he is prepared or not, he must, to prevent calumny, subscribe. Thus we might speak of him on this subject for years, and fill volumes without end, and then not finish this portion of our story.

All employers or factors are not practical men. In such