

## EDITORIAL NOTICE.

ADVERTISEMENTS should be sent to the PUBLISHER, 41, Wellington Street, Covent Garden, W.C.

Letters for Publication, as well as specimens of plants for naming, should be addressed to the EDITOR, 41, Wellington Street, Covent Garden, London. Communications should be WRITTEN ON ONE SIDE ONLY OF THE PAPER sent as early in the week as possible and duly signed by the writer. If desired, the signature will not be printed, but kept as a guarantee of good faith.

Illustrations.—The Editor will be glad to receive and to select photographs or drawings, suitable for reproduction, of gardens, or of remarkable plants, flowers, trees, &c., but he cannot be responsible for loss or injury.

Local News.—Correspondents will greatly oblige by sending to the Editor early intelligence of local events likely to be of interest to our readers, or of any matters which it is desirable to bring under the notice of horticulturists.

Newspapers.—Correspondents sending newspapers should be careful to mark the paragraphs they wish the Editor to see.

## APPOINTMENTS FOR THE ENSUING WEEK.

WEDNESDAY, AUGUST 12—Taunton Fl. Sh. (2 days).

SATURDAY, AUGUST 15—Sandiway and Dist. Fl. Sh.

AVERAGE MEAN TEMPERATURE for the ensuing week, deduced from observations during the last Fifty Years at Greenwich—62.4°.

ACTUAL TEMPERATURES:—

LONDON.—Wednesday, August 5 (6 P.M.): Max. 76°; Min. 57°.

Gardeners' Chronicle Office, 41, Wellington Street, Covent Garden, London.—Thursday, August 6 (10 A.M.): Bar. 30; Temp. 63°; Weather—Overcast.

PROVINCES.—Wednesday, August 5 (6 P.M.): Max. 60° South-west Ireland; Min. 54° North-west Scotland.

## SALES FOR THE ENSUING WEEK.

FRIDAY—

New and rare plants and seeds from New Zealand. Choice imported and established Orchids. Orchids in flower and bud, at 67 & 68, Cheapside, E.C.

Complaints are periodically made on the subject of injuries sustained by handling various plants which contain juices or other substances that produce inflammatory or other disagreeable symptoms on the skin. In some years these disagreeable effects are more noticeable than in others, and it seems tolerably clear that, in the case of some of the offending plants at any rate, a hot, sunny summer tends to accentuate the evil. A plant which is the cause of part, at least, of the trouble is *Rhus radicans*, or, as it is sometimes called, *R. Toxicodendron*. It is grown in a fairly considerable number of gardens in Britain, but instances of trouble arising from it are somewhat rare and scattered. In its native home, North America, it is well known as a dangerous plant, under the name of Poison Ivy, and a stranger does well to learn to readily distinguish it from the somewhat similar and very common Virginia Creeper, especially as both plants are not infrequently to be found growing over the same tree. Even in America its virulence seems to vary according to climatic and other conditions, and, furthermore, some people are far more sensitive to its effects than others. Indeed, we have been informed on reliable authority that at the time when the plants are in flower there are people who are compelled even to leave the districts where the plants are common, doubtless owing to the poison being contained in, or conveyed on, the pollen grains. There are, however, fortunately, not many who are as sensitive as this would imply, although the evil effects consequent on incautiously handling the plants are everywhere recognised in America, and we have on several occasions witnessed them ourselves. It is, then, a curious fact that in this country the plant should be relatively

innocuous, save under exceptional circumstances as already indicated. The poisonous principle resides in the juice or latex present in the leaves and stems of the plant, but the composition of the juice plainly varies according to the condition under which the plant is growing. In the south-east of England we have heard of more cases than elsewhere, and perhaps this is to be attributed to the hotter and more continental type of summer which prevails in this part of the country, for cases of poisoning seem to be less frequent in other districts, and to be almost unknown in the north.

Another species, not uncommon in America, and apparently even more dangerous than *R. radicans*, is *R. venenata*, known locally as the Poison Elder. Some of the species that inhabit the warmer parts of Europe are also injurious in their natural habitats, although they are not generally regarded as endowed with bad qualities when grown in this country. The Wig tree, *R. Cotinus*, as well as *R. Coriaria*, which are both natives of the Mediterranean region, are looked on with suspicion in the south of Europe. The latter plant is unquestionably dangerous, and produces an erysipelas-like affection of the skin of persons who gather the leaves for the sake of the tannin they contain.

Some of the best-known examples of the poisonous qualities of the genus are met with in those species which, like *R. vernicifera*, furnish the well-known lacquer varnish used by the Japanese. The juice is so dangerous that its nature is not as yet fully understood, but the poisonous substance, formerly called urushic acid by Dr. Yoshida, is probably a phenol, to which the name of Laccol has been given by Bertrand, a French chemist, who has devoted much time to its investigation. The varnish results from a chemical change in this laccol produced by a ferment, also present in the juice, when the two substances are exposed to the oxygen of the air.

Another group of plants which is endowed with analogous disagreeable qualities is furnished by some of the Primulas. The two species which enjoy a bad reputation in this respect are *P. obconica* and *P. sinensis*. The latter plant, however, is rarely productive of bad effects, although we have received complaints respecting it from time to time. There is a more general agreement as to the *P. obconica* deserving its evil name. But just as in the case of the Sumachs, or species of *Rhus*, so also with this plant, different persons exhibit very different degrees of susceptibility. Some interesting experiments were made at Prague a few years ago which very clearly showed this. Portions of leaf petiole and the peduncle of the inflorescence bound on the wrist or arm for a short time, produced very marked effects upon one of the investigators, whilst in the case of another subject hardly any result was obtained. It was clearly shown, however, that repeated application of the stimulus did not confer any immunity, such as might, perhaps, on analogy have been anticipated. Indeed, the contrary appeared to be the case.

The injurious substance is contained in the glandular hairs that occur on the epidermis of the plant, and perhaps in the more pointed hairs also, as the extraction of the

contents of the glands and the smearing of the yellowish mass thus obtained on the skin was followed by the characteristic symptoms that are so well known. It was also discovered that the injurious substance is insoluble in water, but is readily soluble in strong spirit, and this indicates how the unpleasant effects of handling the plant may be obviated. By rinsing the hands first with spirit, and then washing with soap in a stream of water, the symptoms may be almost entirely prevented, and even when they have already begun to manifest themselves, the alleviation is considerable. It thus becomes clear that it is of little use to wash the hands in water only, since this will not remove the poisonous substance, and it is to be hoped that those who are sensitive to the action of the secretion will give the methylated spirit method a trial. Seeing that the degree of susceptibility differs so widely, it will probably happen that some people may still suffer, even from the small traces that remain after treatment with the spirit, but it may be expected that the majority will derive considerable benefit from its use.

Some persons suffer from handling the bulbs of Roman Hyacinths, though the evil consequences usually are merely temporary. It is believed that the cause of the trouble in this case lies in the presence of needle-like crystals, or raphides, of calcium oxalate which occur in the dried-up cells of the scales. These easily penetrate the skin, and may set up a troublesome irritation. It is, however, doubtful whether the physical injury alone accounts for the unpleasant effects, and it may be that the needles really serve to inoculate the skin with some deleterious substance. Such is almost certainly the case in connection with some other plants, the Arum, for example. The juice of the tuber, if filtered, is said not to produce any effect if placed upon the tongue, whereas if the cut surface of the rhizome be directly applied, a tingling sensation makes itself felt in the course of a few minutes and gradually increases until considerable pain is experienced. This seems to be due to the introduction of a poisonous substance into the tissues, and not to be solely attributable to the irritation caused by the raphides. The matter is worth more extended investigation, as very little is known about it at the present time.

OUR SUPPLEMENTARY ILLUSTRATION represents *Dendrobium Brymerianum*, "Gatton Park variety," for which Sir JEREMIAH COLMAN, Bart., Gatton Park, Reigate (gr. Mr. W. P. BOUND), received an Award of Merit at the meeting of the Royal Horticultural Society on April 14 this year, and which is one of the most highly developed forms yet seen. The species was introduced in 1874 by Messrs. HUGH LOW & Co., from Burmah, and few Orchids have been better welcomed by Orchidists, although the supply for a good many years was very limited. The typical form was invariably good, and the branched fimbriation on the lip, which forms the chief attraction of the flower, well-developed. But in the *Gardeners' Chronicle*, January 28, 1888, p. 104, the late Professor REICHENBACH describes *D. Brymerianum histrioticum*, which had been imported from Upper Burmah, and was appearing in many gardens. As with some other Orchids, this was an inferior presentment of the original species so far as the cultivator was concerned, for its flowers