

HORTICULTURAL EXHIBITIONS, 1875.

OCTOBER.

6.—Royal Horticultural Society, South Kensington. Meeting of Fruit and Floral Committees. Fungus Show, and Exhibition of Cones.

NOVEMBER.

10.—Royal Horticultural Society, South Kensington. Meeting of Fruit, Floral, and Scientific Committees.
15 and 16.—Loughborough Chrysanthemum and Fruit Show Sec., William Pallett, 55, Baxter Gate, Loughborough.
25.—Royal Horticultural Society of Ireland. Private Winter Exhibition. Sec., A. Balfé, 28, Westland Row, Dublin.

DECEMBER.

1.—Royal Horticultural Society, South Kensington. Meeting of Fruit, Floral, and Scientific Committees.

THE

Gardeners' Chronicle.

SATURDAY, SEPTEMBER 25, 1875.

APPOINTMENTS FOR THE ENSUING WEEK.

MONDAY, Sept. 27—Sale of Dutch Bulbs, at Stevens' Rooms.
TUESDAY, Sept. 28—Sale of Imported Orchids, at Stevens' Rooms.
WEDNESDAY, Sept. 29—Potato Show at the Alexandra Palace (two days).
THURSDAY, Sept. 30—Sale of Dutch Bulbs, at Stevens' Rooms.
SATURDAY, Oct. 2—Sale of Dutch Bulbs, at Stevens' Rooms.

NO sooner is the Edinburgh Fruit Show a thing of the past than another of great magnitude calls for notice. This time it is our Belgian neighbours in association with our French friends who have made the display. The Exhibition, which closes this day, was organised by the CERCLE D'ARBORICULTURE OF GHENT—that little band of zealous pomologists—in association with the POMOLOGICAL SOCIETY OF FRANCE. The show is enormous, as far as Apples and Pears are concerned. Peaches and Plums are naturally not so well represented, owing to the lateness of the season and the duration of the show. Grapes are well shown by Messrs. LANE, of Beekhamptead, who received an unanimous award of a gold medal for their collection of fifteen varieties, in addition to other exhibits.

No one on the British side of the Channel needs to be reminded of the excellence of Messrs. LANE'S Grapes, and we thank those gentleman for their spirit and patriotism in showing what British Grape growing is like. Nevertheless, we can but regret that some of the wonderful Grapes shown at Edinburgh last week were not sent across the Channel. What would our Belgian friends have said to two bunches of Grapes, the one weighing just over the other just under 26 lb.—say 11 to 12 kilogrammes? Think of that, M.M. les Belges. As we have said, the great strength of the Ghent fruit show lies in its unrivalled display of Apples and Pears, in which M. BALTET, of Troyes, and M. GRÉGOIRE, of Jodoigne, took a most prominent part.

We must, however, refer to our detailed report in another column for fuller particulars than it is necessary to give here. If Edinburgh had its "sensational" Grapes, Ghent had its corresponding Apple, in the shape of Ménagère, measuring 1 foot 7½ inches in circumference, and weighing over 1 lb.

For effect sake, it would have been far better if some of the foliage plants, of which there are such prodigious quantities in the city, had been made use of to break the uniformity, caused by rows of plates numbering not less than 12,000. Still, we do not overlook the fact that the primary object of this exhibition is instruction. Certain fruits and groups of fruit are set apart for special "study," and will be reported on in due course.

In addition there is a Congress, whose meetings have extended over four or five days. Lastly, there is the same overflowing heartiness of welcome and hospitality not more profuse than cordial, which is a never-failing characteristic of the Belgians. It seems as if publicly and individually they can never do enough for their

foreign guests. The Burgomaster, Comte de KERCHOVE DE DENTERGHEM, his son, M. OSWALD DE KERCHOVE, MM. RODIGAS, VAN HULLE, PYNAERT, BURVENICH, and the members of the committee, have had the lion's share of the work, and they have added to their labours by the most bountiful and warm-hearted hospitality. We congratulate these gentlemen heartily on the success of their endeavours, and thank them *de tout cœur* for the great kindness shown to our representatives, and the facilities that were offered them in the preparation of the report which appears elsewhere.

We trust that the article of M. BALTET on BUDDING the PEACH with FRUIT BUDS will receive the attention it merits. It is, indeed, singular that so little advantage is taken of the process of grafting with flower or fruit buds. With the exception of some plants intended for forcing we scarcely ever meet with illustrations of the practice, and yet it is neither new nor difficult, while its advantages are obvious. To remove a fruit-bud or a fruit-spur from one tree and transfer it to another is no more difficult than budding or grafting with leaf-buds or scions.

It is only lately that M. BALTET, the eminent pomologist and the able writer, has tried this process with the Peach, at the suggestion, as he says, of one of his *employés*. M. BALTET, in his most praiseworthy desire to render credit where credit is due, takes none to himself, or even to his assistant, who, as he supposes, must have gained the idea from some one else, though he is not able to say from whom. That assistant has a name which suggests that he is of British nationality or descent; at any rate, it is certain that, so far from the practice not being noticed in horticultural works, it is mentioned in several of the leading English works. M. BALTET, of course, had French works especially in mind, and he may thank us for telling him that THOMAS ANDREW KNIGHT has the credit of introducing the practice into this country. In support of our remarks we transcribe the following passage from LINDLEY'S *Theory of Horticulture*:—

"Indeed, Mr. KNIGHT ascertained that it is possible to transfer the blossom-buds of one plant to another, so as to obtain flowers or fruit from them immediately. He thus fixed on the wild Rose the flower-buds of garden Roses, and these buds being abundantly supplied with nutriment, afforded much finer Roses than they would have done had they retained their natural situation." He repeated many similar experiments upon the Pear and Peach tree with similar success, but in the case of the Pear he found that, if the buds were inserted earlier than the end of August or beginning of September, they became branches, and not flowers."

IN some interesting remarks on the INSECT-KILLING POWERS OF PINGUICULA, contained in a recent number of the *Belgique Horticole*, Professor EDWARD MORREN, after describing the structure of the plant, relates how he cultivated some specimens in pots in a spongy soil, keeping them always in the shade, and placing them under glass in winter. In the spring of this year they were perfectly healthy, and flowered from the beginning of April. The plants were developed early in the spring, in the frame in which they had been placed for protection. Nothing very special occurred until they were planted in the open air in a northern but somewhat sheltered situation, when they immediately began to entrap flies. Their favourite food, it seems, is a small black fly, two or three millimetres long, found in moist places; but this does not prevent their availing themselves of the greenfly, which infest the peduncle of the plant.

M. MORREN repeated the experiments made by others relative to the action of the leaves of Pinguicula upon coagulated albumen. On May 28 he placed upon some well-developed leaves some hard white of egg in four little pieces, about 2 millimetres square. At the

same time he placed other fragments upon the leaves of a young Poplar close by. He moistened two of the last-mentioned leaves with the liquid which percolated from an *Echmea nudicaulis*, and placed some other pieces of albumen, moistened, some with pure water, others with water sweetened with sugar, on a china plate. The pieces placed on the plate, and those upon the Poplar leaves, which were not moistened, were unchanged in appearance. All the others, on the contrary, became more or less transparent in the course of a day or two. They were becoming dissolved then at the thinnest edges, while others were covered with mildew. On examining under the microscope an insect which had been caught on the leaf, together with some of the mucus surrounding it, M. MORREN found numerous monads and Bacteria, together with mycelial threads, Torula, &c.—in a word, the usual accompaniments of putrefaction and fermentation. M. MORREN was further struck by the fact that it was always the same insect that was entrapped by Pinguicula. He applied to M. PULS, of Ghent, one of the first Belgian entomologists, who recognised the insect as a Mycetophila, which he believed to be the *Exechia fungorum* of GEER. The larvae of these flies usually exist in Mushrooms, even in *Agaricus muscarius*. All those found on the Pinguicula were females. There is doubtless the same sort of special attraction exercised that which is undoubtedly possessed by certain plants for certain insects. The growth of the Pinguicula goes on altogether independent of the capture of insects, and no relation traced between the nutrition of the plants and the number of insects caught. M. MORREN alludes to many other instances wherein plants serve as insect-catchers by reason of their secretions. On the whole, the author concludes that the Pinguicula has a structure (as described by him) similar to that of the *Nepenthes*; but he doubts the direction of animal matter by the leaves, and only the evidence of putrefaction.

In another article in the same number MORREN gives his experience in the case of the *Drosera*, which was almost precisely the same as in the case of the Pinguicula. In this case could he trace either digestion or absorption of the products of digestion.

M. MORREN does not seem to have made use of litmus paper to test the acidity of the secretion from the leaf after the capture of the insect, nor does he seem to have observed the aggregation in the protoplasm of the leaf described by Mr. DARWIN.

— THE illustration which we give on p. 383 represents the interior of the WINTER GARDEN at the Flora Gardens AT COLOGNE, the scene of the International Horticultural Exhibition. The building is of iron and glass, elegant in design, and of fine proportions. The central Palm, raised on a mound of rocks covered with appropriate plants, is *Phoenix dactylifera*. In this building was given one of the multitudinous banquets which the Society offered to the Crown Prince and the jury. We have had occasion to speak previously of the imperfect arrangements of this show; and, as another illustration, we may add that, up to this moment, we have received no official intimation of the prizes that were awarded. We believe that, in addition to the prize awarded to Messrs. VETICH, and to which we have already alluded, Mr. B. S. WILLIAMS received sundry awards which, in any case, were certainly well-deserved.

— AN EXHIBITION OF FUNGI and a Conference of Cryptogamic Botanists will be held at Perth on September 29 and 30 and October 1. The secretary is Dr. F. BUCHANAN WHITE, Rannoch, Perthshire.

— We hear of a case which, if our information be correct, illustrates very forcibly the necessity that exists on the part of exhibitors not only to keep strictly to the conditions of the SCHEDULE but also to avoid even the appearance of an infringement. A very respectable grower had some time since purchased of a well known firm of plant exhibitors a large *Ixora*, which was to be delivered at the earliest opportunity, and singularly enough that opportunity offered when the