In the majority of instances this is the only course that could be advantageously followed, for the names are generally given without adequate research and with no reference to system. They are, in fact, the outcome of the nomenclator's fancy solely. But in many cases the plant is authoritatively described in the gardening periodicals, and when that is the case the customary citation might with advantage be made in the Kew list.

One most objectionable practice the gardeners have, and that is of imitating the names given by botanists *secundum artem*. In the eyes of the scholar, botanical nomenclature is mostly barbarous, but garden nomenclature is too often ludicrous. It is more than that, it is misleading. A botanist ignorant of the history of a garden plant and finding it provided with a Latin generic and specific name would naturally suppose that he had to deal with a species properly described and recorded, and would waste his time and patience in fruitless search unless by good fortune he lighted on the Kew *Bulletin*.

But if some sort of provisional name could be given to plants of garden origin or to plants of unknown status, such name to be so framed as not to give rise to misapprehension, horticulture would not suffer and science—at least indirectly—would be the gainer.

The Royal Horticultural Society has, at various times, endeavoured to grapple with this evil, and has even formulated a code of rules to be followed by the horticulturists when introducing "new" plants to the notice of the Society or the public. The rules are excellent, but they are far more frequently honoured in the breach than in the observance, and the Society seems powerless to enforce its own precepts even in its own records. The alliance of old custom with new developments, however anomalous, seems likely to persist in the future as it has done in the past. The Kew publications to which we have referred are invaluable to the student by lessening the difficulties of research and neutralising the anomalies of which mention has been made.

THE PHOTOGRAPHIC CHART OF THE HEAVENS.[1]

IT is to be regretted that a whole year has been allowed to intervene between the meeting of the International Committee charged with the construction of the photographic chart of the heavens and the official publication of the proceedings of the members, since the interest that would otherwise attach to the utterances of so many expert astronomers in conference assembled is materially lessened by the delay. Doubtless the collection of proofs from sources so scattered and so distant demands a long time, but the most careful and praiseworthy desire to secure accuracy might have been satisfied with a shorter period. Two very evident drawbacks result from this method of treatment. Not only have more or less complete statements appeared in various scientific journals, but the reports on the amount of progress effected by the various participants in the scheme refer to a twelvemonth since and are already ancient history.

But, on the other hand, it is abundantly evident that these meetings, held from time to time, perform a very useful work wherever widespread cooperation is necessary. They not only afford evidence of the earnestness of purpose and determination to successfully prosecute the scheme, that originated under the auspices of the late Admiral Mouchez, but they supply the means of most readily combining the activities of many observatories to secure a common aim. The readiness with which so many astronomers acceded to the request to undertake the observations of Eros, and the adoption of a uniform plan of wide-reaching extent, could scarcely have been effected in the time at disposal without personal intercourse and mutual encouragement. It is true that the observations have all been made and much of the reduction completed before we get the official report, but this in no way detracts from the value of the results immediately obtained, while the proceedings of the Conference will remain as a valuable historical document bearing on the progress of astronomical science.

To the general methods of observation of Eros and the success which has attended the scheme we have already referred (NATURE, vol. lxiii. p. 502), and may pass the matter aside with the reassuring reflection that the latest reports fully confirm the success that was anticipated from the earlier measures. Of the degree of completeness accomplished in the photographic surveys of the heavens it is not easy to form a very exact notion, owing to no tabular statement accompanying the report and the varied methods of description adopted by the various authorities, but the following table will exhibit fairly accurately the amount of progress reported up to the date of the meeting :—

Limits of Zone in declination	Observatory	Number of plates for catalogue	Number of plates for chart	Number of plates measured
90° to 65°	Greenwich	1106	1076	608
64 ,, 55	Rome (Vatican)	476	106	15
54 ,, 47	Catania	Complete	None	36
46 ,, 40	Helsingfors	Complete	⅓	380
39 ,, 32	Potsdam	Complete	None	(100,000 stars)
31 ,, 25	Oxford	Complete	None	736
24 ,, 18	Paris	Complete	97	650
17 ,, 11	Bordeaux	402	17	293
10 ,, 5	Toulouse	½	45	⅛
4 ,, − 2	Algiers	Complete	97	497
− 3 ,, − 9	San Fernando	Complete	596	145
− 10 ,, − 16	Tacubaya	746	None	203
− 17 ,, − 23	Santiago	(Abandoned)		
− 24 ,, − 31	La Plata	(Abandoned)		
− 32 ,, − 40	Rio	(Abandoned)		
− 41 ,, − 51	Cape	Complete	Complete	126
− 52 ,, − 64	Sydney	Complete	(Greater part)	
65 ,, − 90	Melbourne	900	Complete	

Of the plates for the chart it is intended that there should be two series, made respectively with one exposure of an hour and three exposures of half an hour each. The word "complete" in the chart column is meant to apply to one of these series, but Sir David Gill has made considerable progress with the second series. The arrangements made for supplying the lacunæ caused by the South American observatories finding themselves unable to fulfil their engagements have already been reported (p. 335).

To judge from the number of papers presented on the determination of photographic magnitude, this subject still seems to occupy a large share of the attention of the Committee—larger, indeed, than to an outsider the subject seems to warrant. On the occasion of the meeting in 1896, the committee decided that the several observatories were at liberty to determine the photographic magnitude, either by estimation or by measurement, simply stipulating that whatever system was adopted it should be one capable of precise definition and permit

[1] "Réunion du Comité international permanent pour l'exécution de la Carte photographique du ciel, tenue à l'Observatoire de Paris en 1900." (Paris: Gauthier-Villars, 1900.)

the scales adopted to be reduced to a common system. This seems to give sufficient latitude, but, nevertheless, at the eleventh hour, no less than five different papers are presented on this vexed question of magnitude. Among other papers forming the annexe is a short but interesting note from the Astronomer Royal on the number of stars found on each of the plates devoted to photographing the Polar Cap, with a comparison with the numbers comprised in the Durchmusterung and the accurate catalogues of the Astronomische Gesellschaft. The totals are as follows :—

Number of stars measured on the plates	58,176
Number of stars to the square degree	70·0
Number of stars in Argelander's Durchmusterung	9979
Ratio of photographed stars to Bonn D.M. ...	5·83
Number of stars in A.G.C. Catalogues	4966
Ratio of photographed stars to A.G.C.	11·7

If the number of stars approximately increases as the magnitude diminishes, the ratio here given would point to the faintest stars on the plate being 1·9 mag. fainter than Argelander's faintest stars, or well covering the eleventh magnitude, originally assigned as the limit to which the catalogue should extend.

Since writing the above, M. Lœwy has published very complete details showing the approximate times of observation of the planet Eros at no less than forty-six observatories where the work has been undertaken. The energy displayed is of the most gratifying character, and the final result will no doubt demand a degree of confidence commensurate with the labour that has been bestowed on the undertaking. The work is shown to be one of gigantic magnitude, and M. Lœwy displays considerable hopefulness in suggesting that two years may see it completed. Several other papers, all devoted to securing accuracy and homogeneity in the final reductions, also appear in this brochure. We may especially call attention to a paper by the Director of the Paris Observatory on the degree of precision that the photographic measures possess, and of the success that is likely to attend the adoption of the scheme for driving the equatorial at various rates depending on the amount of geocentric motion of the planet itself. The additional matter supplied by the Paris authorities is of a highly interesting character to which we hope to do justice later, when complete details from the various authorities are published.

THE COLORADO POTATO BEETLE.

THE official announcement by the Board of Agriculture of the appearance of the Colorado potato beetle swarming in a potato field at Tilbury is a very serious matter, for we have no wish to see another insect pest added to those with which our agriculturists already have to contend. It is satisfactory to know that the Board took instant measures to cause the destruction of all the crops within the infested area ; and as the surrounding neighbourhood has since been searched in vain for any further traces of the insect, it is confidently hoped that the measures taken for its timely extirpation have proved successful.

The beetle is about half an inch long, and slightly oval in form. The wing-cases are longitudinally and alternately striped with black and yellow, and the wings are red. The grubs, which feed on a great number of other wild and cultivated plants besides the potato, are orange or reddish, with a row of black spots on each side. The oval yellow eggs are laid in clusters.

The insect was so destructive in North America some years ago that great fears were entertained of its spreading to Europe ; and at that time was passed the Destructive Insects Act, according to which every person meeting with the insect is bound, under a penalty of 10*l*., at once to inform the police, who in their turn must notify the local authorities, who must communicate by telegraph with the Board of Agriculture.

It must be remembered that, if there is danger of an injurious insect establishing itself in a country, instant action is as necessary as in the case of a threatened epidemic. W. F. KIRBY.

PROF. BARON ADOLF ERIK VON NORDENSKJÖLD

WHEN a man who has spent an earnest and useful life reaches the mature age of threescore years and ten, it must be a relief to those near and dear to him when his last days are not spent in suffering. The great Swedish explorer's end was in this wise. "His death," writes his nephew, Dr. Otto Nordenskjöld, "was absolutely sudden ; the same day he was working in his laboratory, occupied with great plans in his mineralogical and chemical work."

Baron Adolf Erik von Nordenskjöld was born at Helsingfors, the capital of Finland, on November 18, 1832, the third in order of seven children. His father, Nils Gustav Nordenskjöld, descended from a scientific family, and, himself an ardent naturalist, was chief of the Mining Department of Finland. Nils Gustav was a most distinguished mineralogist, and his work brought him into communication with the most eminent mineralogists and chemists of his time in France, Germany, and Britain. He travelled as far as the Urals, and on many of his journeys he was accompanied by his son, Adolf Erik von Nordenskjöld, who as a boy became an industrious collector of minerals and insects. He acquired great skill in collecting minerals and in the use of the blow-pipe, which his father handled with a masterly skill, unknown to most of the chemists of the present day. Thus, both by inheritance and by the influence of environment, Nordenskjöld had opportunities allotted only to the few, but which were taken the greatest possible advantage of. His early education was from private tuition, after which he was sent to "gymnasium" at Borgo, a connecting-link between school and university. Here he distinguished himself, as the rector expressed it, "only by absolute idleness." He was marked in his certificate "unsatisfactory" in nearly the whole of the subjects. His parents were judicious enough not to attach any importance to this well-deserved mishap. His private tutor was removed ; and with five silver roubles Nordenskjöld had to seek modest board and lodging, and got full liberty to manage his studies in his own way. "Self-respect," he says, "was thus awakened. I became exceedingly industrious, and was soon one of those then attending the gymnasium who obtained the best reports."

Nordenskjöld entered the University of Helsingfors in 1849, devoting himself chiefly to the study of chemistry, natural history, mathematics, physics, and, above all, of mineralogy and geology. He took charge of the rich mineral collection of Feugard, and made many excursions. In 1853 he accompanied his father on a mineralogical tour to Ural, when he planned an expedition to Siberia, which the Crimean War prevented him from carrying out. On his return he wrote, as his dissertation for the degree of licentiate, a paper "On the Crystalline Forms of Graphite and Chondrodite," which was discussed under the presidency of Prof. Arppe on February 28, 1855. At this time he published "A Description of Minerals found in Finland," "The Mollusca of Finland" with Dr. E. Nylander, and shorter papers in the "Acta Societatis Scientiarum Fenniæ." During this time he was appointed Curator of the Mathematico-Physical Faculty and to a post at the Mining Office with inconsiderable pay. Before he received his second