

ured  $\Delta\alpha$  and  $\Delta\delta$ , and then the *combined* correction for differential refraction and parallax. As every computer of the final orbit of a comet wishes to use his own corrected distances in applying the parallax, and as the distances used above are not stated, he must in this case re-compute both the differential refraction and the parallax-factors. It would certainly be better to publish the  $\Delta\alpha$  and  $\Delta\delta$  corrected for refraction, and the 'log  $p\Delta$ ,' according to universal custom.

**New or variable stars.** — Mr. W. H. S. Monck, in the *Observatory*, 1885, 335, makes the suggestion that the new or temporary stars that occasionally appear may be due to swiftly-flying meteor streams in space, meeting a nebula or gaseous mass, either bright or dark, and suddenly heating a part to incandescence, as in the case of shooting stars striking our atmosphere.

**Discovery of an asteroid.** — A telegram from Professor Pickering announces the discovery on October 27 of a new asteroid, by Perrotin of the Nice observatory. Its position on October 27, at 7<sup>h</sup> 12<sup>m</sup>, Washington mean time, was: right ascension, 1<sup>h</sup> 8<sup>m</sup> 53<sup>s</sup>; declination, +7° 8', with daily motions of —36<sup>s</sup> in right ascension, and —7' in declination. This is the eighth asteroid discovered this year, and the sixth discovered by Perrotin.

**Mr. Chandler's Almucantar.** — We recently noted (*Science*, vi. 239) Mr. Chandler's correction to the latitude of the Harvard college observatory from almucantar-observations. Since then he has unquestionably shown (*Astr. nachr.*, 2687) that this instrument is capable of detecting slight errors in the positions of even some of the '*hauptsterne*' of Auwers' system, and of furnishing valuable corrections to them from a comparatively limited number of observations. Mr. Chandler's promised memoir upon the construction, theory, and use of the almucantar will be awaited with unusual interest.

**Death of General Baeyer.** — Geodesy has lost its most illustrious representative in the death, at the advanced age of 91, of Dr. J. J. Baeyer, founder of the European *Gradmessung*, president of its central bureau and of the Royal Prussian geodetic institute. He died on the night of September 10–11.

#### NOTES AND NEWS.

ACCORDING to the report of Superintendent Wear, of the Yellowstone national park, the maintenance of a strict watch day and night has resulted in breaking up, in a measure, the wholesale slaughter of game; and the park is now full of game of all kinds, including about two hundred head of bison, large numbers of elk, and several

herds of antelope. By the new roads, access to the objects of interest is facilitated. It is recommended that the force of assistants be increased from ten to fifteen, as the present force is not large enough to prevent the commission of acts of vandalism. The travel in the park this summer has been much greater than ever before.

— President Porter has sent to the corporation his resignation of the presidency of Yale college, the resignation to take effect at Commencement, next June. He will, however, retain his position as Clark professor of moral philosophy.

— King Leopold of Belgium, it is reported, has already found the Kongo Free State a more expensive enterprise than he can carry on unaided. His recent visit to Wiesbaden was made, it is said, for the purpose of inducing some one of the German princes to assume the sovereignty of the Kongo country in his stead.

— R. T. Stupart, the Hudson Bay observer, who abandoned his station at Stupart Bay the day before the steamer Alert reached there, arrived in Halifax on Saturday, Oct. 31, on the steamer Miranda from St. John's, Newfoundland. Their voyage of twelve days in an open boat to Fort Chimo was exceedingly perilous.

— Supplementing the regular course of instruction at Sibley college, Cornell, a series of lectures on mechanical engineering will be delivered from time to time by members of a body of non-resident lecturers who have been chosen from among the most distinguished men of the profession. These gentlemen choose their own subjects, and times of lecture, and their own method of presentation of the subject selected. The director of the college announces that the following named gentlemen are engaged to lecture during the year 1885–86: Dr. E. D. Leavitt, jun., Dr. R. W. Raymond, Dr. C. E. Emory, Mr. Charles T. Porter, Mr. J. M. Allen, Mr. J. C. Hoadley.

— A petition to congress for a deed to San Miguel mountain—an excellent situation for an observatory, near San Diego—has been circulated by the San Diego society of natural history.

— The San Diego society of natural history has taken steps for the protection of the nearly extinct Punis Torreyana of San Diego county.

— The '*Lungen gymnastik*' of Th. Huperz is really a handbook on the care and development of the lungs, and the attendant and reflex advantages of such care. Though he says it is for the physician, yet its style and method are such that it may be most successfully used by the laity. The

structure and uses of the organs are just enough dwelt upon to make the subject clear. Besides the common ideas of the injuries of impure air, he tells of the evils of carpets, drapery, curtains, and upholstery as introducing bad air into our living apartments. He comes down heavily on the fear of slight draughts of air. If any adverse criticism is to be made, it is that the author does not make enough of the impure exhalations of the lungs and skin as injuring the air, laying the sin of air-poisoning too much at the door of carbonic acid. And the perils of carbonic oxide, as found in the products of combustion of water gas, are not dwelt upon.

— One of the best compends on its subject that has yet appeared is Edinger's ten lectures 'Ueber den bau der nervösen centralorgane,' just published at Leipzig. The subject is beset with very many difficulties, and there are many controverted points at every step, and many degrees of certainty about what is generally accepted. The author is, moreover, an original investigator, liable to give too great prominence to his own work. Despite all these difficulties, however, we have here without doubt the most lucid and the most judicious presentation of the subject of the finer internal anatomy of the nervous system yet made in so small space. The work contains 120 illustrations, many of them original, which add greatly to its value. We have long needed a concise presentation of this subject, which should include, as none of the larger and well known manuals do, the results of recent investigations, especially those of Meynert and Flehsig, to which full justice is here done. It is sure to prove of peculiar value to teachers. If another lecture could be added on the embryology of the normal brain, the value of the book would be increased.

— E. Wasmandorff has published (Virchow's and Holtzendorf's Sammlung wissenschaftlicher vorträge, ser. xx.) an exhaustive study of the various forms, in which sorrow for the loss of friends has manifested itself among all peoples, ancient and modern, civilized and savage. Fortified by a wealth of references to original sources of information, it constitutes a valuable contribution to anthropological science. It is impossible, within our limited space, to give more than a single example of the author's interesting generalizations. The ordinary colors of mourning garments are black and white. As is the European custom, black prevailed among the ancient Egyptians, Hebrews, Greeks, and Romans, and the native races of this continent. White is the color among the inhabitants of China, Japan, Oceanica and large portions of Asia; so also in parts of Greece and

anciently in Germany. Blue is the color in Arabia, and among the Turks and Egyptians, and in Catholic upper Germany it is prescribed by the church. Yellow was used by the ancient Celts and in some of the kingdoms of Asia.

— Several inquiries having been made of us relative to our statement on page 351, that an 'actual competitive examination' was required for admission into the Royal society of London, we print from *Nature* the following extract from Professor Chrystal's address before the British association, which seems to warrant what was said: "I think our great scientific societies — the Royal societies of London and Edinburgh, and the Royal Irish academy — might do more than they do at present to prevent this languishing of local science, which is so prejudicial to the growth of a scientific public. Besides their all-important publishing function, these bodies have for a considerable time back been constituted into a species of examining and degree-conferring bodies for grown-up men, that is to say, their membership has been conferred upon a principle of *exclusion*. Instead of any one being *admitted* who is willing to do his best, by paying his subscription or otherwise, to advance science, every one is *excluded* who does not come up to the standard of a certain examining body. So far is this carried in the case of the Royal society of London, that there is an actual competitive examination, on the result of which a certain number of successful candidates are annually chosen."

#### LETTERS TO THE EDITOR.

\*\* Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

##### The care of pamphlets.

IN response to the demand which Mr. Goode makes in *Science* of Oct. 16, for descriptions of methods of caring for pamphlets, I describe my own method.

Each pamphlet is perforated at the back with holes to admit a cord. This is most conveniently done with a cutting punch, which makes a round and smooth hole, but it can be done with an awl. Cords are then passed through these holes, and any number of pamphlets may be bound together. Whenever it is desired to insert a new pamphlet, or to rearrange the old, the cords can be withdrawn and re-inserted. To facilitate re-arrangement, all holes are made at exactly the same height above the lower end of the pamphlet. If, then, all the pamphlets on the fauna of a country, for instance, have been bound together temporarily, and it is desired to rearrange them by zoölogical groups with the groups of other faunas, no difficulty in regard to the binding arises from the interchange. These holes are made, for octavos, at 2.5, 7.5, 16, and 21 cm. from the lower edge of the pamphlet; for duodecimos, at 2.5, 7.5, 11, and 16 cm.; for quartos, at 2.5, 7.5, 21, and 26 cm., etc.; so that pamphlets of any two or more