Perihelion Time = Sept. 17·2228200 Greenwich Mean Time.

$$\left. \begin{array}{rl} \Omega = & 346 \quad 1 \quad 7\cdot91 \\ \pi - \Omega = & 69 \; 36 \; 12\cdot79 \\ i = & 141 \; 59 \; 52\cdot16 \\ \phi = & 89 \quad 7 \; 42\cdot70 \\ \log a = & 1\cdot9331366 \\ \log q = & 7\cdot8904739 \end{array} \right\} 1882\cdot0$$

period = 793·689 years

$\delta\lambda \cos\beta = -0''\cdot06 \quad \delta\beta = +0''\cdot01$

$x = r\,[9\cdot9951411]\sin(170\;42\;12''\cdot72 + v)$
$y = r\,[9\cdot9877234]\sin(262\;46\;57\cdot39 + v)$
$z = r\,[9\cdot4435130]\sin(\;49\;20\;25\cdot11 + v)$

The observations as given were afterwards corrected for parallax by means of elements previously computed. These elements bear a considerable resemblance to Comet I., B.C. 371; and it may possibly be its third return, a very brilliant comet having been seen in full daylight A.D. 363.   E. FRISBY,
Washington, Dec. 19, 1882   Prof. Math., U.S.N.

THE DUMAS MEDAL

WE recently (vol. xxvii. p. 174) gave the addresses at the Paris Academy of Sciences in connection with the presentation to M. Dumas of a medal in com-

memoration of the fiftieth anniversary of his election to the Academy. We are now able, by the courtesy of our French contemporary, *La Nature*, to reproduce an illustration of this medal, which was presented by M. Jamin in words both eloquent and touching, as a token of the "love and gratitude" of the distinguished chemists' *confrères*, pupils, and friends. The medal is the work of M. Alphée Dubois.

PROFESSOR VON GRAFF'S MONOGRAPH ON THE TURBELLARIANS[1]

THIS splendid folio monograph consists of two volumes, the one comprising the text of over 600 pages illustrated by woodcuts, the other twenty as beautifully executed partially coloured plates as have ever been turned out, all from the author's own original drawings. The publication of the work has been assisted by a grant from the Berlin Royal Academy of Sciences.

Ludwig von Graff is Professor of Zoology at the College of Forestry at Aschaffenburg, in Bavaria. His first memoir on Turbellarians was published in 1873, at which time he first made up his mind to work out from his own observation a revision of the Turbellarians. The present monograph is, as he tells us in the preface, the result of almost incessant work during the last five years. He has made numerous journeys to the Naples and Triest stations, and has also visited many other parts of the European coasts north and south, and the fresh waters in all directions, in order to pursue his investigations on living Turbellarians. He has thus been able himself to examine 70 out of the 168 species of Rhabdocœlida which are known with certainty. The work being thus founded on so wide a personal acquaintance with the forms of which it deals, is of especial weight and value; it constitutes a systematic monograph of the Rhabdocœlida, founded on a sound basis of anatomical structure, and embracing all species hitherto described by other observers, together with those discovered by the author himself (thirty new species).

It is doubtful whether the present work will be followed by a second part embracing in a similar manner all the known Dendrocœlida. The matter depends on the amount of ground which may be covered by Dr. A. Lang's forthcoming monograph on Turbellarians, in the "Fauna and Flora of the Gulf of Naples." If this monograph proves to be so comprehensive that a further one would be superfluous, then Prof. Graff will publish a quantity of material collected by him concerning the Dendrocælida, in three smaller memoirs on the Polyclada, the Triclada, and embryology respectively. The present work is appropriately dedicated to the memory of O. F. Müller and Sir John Dalyell. It is pleasing to find the great merits of the latter thus recognised by a foreign naturalist.

The author does not admit Sidonia = *Rhodope varanii*, which, in opposition to Dr. R. Bergh, he considers to be a nudibranch, or Dinophilus, which has lately been shown to lie near the Archiannelids amongst the Turbellarians; and in the definition he gives of the group excepts the Microstomida, which differ from all other Turbellaria in having a complete pericsophageal nerve ring, in being diœcious, and in multiplying asexually by budding.

Separating, as is now so usual, the Nemertines altogether from the Turbellarians, he divides the group into the Rhabdocælida and Dendrocælida. In the definition given of the two sub-orders, an interesting point of difference is brought out, namely, that in the former the yelk glands are always present in the form of a pair of compact glands, whereas in the latter they are always divided up into numerous separate follicles.

The Rhabdocælida are divided by the author into three groups : I. Accœla ; II. Rhabdocœla ; III. Alloiocœla, which are thus defined :—

[1] "Monographie der Turbellarien." 1. Rhabdocœlida. Dr. Ludwig von Graff. (Leipzig : W. Engelmann, 1882.)