SCIENCE. 449

SCIENCE:

A WEEKLY RECORD OF SCIENTIFIC PROGRESS.

JOHN MICHELS, Editor.

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SATURDAY, SEPTEMBER 24, 1881.

ENCKE'S COMET.

This comet is now visible in telescopes of moderate power, and will increase in brightness until November, when it may be visible to the naked eye. The corrections to the ephemeris, computed by Dr. Backlund, of the Pulkowa Observatory, are as follows:

$$\Delta a = -39^{\circ}.0 : \Delta \delta = -1'.4$$

These corrections may vary a little as the comet approaches the earth, but it can be found without trouble. If we consider the great care and labor that have been given to the calculation of the ephemeris; and the fact that the perturbations by nearly all the principal planets have been computed, as well as the effect of the resisting medium in space, the corrections to the ephemeris seem to be very large. This comet affords another example of what is now most needed in Astronomy, viz., complete and careful theoretical investigations. It will be comparatively easy to obtain a great number of observations of this comet during its present return, while a much smaller number of good observations is sufficient. The attention of astronomers should be given rather to a satisfactory determination of the motion of the comet, since the recent computers of its orbit do not have the success of Encke in predicting its returns.

THE WARNER-ASTRONOMICAL PRIZES.

We recently explained, in an editorial, the conditions on which Mr. H. H. Warner consents to present to each of the discoverers of comets during the year 1881, the sum of two hundred dollars. We also stated that applicants for the prize for Comet b, 1881, were presenting their claims at the rate of sixty per diem

We now learn by a communication from Mr. C. S. Whittemore, secretary to the Rochester Astronomical

Society, that nearly 3000 letters were received claiming priority in the discovery of this comet, all of which have been examined. As a result of such examination, Professor Lewis Swift reports that "no conclusion can be reached that would be scientific and satisfactory." In other words, the claims of the 3000 applicants are ignored, and the prize of \$200 for this, the most important of the three comets, so far discovered in 1881, is withdrawn.

We cannot refrain from expressing our dissatisfaction with this decision, and the methods employed in arriving at it, which we believe to be neither "scientific nor satisfactory."

Mr. Warner, in a letter to the public dated Septem ber 5th, states, that two of the conditions on which he consented to give a prize of \$200 to the discoverer of every comet appearing in 1881, were as follows: That it should be "telescopic" and "unexpected." He now claims that "Comet b was neither telescopic nor unexpected." Under these circumstances if Mr. Warner had simply announced that Comet b did not come within the meaning of his advertised prize, his course would have been intelligible and satisfactory. But he himself has stated, that in spite of these disqualifying circumstances, he "was anxious, could the first discoverer be found, to make a special reward of \$200." In other words, a decision was arrived at to waive the disqualifications, and to proceed as if they did not exist, and the same letter admits that Professor Lewis Swift "examined" the 3000 applications on their merits. Such being the case, when Professor Swift found that he was unable to arrive at a "scientific and satisfactory conclusion," he should (under the terms of the contract between Mr. Warner and the public), have instantly referred the matter to Professor Asaph Hall, of Washington, and the other gentleman named as referee.

Under these circumstances we consider that Mr. Warner is under the moral obligation of carrying out his contract in regard to this matter, and insisting on Professor Swift taking the proper steps to arrive at some decision. Probably the mere perusal of the 3000 letters would instantly reduce the number to some half dozen applicants, whose cases could be submitted to Professor Hall, who would probably decide upon their merits within a week.

The second point in Mr. Warner's letter to which we would draw attention, is that in which he states, that to mitigate his disappointment in not being able to trace the "first discoverer" of Comet b, he proposes as a balm to the claimants, and to encourage astronomical study, to offer a prize of \$200 to the person who shall prepare the best essay on "Comets: Their Composition, Purpose and Effect upon the Earth."