

world, and that idealism is indifferent to all this love of merely fantastic and romantic mystery. It regards the world as through and through rational, and for that very reason it does not suppose phenomena to be more divine, merely because of the accident that we cannot explain them by any general rules of experience. It insists, that if we could produce new life of any order, high or low, as easily as we can strike a light, life would be no more and no less a manifestation of the divine reason than it now is. And this idealism needs no subtle 'astral fluids' to convince it that there are spiritual realities. The true nature of a cow is not more manifest in skimmed and watered milk than it is in the rich new milk; and this trust in 'subtle media' is merely a demand that we shall believe only the skimmed milk of nature to be a genuine expression of the divine life. If all the matter in nature were for our senses composed of indivisible particles as big as paving-stones, and if every heap of these paving-stones, however and whenever made, behaved just like a rational being, and wrote philosophic lectures, the spiritual nature of reality would be just as manifest as it now is, and philosophic materialism would be just as absurd. Hence Professor Cones does what this second form of idealism regards as something worse than wasted labor. He not only talks confusedly about his unintelligible biogen, but he helps to disseminate the impression that a belief in a spiritual truth in the world depends upon a faith in the existence of some fluid so thin that you cannot say any thing definite about it. All this is rank paganism; for it is analogous to the views of those peoples whose gods are conceived after the fashion of smoke.

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REPORT OF THE OBSERVATORY AT HERÉNY, HUNGARY.

Publikationen des astrophysikalischen observatoriums zu Herény in Ungarn. Herausgegeben von EUGEN VON GOTHARD. Heft i. Herény, 1884. 104 p., 6 pl. 4°.

THE astro-physical observatory of Herény has recently issued its first volume of publications, prefaced by the director, von Gothard, with a graceful tribute to his friend, the well-known Dr. von Konkoly.

The observatory is situated on the estate of Herény, near Steinamanger, in the western part of Hungary. The main building was finished in 1881, and is of two stories, with a

tower for the equatorial at one corner: a smaller building receives the transit instrument. The rooms are all admirably planned and arranged to promote the comfort and efficiency of the observers. In the upper story we find an office, a room for the director, and a large, well-appointed physical laboratory. On the ground-floor there are, besides two smaller rooms, a chemical laboratory fitted with many conveniences, and a workshop. The workshop, a feature in which most of our observatories are deficient, is supplied with tools intended not only for making minor repairs, but for constructing many valuable pieces of apparatus; and what is even more valuable, as it is unusual, the director and his assistants appear to be skilful mechanics.

The principal instrument of the observatory is a Newtonian reflector by Browning, of ten and one-fourth inches aperture, which is provided with a very complete outfit of photographic and spectroscopic accessories. A little portable transit of about an inch aperture, the object-glass of which is by Fraunhofer, and the mounting by Reichenbach, is used for determining time. There are two astronomical clocks by Freitag, a set of meteorological instruments, and a large collection of subsidiary physical apparatus. The library, though still small, is steadily increasing.

The director of the observatory, Eugen von Gothard, is assisted by his brothers, Alexander and Stefan von Gothard, and by Josef Molnar. The observations in the present volume are, for the most part, upon the spectra of the fixed stars. In 1881 and 1882 the spectra and colors of nearly three hundred fixed stars were examined, and the stars classified according to Vogel's types. Spectroscopic observations, and observations of a generally descriptive nature, were also made of Wells's comet, the great comet of 1882, and Barnard's comet. This, together with observations for time, and the care of the clocks, has been the director's work. Alexander von Gothard contributes the physical observations upon Jupiter and Mars, accompanied by twenty-four well-executed sketches. Miscellaneous observations include observations of the solar eclipse of May 16, 1882, and the August meteors of that year. Satisfactory observations of the transit of Venus were not obtained on account of unfavorable weather.

In the typography of the volume, and in the care and neatness with which the plates are prepared and bound, the young observatory will compare favorably with many older institutions.