

what miscellaneous assemblies may perhaps fully justify. But whatever may be the effects of this absence of the predominating element of youthful aspirants for honors in the field of Scientific adventure, the assembly of so many of the most distinguished representatives of American Scientific Veterans, was a peculiarly acceptable feature to those who were allured from other countries, by the echo of their fame. Nor must it be overlooked that in whatever other respects the popular element may work, it is scarcely possible for a warmer or more hospitable welcome to be offered any where, than that which the citizens of Albany, and the Official representatives of the State of New York, tendered to the assembled Congress of American Science, and to the visitors attracted by the justly earned reputation of its members.

The great feature of interest at this meeting was the inauguration of the Dudley Astronomical Observatory. This observatory has been founded by the liberality of some citizens of Albany, among whom Mrs. Dudley, whose name it bears, has not only contributed upwards of \$25,000 for the building and instruments but has announced a further donation of \$50,000 towards its permanent endowment. The Hon. Edward Everett delivered a splendid oration on the occasion, in the presence of the Association, the dignitaries of the State, and the citizens of Albany, the venerable foundress herself occupying the seat of honour. The observatory is built in a solid and massive style, and finely situated on the brow of a hill; its erection was superintended by a committee of eminent astronomers, and the construction of the instruments was entrusted to Dr. GOULD, who has accepted the appointment of Director. At a meeting in Section, Dr. GOULD described in detail the new instruments. The minor instruments have been received, and the Observatory has been fitted up with these and others lent by Prof. BACHE from the Coast Survey, but the reception of the larger instruments will be delayed for a few weeks longer. The Transit circle, combining in one the Transit telescope and meridian circle, was ordered from PISTOR and MARTIUS, the celebrated manufacturers of Berlin, by whom the new instrument at Ann Arbor was made. A number of improvements have been introduced in the Albany instruments, not perhaps all absolutely new, but an eclectic combination of late adaptations with new improvements. Dr. GOULD made a distinction of modern astronomical instruments into two classes, the English and the German. The English is the massive type; the German, light and airy. The English instrument is the instrument of the engineer; the German, the instrument of the artist. In ordering the instruments for the Albany Observatory, the Doctor had endeavoured to combine the two, with, however, a preference to the German type. The circle is three feet in diameter, graduated to intervals of two minutes, and read by micrometers to tenths of seconds. The microscopes are four in number, and are not carried by moveable frames, but are imbedded in the piers. The piers themselves completely surround the circle so as to eliminate the effect of changes of temperature by radiation. The tube of the telescope is eight feet in length, and the object glass is eight inches clear aperture. The glass was made by Chance, of Birmingham, and ground by Pistor himself. The eye-piece, in addition to the diaphragm, is furnished with two micrometers, one for vertical, the other for horizontal motion, the use of these being for the circumpolar stars, whose motion is too slow for registration by the Chronographic method. One principle has been adhered to in the whole of the instrumental arrangements, namely: that every error is capable of being determined in two independent ways.