

Much trouble was experienced in securing a good casting for the steel axis of the instrument. Three were found imperfect under the lathe, and the fourth was chosen, but even then, the pivots were made in separate pieces, which were set in very deeply, and welded.

Dr. GOULD said he would have preferred a smaller instrument, in which the facilities of manipulation would have been greater, but was hampered by one proviso, upon which the Trustees of the institution insisted—that this should be the biggest instrument of its kind, and the instruction was obeyed. He had been requested by the gentlemen who had this enterprise in charge, to suggest, as a mark of respect to a gentleman of Albany, who was a munificent patron of Science, that this instrument be known as the Olcott Meridian Circle. The other large instrument for the Observatory, the Heliameter, has been entrusted to an American artist, but is not yet completed. It was also announced that the American Astronomical Journal, hitherto supported at Dr. GOULD'S own expense, was in future to be published at Albany, under Dr. GOULD'S editorship, the responsibility of its cost having been assumed by a number of gentlemen of that City.

Among the Astronomical papers read before the Association was one by Dr. PETERS on a *Periodical Comet of thirteen years*. This Comet was discovered by Dr. PETERS, at Naples, in 1846. He has prepared an ephemeris of the Comet from 1857 to 1860. The comet was very difficult to observe; its light was so faint in 1846 that he could not perceive it until he had reposed his eye for some seconds in darkness. Even under these circumstances he had only seen it at intervals during a period of twenty days. He had devoted some time to calculating where the comet might be looked for on its re appearance, and had drawn lines on a map, from eight days to eight days, so that the observer would be saved much of the labor of sweeping, and the comet could readily be discovered. The probable orbit gives an ellipse of thirteen years, with a probable error of one year, so that its period might be twelve or fourteen years. In 1854, Saturn came into nearly the same position as this comet, and some uncertainty exists as to its distance, it having been difficult to ascertain whether it was nearer the interior or the exterior of that planet. Unless some accident had happened, the comet might be looked for either fifty-six days before or fifty-six days after the 15th of March, 1859. This enquiry had become of more importance since two comets pronounced periodic, those of de Vico and Brünnow, had failed to re-appear. Dr. PETERS remarked that the discovery of comets has decreased. Last year, not more than one or two were discovered. He thought this falling-off is owing partly to the fact that the award of a comet medal has been abandoned by the King of Denmark. For many years, the discoverer of any telescopic comet received a comet-medal from the King, but in 1848 the custom was abolished, and the zeal for discovery has since declined. He hoped the institution of the comet-medal would be renewed here.

Dr. GOULD observed that it was not a little curious that since the establishment of the Observatory at Pultowa the realm of Denmark had contributed 200 per cent. more to the progress of astronomical science, in proportion to its population, than any other country. The comet medal, whose institution was suggested by Schumacher, continued to be awarded for fifteen years, during which period the discoveries of comets averaged five to seven per annum, and the average discover-