

as 300. As Lohrman had done before them, they followed Schroeter's system of describing by numbers the relative brightness of objects they observed. Their scale, since in common use, runs from zero for shadows to 10 degrees for the brightest lights.

Beer and Mædler's great work enjoys the reputation of being a model scientific monograph. Without trace of vanity or egotism, the workman in it is lost in his work. One of them, not content with his protracted labor on a difficult portion of the moon's disk, adds: *Que potui feci, faciant meliora potentes*. Involuntary one bows in respect to these plodding, sincere workers, as they say in conclusion: "The time and strength our labors have taken, make us aware this "is the chief work of our lives, but our toil will be rewarded if it "meet the expectations of the scientific world." Beer was a German banker, brother of Meyerbeer, the musical composer.

Schmidt, of Athens, for many years held a chief place of honor among observers of lunar phenomena. He made more than a thousand original drawings for a lunar map 75 in. in diameter. His map was completed more than thirty years ago, though publication was delayed from the question of cost.

In 1864, the British Association appointed a "Moon Committee," of which Mr. Birt was secretary. They decided to map the lunar surface on a scale of 100 in. to the moon's disk, and to use for that purpose a telescope magnifying 1000 times. It was decided to use preliminary sketch maps double the size of the map to be finally engraved. Some of the sketch maps were issued, but I am not aware that the finished map has ever been published.

Among English writers on lunar subjects, Nasmyth, the celebrated engineer who invented the steam hammer, is entitled to a high place. His book, "The Moon considered as a planet, a world, and a satellite," was issued in conjunction with Mr. Carpenter, and has run through several editions. It is much prized for its chapters concerning the physical condition of the moon, and for its exquisite drawings of lunar craters, mountains and plains. Nasmyth's exceptional skill in drawing never shone to more advantage than in his illustrations of lunar scenery. In his most interesting biography, Nasmyth describes his method of obtaining these illustrations. He first made, directly at the telescope, careful drawings of the part of the moon's disk selected for description. Full notes were taken with the