

courage the Society to instruct and aid the non-professional members. He wrote: "The difficulty...that I, as a novice, first encountered in astronomy was that, after understanding the general outlines of its descriptive department, I was at a loss where to begin or what to do in the way of observation." He proceeded to make some suggestions for other amateurs: choose a specific goal to pursue, and be sure to "make notes at once of what you observe, with all the details possible. Trust nothing to your memory... Remember that celestial phenomena occur but once, and you may happen to be the only person to have observed that one." Photography offered another way in which amateurs could make useful contributions. And with all this, he counseled patience: "Do not expect to discover a planet or a comet the second night you observe." This is still good advice today!

Chapter 6:

Challenges and Difficulties

The year 1893 saw the creation of a second A.S.P. Section, in Mexico City. Much of the impetus for this probably came from Molera, who visited there early in the year. He was impressed with the facilities of the National Astronomical Observatory at Tacubaya, and praised the expertise of its seven staff members. He felt that Mexican members would benefit greatly by the frequent meetings which would ensue as a result of their organization into a Section, and also by the receipt of the *P.A.S.P.*, although they "are printed in a language foreign to their vernacular." He concluded that "The Mexican Section of our Society is ... in good hands, and its success is assured."

But despite his confidence, the existence of Sections seems to have been an idea that did not prove effective. By 1905 the *Publications* stopped listing the Chicago and Mexican Sections, as they had done up until that time, presumably because they were no longer active.

During the 1890's the *Publications* appeared bi-monthly, as they continued to do until 1983, when they became monthly. In 1894 Holden added a "Planetary Phenomena" column, primarily for the benefit of the amateur members, which was written for thirty years by Malcolm McNeill. McNeill, a professor of astronomy and mathematics at Lake Forest, Illinois, had been writing such a column for *Popular Science News*, and Holden inquired if he would be interested in doing a



Malcolm McNeill in 1897. McNeill, a professor of astronomy at Lake Forest, wrote the popular-level "Planetary Phenomena" in the *Publications* of the A.S.P. from the column's inception in 1894 until his death in 1923. (Photograph courtesy of the Mary Lea Shane Archives of Lick Observatory.)

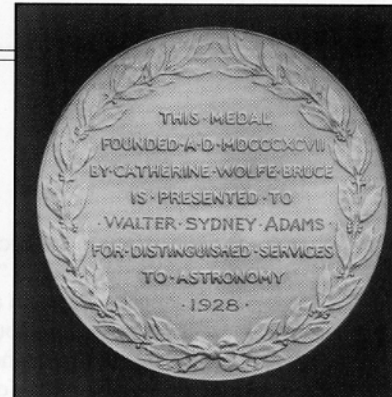
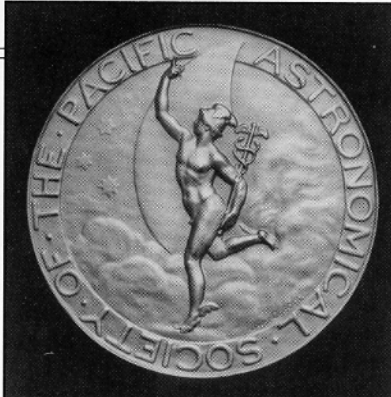
similar one for the *P.A.S.P.* McNeill replied, "I shall be delighted to do so... I should think that something a little more extended, and not so absolutely elementary, might be better suited to the needs of anyone who takes enough interest in Astronomy to read the A.S.P. publications."

McNeill continued to write this column until his death in 1923; it was then produced by Carlos S. Mundt and Hamilton M. Jeffers, and replaced in 1928 by a more general column entitled "Aspect of the Heavens". This column then ran in every issue of the *P.A.S.P.* through 1960, with various authors, especially C. H. Cleminshaw of the Griffith Planetarium in Los Angeles. In 1961 it was replaced by a summary for the year, published in the small format of the A.S.P. *Leaflets* (which had begun in 1925), called "The Heavens in 1961". This continued to appear each year through 1971, when the *Leaflets* were discontinued and replaced by *Mercury* magazine. Today, A.S.P. members get their sky information from the *Sky Calendars* produced by the Abrams Planetarium in Michigan.

By 1894 the Society was having financial difficulties, in company with the rest of the nation. In April Burckhalter wrote to Holden: "There is an absolute famine of news except that business is growing visibly worse — and that is not news. It will have a bad effect upon the A.S.P. It will make the collecting of dues difficult and new members hard to get, but like other sufferers I live in hopes of better times." The cash balance in the Society's general fund was \$378.39; membership dropped from 482 to 433 during the year; the *Publications* were a costly expense (though in that year they received second class mailing privileges).

The Board of Directors approved a proposal to use the Life Membership Fund (which had until then been invested and only the interest used for current expenses). In 1896 the treasurer was authorized to draw up to \$300 from this fund if needed. However, problems continued, so that by 1900 the cash balance was \$35.09, and membership was down to 291. In 1902 things became so bad that individual members had to come to the rescue. Alvord gave \$100 toward current expenses, and Pierson offered to bear the Society's deficit for the year. (At the end of 1902 the cash balance was an astronomical \$2.28.) But finances continued in

The Bruce Medal. Endowed in 1894 by Catherine Wolfe Bruce, it has become one of the most prestigious awards for contributions to astronomy. (Photographs from the A.S.P. archives.)



a precarious state for some years yet, and, as we shall see, financial straits would be a recurrent problem for the Society through its history.

Two bequests helped somewhat. In 1904 Alvord died, and left the A.S.P. \$5000. The year before, John Dolbeer, a member who had done very well in the lumber business, also willed \$5000 to the Society. These bequests were invested, and the income from these helped keep the A.S.P. afloat.

The original bylaws had called for six meetings of the Society per year: three in San Francisco and three at Lick. By 1895 the Lick meetings were becoming fewer, and in some years (for example, 1897 and 1901) there were no meetings there, due to lack of a quorum. The difficulties of the journey up the mountain deterred many members from going. In 1903 the bylaws were changed to specify three meetings in San Francisco and two at Lick; but already this was out of date with current practice, and Lick meetings occurred only sporadically. In 1909 the bylaws were again amended, to an August meeting at Lick and four San Francisco meetings each year. Though Lick meetings were only held in 1911 and 1917 during the next decade, the policy of at least four meetings in San Francisco or nearby continued in force through the 1920's.

At these gatherings some business typically was transacted, such as the election of new members, and then one or more papers were read to the assembled group. Frequently these were illustrated with lantern slides; they usually dealt with some aspect of astronomy being pursued by the professional members. Often these papers were later published in the *P.A.S.P.*, and served to show the fields of active interest — for example, the planet Mars, comets, or some new observing techniques. Occasionally a member would describe a recent trip to a foreign observatory. Presumably discussion followed these talks, as did socializing.

But, more and more, the business of the Society would be conducted through the mails and through the *Publications*. Today, with members scattered in 50 states and over 70 other countries, we take it for granted that only a small fraction of the Society's members can attend any meeting and that the Society's work must be conducted through the postal systems and the electronic mail networks that now connect the research institutions and astronomy enthusiasts of the world.

Chapter 7:

The Bruce Medal

A major event for the A.S.P. occurred in 1897, when Miss Catherine Wolfe Bruce of New York City endowed a gold medal, to be awarded to "that astronomer whose work has most deserved it." Miss Bruce had inherited a fortune from her immigrant father, and was a generous philanthropist to many causes, including astronomy. She previously had made gifts to Holden for Lick Observatory, as well as to other astronomers, such as E. C. Pickering of Harvard and Max Wolf of Germany.

Holden solicited her interest in establishing an A.S.P. medal, which she agreed to do, on the conditions that it should not be restricted to American astronomers, and should be given "for distinguished services to astronomy only when a suitable candidate can be found." The A.S.P. Board of Directors was to select the recipient from a list of one to three nominees presented by the directors of each of six observatories, three American and three foreign. (At first these were Lick, Harvard, Yerkes, Paris, Greenwich, and Berlin).

In announcing this gift to the members, Holden wrote: "...not only will the Bruce Medal tend to the advancement of Astronomy, and enable the Astronomical Society of the Pacific to adequately recognize scientific work of the highest class (and these are Miss Bruce's only desires), but it will forever connect the name of the founder with the progressive advances of Astronomy... The time will soon come when the Bruce Medal will be one of the most highly prized recognitions of original and useful service to Astronomical Science."

The first Bruce Medal was awarded in 1898 to the dean of American astronomers (and Edward Holden's mentor) Simon Newcomb. Since then it has been given a total of eighty-two times (as of 1989), and has indeed long been regarded as one of the highest honors in the field of astronomy. Miss Bruce died in 1900, and the *P.A.S.P.* noted her passing by quoting from her