
Chapter 12:

Financial Aid

Throughout its existence a plaintive theme running through the Society's activities has been a scarcity of money. We have already seen the financial problems of the late 1890's and early 1900's. In 1916-1917 the cash balance was again below \$200, but a massive membership drive helped bring it back up. In 1921 there was concern about the printing costs for the *Publications*, and new revenue (that is, new members) was again needed. There was still no change in the \$5 annual dues, however, except to raise the student dues from \$2.50 to \$3.00 in 1929.

In 1932 the Society ran a \$100 deficit, but recovered in 1933 through collecting delinquent dues and cutting down public lectures. In 1935 there was a loss of about \$2,000 in the operating accounts; this was partly an accounting matter, but also partly from stock losses. A bequest from Arthur L. Black of \$2,775 in 1936 was set up as a special fund, the interest from which could be used for ongoing expenses. But in 1949 the same refrain was heard from the Board: a need to reduce costs or add members.

One financial palliative taken by the Board in 1950 was to institute page charges for technical material in the *P.A.S.P.* This meant that the author of a technical article (or his/her institution) would be billed a certain amount for each printed page. Such page charges are common in astronomy and physics, and in the other smaller sciences as well; they help to cover the costs of producing technical journals which have a fairly small circulation and no advertising, and thus prevent subscription costs from becoming unreasonably high.

The institution of page charges must be seen in the context of the broader changes that were affecting both the field of astronomy and the Society. By the 1950's, changes in the practice and instrumentation of astronomy led the *P.A.S.P.* to become an increasingly professional journal. Although it still carried columns like "Aspects of the Heavens" and "General Notes" (which included information about amateur astronomy groups), more and more of its articles were accessible only to professional astronomers. The rapid advances in astronomy after World War II resulted in a growing flood of technical papers.

Radio astronomy had blossomed from the advances in military technology needed for the development of radar equipment. In the postwar decade, radio telescopes detected the radiation from cold neutral hydrogen atoms in space, paving the way for a much clearer understanding of the raw material of the uni-

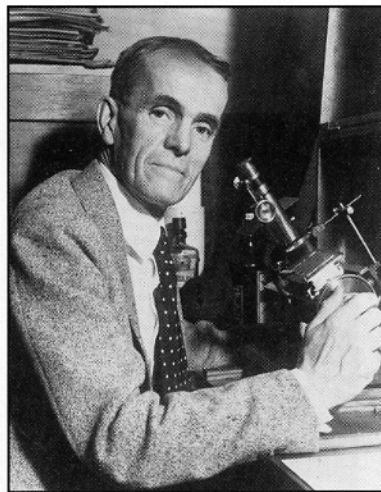
verse and the formation of stars from it. In addition, radio waves were detected from the Sun, the Crab Nebula and other remnants of exploding stars, from several peculiar galaxies, and even from the planet Jupiter.

Progress in astrophysics was revolutionizing our understanding of the structure of stars and how they evolve. New large telescopes such as the 200-inch on Mount Palomar were peering deeper into the universe and producing new evidence in support of an expanding universe of galaxies. The *P.A.S.P.*'s contents reflected these changes, and the research reports it published were often very detailed and not easily understood by the layperson. This eventually led to the creation of the A.S.P.'s popular journal *Mercury*, and the complete professionalization of the *P.A.S.P.*

In 1951, because the Society was again running a deficit, the A.S.P. dues were finally raised to \$6.50 for active members, \$4 for students, and \$100 for life members. In the 1980's these dues look nostalgically low; but at the time the increases were subjects of great debate among the officers and directors.

It was clearer and clearer to the Society's Board that dues alone could not support the work of the Society, even with a growing membership. Like many other scientific societies around the world, the A.S.P. began to look to private philanthropy as a long term solution to its financial problems.

In 1939, during its fiftieth anniversary year, the Society had received a welcome bequest: Mrs. Alexander F. Morrison left \$25,000 to fund a lectureship in honor of her husband, a life member who had died in 1921. Morrison, born in 1856, had received his law degree in 1881, and practiced law in San Francisco for forty years. He had a wide range of interests, and his private library of 15,000 volumes was given by his wife to the University of California after his death. He had



Walter S. Adams. This noted Mt. Wilson astronomer (no relation to Charles Adams) gave the first Morrison Lecture in 1941. (Photograph courtesy of Mt. Wilson Observatory.)

joined the A.S.P. in 1917, and was in his first term as a director in 1921 when he died. His wife, a life member since 1935, had already been a generous donor to Lick Observatory. (A Morrison donation was also instrumental in endowing a planetarium at the California Academy of Sciences.) Her bequest to the A.S.P. recognized "Mr. Morrison's interest in astronomy and...his desire that a knowledge of this subject should be brought within the reach of all persons."

The income of the fund was to be used to provide an annual series of nontechnical lectures, free to the public, to be given in San Francisco or wherever else (originally within California) the Board might decide. In mid-1940 a committee was appointed to arrange for the first series, which began in January 1941 with a talk in San Francisco by Mount Wilson astronomer Walter S. Adams (no relation to Charles) on "What Lies Between the Stars." This talk was repeated in Pasadena and was printed in the April 1941 issue of the *P.A.S.P.* Other lectures in the first series were given by the noted astronomers Edwin P. Hubble and Robert J. Trumpler. These were well received, and the program has continued to provide lectures by astronomers at colleges, amateur astronomy meetings, astronomy conferences, and teacher workshops over the years.

A major boost to the Society's endowment came in 1954 with the receipt of two sizable bequests. The larger was from the estate of Thomas L. Casey, who had been a member of the A.S.P. since 1916. Born in 1857, he graduated from West Point in 1879, and became a Second Lieutenant in the Corps of Engineers; he worked his way up to Colonel, and served on commissions responsible for many river and harbor improvement projects. But he always had strong interests in the sciences, especially astronomy and entomology. He accompanied Simon Newcomb to the Cape of Good Hope in 1882 to observe the transit of Venus, and also calculated orbits for several binary stars. He retired from active military service in 1912, but continued his scientific pursuits until his death in 1925. In his will he

left a sizable bequest to the A.S.P., to be transferred to the Society upon the death of his wife. Mrs. Casey died in 1951, and the assets (over \$200,000) were transferred in late 1953. This was the largest bequest in the history of the Society and made an enormous difference in its financial situation.

The second bequest came from Louise Ware. Miss Ware had graduated from Vassar College in 1902, and worked for a few years at the Yerkes Observatory before coming in 1906 to the new Mount Wilson Observatory in Pasadena. She worked there as a "computer" (back when astronomical calculations were done by hand or by using adding machines) until her retirement in 1942, measuring the wavelengths of absorption lines in the Sun's spectrum and determining stellar brightness with one of the first microphotometers (very sensitive light-measuring machines) at the Observatory. Upon her death in 1953, she left an amount in excess of \$25,000 to the A.S.P., despite the fact that she seems never to have been a member of the Society.

The Ware and Casey bequests gave the Society much-needed capital. When, in the late 1960's and early 1970's, the Board would begin to plan the expansion of the Society's educational programs, the endowment would give them the resources required. As the Society today plans for its second century, the Board is again looking to private and corporate giving as the key to allowing the A.S.P. to continue and expand the educational programs for which the Society has received so much praise.

Chapter 13:

The Passing of an Era

World War II had its impact on the A.S.P. and on American astronomy in general. The education of many astronomy students was interrupted, and professional astronomers left their observatories for work directly related to the war. Some even lost their lives. In 1942 Arthur B. Wyse, a promising young Lick astronomer and a member of the editorial committee of the Society, who had gone to war as a civilian scientist, was killed in the collision of two blimps off New Jersey. His widow requested copies of his *Leaflets* and *P.A.S.P.* articles for their children. Charles Adams, the Society's secretary, arranged for this, donating some of his own copies and making sure that she received everything free of charge.

Colonel Thomas Lincoln Casey. Col. Casey's will bestowed the largest single grant to the A.S.P. in the Society's history and eventually made possible the growth of its public outreach services. (Photograph from the October 1925 issue of the Publications of the A.S.P.)

