News of Science

AAAS Headquarters

The new AAAS headquarters will be ready for occupancy late this spring. The association will use the first two floors of the building, and the third floor will be shared by several affiliated societies.

The architects, Faulkner, Kingsbury and Stenhouse, have designed the building with unusual attention to thermal controls. Three sides of the structure have two-story aluminum louvers covering the windows. These provide good natural light and at the same time reduce the cost of air conditioning by deflecting the sun's rays.

The louvers are operated by an electric motor and a clock mechanism; the angle of the aluminum panels changes with the movement of the sun. The timing device will probably have to be adjusted about six times a year so that the windows will always be shaded. The louvers have created considerable interest, for, although they have been used





on the West Coast, this is the first time that they have been tried in the Washington area.

All mechanical equipment for the new structure is enclosed in the penthouse for example, the air conditioning and heating units and the elevator shaft.

The two photographs, showing the back corner of the building at 15th and N Streets and the front corner at 15th Street and Massachusetts Avenue, were taken by Kenneth Gilmore of the Washington Daily News.

Radiation in Emission Nebula

The first observation of the absorption of 3.5-meter radiation in an optical emission nebula, NGC6357, was reported in the 28 Jan. issue of *Nature* by B. Y. Mills, A. G. Little, and K. V. Saeritan of the Australian Commonwealth Scientific and Industrial Research Organization. This absorption of radio waves in an emission nebula leads to an estimate of the electron temperature of the nebula that is based almost entirely on radio data.

The authors have come to the conclusion that the electron temperature in the nebula is 6500°K. This is somewhat lower than the 10,000°K that is usually assumed for such nebulae. The value could be even lower if the nebulae are "patchy." A quantitative optical study is suggested.

\$2,657,434 for Medical Schools

Grants amounting to \$2,657,434 were awarded to the nation's 81 medical schools for 1955 by the National Fund for Medical Education. Fifty-eight percent was contributed by corporations, through the fund's Committee of American Industry, and the balance by physicians, through the American Medical Education Foundation.

This is the largest annual award in the fund's history, 22 percent greater than in 1954, and brings to \$9,589,490 the total collected by the fund since 1951, the year in which the first grants were awarded.

Each of the 75 4-year schools received \$15,000 and \$30 for every undergraduate

medical student; each of the 6-year schools received \$7500 and \$30 per student. Added to these grants were the gifts of individual physicians to designated schools.

Fund grants are unrestricted, except for the provision that they cannot be used for building purposes. The money is used by the schools primarily to increase teacher salaries, fill faculty vacancies, and open new courses in areas of recent scientific progress.

Industry's support of medical education has mounted steadily since 1949, when the fund was established. Last year 1532 corporations contributed to the fund, compared with 1129 in 1954.

Size of the Antiproton

The antiproton, newly discovered particle of negative matter [Science 122, 1222 (23 Dec. 1955)], is twice the size scientists expected, according to Owen Chamberlain of the University of California in a report that he delivered at the recent meeting in New York of the American Physical Society. In connection with this finding, Edward Teller, also of the University of California, has predicted the future discovery of two new particles. He says that the undiscovered particles are needed to explain the large effective size of the antiproton.

Chamberlain reported that more examples of the antiproton are now being found, for investigators are learning exactly where to place the emulsions on which the negative particles register as nuclear stars. One star, discovered by Gerson Goldhaber and associates, is especially important. It has eight prongs, with three protons and five pions. One pion decays into a mu meson and an electron. Total visible energy of this star is 1230 Mev, an amount that is in excess of the rest mass of either the proton or antiproton, which is 938 Mev.

This excess energy gives the best evidence yet that the antiproton annihilates either a neutron or a proton. This is demonstrated by the fact that the visible energy exceeds that of one particle. The difference between 1230 Mev and the 1876 Mev of two particles is the energy of neutral particles not visible that emerge from the star.

The Berkeley group is collaborating with Eduardo Amaldi and his coworkers in Rome. The antiproton star reported by Amaldi's group showed a visible energy of 826 mev.

News Briefs

A report on venereal disease that was released jointly by the Association of State and Territorial Health Officers, the American Venereal Disease Association,