nominated by the Universities of Oxford, Cambridge and London; the Royal College of Physicians of London; the Royal College of Surgeons of England and the Society of Apothecaries of London published a report on the medical curriculum which stressed the need for a continuance of the general education of intending medical students of post-school certificate stage, and therefore recommended that "the Licensing Bodies consider the possibility of allowing an encouraging exemption from the first M.B. examination by means of a higher school certificate examination conducted by any recognized examining body in which, in addition to the three principal scientific subjects, a subsidiary non-scientific subject be taken."

The higher school certificate examination is the normal objective of the post-school certificate student in public and secondary schools, and *Nature* points out that if the licensing bodies would recognize for the purpose of exemption from the second examination stated in pre-registration requirements those subjects in which a student has passed a higher school certificate examination, they will impart to the higher school certificate examination a value which has been questioned in the past by intending medical students. The recognition would also lead to greater uniformity in the education of post-school certificate students in the schools and would go a long way towards removing the evil of segregation of intending medical students from the rest of the school.

THE CONTROL OF FOREST FIRES

FOR the past fourteen years the Forest Service has been assimilating weather data that makes it possible for the ranger to determine to a certain extent the hazard of forest fires at all seasons of the year. With this information at hand and a variety of instruments he is able to estimate the probability of fires in his particular patrol and is prepared for emergencies.

According to H. T. Gisborne, senior silviculturist of the Northern Rocky Mountain Forest and Range Experiment Station, the principal factors contributing to forest-fire danger, aside from careless and indifferent human actions, are as follows: The character and volume of common forest fuels; topography, which influences the exposure of fuels and the rate of spread of fires; lightning, the one weather element that causes fire; wind, which often controls the rate of spread of fire, and current moisture content or inflammability of the fuels, which is determined principally by precipitation, temperature, humidity, solar radiation and soil moisture.

Mr. Gisborne states that the first two factors vary little from year to year, but that the third, fourth and fifth factors vary decidedly each season, even from day to day; consequently these three require daily measurement if the development of critical fire danger is to be estimated correctly, the character of each fire season rated accurately and the efficiency of the fire-control organization judged on the basis of fire danger.

Standard meteorological instruments are used in measuring weather factors by all fire-stations. This work is carried out in cooperation with the Weather Bureau. In the measurement of precipitation the standard Weather Bureau gauge, as well as a smaller Forest Service gauge, is used.

In addition to precipitation, humidity, wind and lightning, there are several other weather factors which need careful observation and accurate reporting. Haze, mist and smoke often prevent prompt discovery of fires at distant points from the lookout station. Another is the moisture content of the forest duff—the mat of dead leaves, twigs and other vegetation. The duff hygrometer, an instrument for measuring moisture content in dead vegetation, gives an accurate check on the inflammability of the material. It is possible for the forester to make a complete integration of all information from the various instruments—rain gauge, thermometer, thermograph, psychrometer, hygrothermograph, anemometer, meteorograph and duff hygrometer. From this information he can form an accurate fire-danger chart which has three major uses: (1) As a basis for localizing weather forecasts, (2) as an index of current fire-danger and (3) as a basis of fire-danger comparisons.

Mr. Gisborne points out that the value of these measurements may be offset to a great extent unless there are coordinating fire-protective regulations. In the Rocky Mountain region, such measurements are now the basis for deciding when smoking shall be forbidden within national forests, when all national forest visitors shall be required to register and obtain permits and when certain areas within national forests shall be completely closed to entry. It is desirable also that spring and fall slash burning be regulated on this basis.

THE FOSSIL CYCAD NATIONAL MONUMENT

To the two national monuments left by nature and now protected and preserved as illustrations of ancient plant and animal life, the Dinosaur National Monument of Utah and the Arizona Petrified Forests, has been added a third, the Fossil Cycad National Monument of the Southern Black Hills, of South Dakota, as a result of the work of Professor G. R. Wieland, of Yale University.

This site, in the neighborhood of the "Stratosphere Bowl" and Mount Rushmore, where the great rock carving is being carried on by Gutzon Borglum, was recognized by Professor Wieland some twenty-five years ago. Here in formations 120,000,000 years old