

typical condition has been reproduced in all the above hosts. No one bacterial species is constantly associated with the trouble; and up to the present time we have isolated six types, each of which has caused extensive lesions in susceptible hosts when inoculated from pure cultures. Only during the months of December, January and February has this condition been induced experimentally; before and after this period small lesions develop but rarely damage the trees to any extent.

The souring of trees caused by stagnant soil water is prominent at times during the spring when the trees are starting into leaf. Trees standing in water which is moving through the soil are not damaged, but those subjected to stagnant water suffer in proportion to the damage to the roots. The leaves turn yellow, wilt as though lacking moisture, become brown at the edges and finally die. The affected roots become highly discolored and sour and die, while those not injured remain normal and continue to support the corresponding upper portion of the trees. In these cases a portion of the affected tree remains alive and continues growth. There are all gradations of top effect, and many cases recover if the water is drained off.

Many trees affected with sour sap of either of the above types become also infected with bacterial gummosis, which further complicates the question of the primary etiology of the trouble.

M. C. GOLDSWORTHY  
RALPH E. SMITH

DIVISION OF PLANT PATHOLOGY,  
UNIVERSITY OF CALIFORNIA

## SILVER OR GOLD

As a rule silver tarnishes to a greasy black color. I have found silver articles in the Near East which fail to blacken on weathering, but instead, become coated with a film of golden hue. One would think that the silver had been gold-plated. I investigated this interesting fact and discovered that silver originating in Caucasian deposits was particularly capable of this type of tarnishing. Apparently the small platinum content or the presence of some of the similar rare metals is responsible for this phenomenon.

Antique dress jackets of the Near Easterners, made of beautiful purple velvet and decorated with what seems to be gold braid, are to be found in the bazaars. This gold braid is silver—there is no trace of gold in it. Silver braid was used and in the course of time it tarnished to the gold color. Slightly rubbing it with a jeweler's touchstone reveals the silver beneath the outer film.

Two pieces of old Russian silverware, formerly used by the late czar of Russia, were presented to me. These were highly polished when given me. They are now beginning to exhibit this characteristic tarnish.

Some silver "Alexander the Great" coins which I unearthed in Macedonia fail to show this tarnish. The origin of the silver of these coins is probably Macedonia. Although silver is not found in Macedonia now, we do know that the early Greeks did find it along the banks of the Exidoros.

Perhaps all that glittered on the royal purple robes was not gold but silver!

MAURICE H. BIGELOW

UNIVERSITY OF PITTSBURGH

## REPORTS

### THE AMERICAN MUSEUM OF NATURAL HISTORY

DEFINITE plans to seek, through gifts from the public, \$10,000,000 added endowment for the scientific and educational work of the American Museum of Natural History were adopted on May 5 by the trustees at their sixty-first annual spring meeting. The board confirmed selection of a committee, with President Henry Fairfield Osborn as chairman, to present actively during the balance of the year in the metropolitan area and throughout the country the needs of the institution.

This action followed submission of the annual report of the museum by President Osborn, who emphasized that mounting costs since the war and increasing demands for expansion of the museum's functions had brought about a severe financial stringency. Many important activities, he stated, were at a standstill or below normal, while projects necessary to keep

the museum in its position of leadership in science and public usefulness were in abeyance.

"We are held back internally, while outwardly we are prospering," said President Osborn. "Annual public support of the museum, though increased, continues to fall far short of even the routine needs. Only the heavy emergency contributions by trustees have prevented the discharge of a large number of employees, but the budget thus temporarily balanced covers little more than ordinary maintenance for 1930. It holds no guarantee for succeeding years, and it has not prevented a sharp curtailment of the scientific work which is the very being of the museum and the basis not only of its prestige but of its unique service to the city, the state, the nation and the world at large.

"If the museum, which has become the particular pride of the people of metropolitan New York and virtually a household word all over the globe, is to continue its brilliant record of achievement, thus far