

MYCOLOGY

**Scientific Body Thrives
With Dues Paid in Fungi**

DUES payable in fungi, not cash. That is the unique fiscal policy of a science society with headquarters on the campus of the University of California. It is the California Mycological Society, devoted to the special study of mushrooms, puffballs, earthstars and other kinds of fungi.

The prospectus of the society states: "You are invited to become a member of this society. The only requirements are that you will endeavor to forward five or more species with notes per year . . . There are no dues."

The secretary of the society-without-dues is Miss Elizabeth E. Morse, whose office is in the Life Sciences Building.

From the large number of specimens collected in this and other ways, Miss Morse has recently segregated out an entirely new genus of puffball, a curious plant with its tough outer skin sculptured into markings more or less suggestive of those on a turtle's shell. She has given her new fungus the name *Calbovista subsculpta*.

Science News Letter, June 8, 1935

ARCHAEOLOGY

**Fake Manuscripts Being
Marketed to Scientists**

DECLARING that the recently discovered Gomesta Manuscript, hailed as a Rosetta Stone for the Maya hieroglyphics, is a hoax, Frans Blom of Tulane University warns scientists that attempts are being made to market several faked documents in Mexico and Guatemala.

The Gomesta Manuscript, which offers a Spanish translation of Maya hieroglyphs by R. Gomesta, a Spaniard of Conquest days in Mexico, and which Mr. Blom believes not old at all but a fabrication perpetrated by an unknown person about 1900, was published several months ago by the Maya Society. Dr. William Gates of the Johns Hopkins University prepared the manuscript for publication and compared it to the famous Rosetta Stone which unlocked the mystery of Egypt's hieroglyphics.

In a manuscript report which Mr. Blom has written for "Maya Research," a quarterly published by the Alma Eagan Hyatt Foundation in New York, he states that the Gomesta Manuscript has been closely studied by Dr. Herman

Beyer, Prof. Alfredo Barrera Vasquez, and himself.

"We find the manufacture of the 'Gomesta Manuscript,' the long heralded 'Rosetta Stone' of Maya characters, was concocted with the aid of Beltran via Pio Perez' Coordination and Brinton's Primer," writes Mr. Blom.

These two books deal with Maya writing and language and were published respectively in 1898 and 1895.

"At least thirty times we can trace the illustrations or parts of them direct to Brinton," Mr. Blom states.

Stressing how welcome a "Rosetta Stone" to Maya hieroglyphic writing would be, Mr. Blom says that "for years, Maya students have turned pages of dusty manuscripts in large and small libraries in hope of finding such a rare document."

Science News Letter, June 8, 1935

ARCHAEOLOGY

**Ruins on Island Give Old
Mayans New Boundary**

DISCOVERY of ruins at a lake in Spanish Honduras pushes the known territory of the early Mayan civilization 80 miles farther east. So Frans Blom of Tulane University reports, as a result of explorations which he made in the season just ended.

Mr. Blom and his party found the ruins, unexpectedly, about 80 miles east of the well known Mayan city of Copan, on Lake Yojoa. In the lake they encountered a small island artificially rebuilt into terraces and mounds in the Mayan style of providing high foundations for structures. On one mound could still be seen stone columns carved with the head of the great Mayan serpent god.

The ruins date probably from about the time when Copan was at its height, said Mr. Blom, that is, in early centuries of the Christian era. At that time there was a flourishing community on the lake shore.

Several other ancient cities, not previously known, were also found.

Plans to return to Honduras, to write the geography of the country, are being made, Mr. Blom stated. No systematic studies of the geography have been made since 1850, and school geography texts written in current years still quote those early researches. The project is expected to take from three to five years, and will make clearer the background on which the early Mayan cities grew up.

Science News Letter, June 8, 1935

IN SCIENCE

CHEMISTRY

**Philippine Seeds Yield
Oil That May Rival Tung****B**AGILUMBANG!

That fireworks-sounding name may be the signal for a new foreign invasion of the American paint and varnish industry, benefited years ago by the coming of the more tersely-titled tung oil from China.

Bagilumbang oil is a product of the Philippines, and the big-seeded fruits that produce it are now being raised on a small experimental scale in Florida. Oil extracted from these Florida seeds was demonstrated by two U. S. Department of Agriculture chemists, Dr. G. S. Jamieson and R. S. McKinney, before the meeting of the American Oil Chemists Society.

The oil, a limpid, light-colored fluid, resembles tung oil in its valuable quick-drying properties. Bagilumbang trees prefer a limestone soil, in contrast to tung oil trees, which cannot abide lime and are grown most successfully in the hopeless-looking sandy soils of northern Florida and the Gulf coast.

Science News Letter, June 8, 1935

AERONAUTICS

**Will Watch Stratosphere
Balloon With Telescope**

AN EYE more used to watching the remoter heavens will be training an eight-inch telescope on the stratosphere balloon Explorer II, if it drifts within 50 miles or less of Des Moines.

Dr. D. W. Morehouse, astronomer, president of Drake University and director of the Des Moines Municipal Observatory, is preparing to take accurate position observations on the big bag, if it floats within sight, just as though it were a comet or other stranger in outer space. In good "seeing weather," his instrument can pick up an object of that size at a range up to 50 miles, if it floats as high as stratosphere balloons are wont to do, says Dr. Morehouse.

Last summer, Dr. Morehouse kept lone and vain vigil, while the stratosphere balloon met mishap over Nebraska.

Science News Letter, June 8, 1935

E FIELDS

PHYSIOLOGY

Hypnotist Can Make Empty Stomach Act as Though Fed

A HYPNOTIST can make an empty stomach believe it has been given a full meal, and the digestive organ acts accordingly.

While it has been known that hypnotists could make their subjects think they were either hungry or well-fed, it has remained for a group of scientists at Wayne University to demonstrate that the feeling is not merely mental but is based on an actual physical change in the state of the stomach following the hypnotic suggestion.

Details of the experiment were reported by Drs. H. L. Frick, R. E. Scantlebury and T. L. Patterson to the American Physiological Society.

Their subject was a 34-year-old man who was hypnotized after he had been fasting for 18 or 20 hours. With special apparatus, including small balloons, for observing the activity of the stomach, the Wayne University investigators timed the normal hunger contraction periods of this man's stomach. Then the hypnotist suggested that the subject had eaten. The hunger contractions were immediately checked, just as they would have been if the subject actually had eaten.

Science News Letter, June 8, 1935

PSYCHIATRY

Find Senility May be Due To Unknown Body Poisons

SENILITY and certain changes of old age may be caused by some unknown poisonous substance in the body.

This suggestion and a new significance for the old expression "second childhood" were presented by Drs. David Rothschild of the Foxborough, Mass., State Hospital and Jacob Kasanin of the Rhode Island State Hospital for Mental Diseases at the meeting of the American Psychiatric Association.

In the light of their studies they suggest a new psychological explanation for "second childhood" as follows:

"The individual as he grows older wants to become younger and younger, and so he over-compensates for it by laps-

ing, not into middle age, but going beyond this and beginning to act like a child."

These new ideas developed through a study the psychiatrists made of a relatively rare ailment called Alzheimer's disease. In their experience, they state, the disorder is by no means uncommon. The disease is characterized by symptoms of progressive mental weakness, something like senile dementia, in which the patient becomes confused, loses his memory and is unable to talk. These changes in Alzheimer's disease, however, start in middle age, much earlier than loss of memory and other signs of mental deterioration due to senility set in.

Along with these clinical symptoms are certain changes of the brain tissue found in both Alzheimer's disease and senile dementia.

The interesting point of the study reported is that Drs. Rothschild and Kasanin found these same changes in two patients suffering from physical disease. One of these patients had heart disease and the other cancer.

This discovery suggested that senility and certain changes of old age may be caused by some unknown poisonous substance in the body.

Science News Letter, June 8, 1935

ARCHAEOLOGY

Soviet Scholars Decipher Dead Language of Mongolia

DECIPHERING 5,000 hieroglyphs of a forgotten language, 900 years old, has been achieved by the Oriental Studies Institute of the Soviet Academy of Science. Working out the pronunciation of the long-forgotten speech, and writing a dictionary are the duties next scheduled.

The dead language, brought to life again, was used by the Tangut State which ran its career in Mongolia between the tenth and thirteenth centuries, until Mongols wiped it out.

With its writing now deciphered, further studies are expected to show what the regime of the Tangut was like, and its social and economic relations. The only collection of its literature in existence belongs to the Soviet Academy and is the source material for the language studies. The collection not only includes poetic works and ancient sayings but twenty volumes of a Statute Book of the Tangut State. It is this governmental work which is expected to be particularly enlightening regarding the forgotten nation.

Science News Letter, June 8, 1935

ASTRONOMY

Nova in Hercules Grows Brighter After Fading Out

THERE is still brilliance in the famous "new star," Nova Herculis, that burst forth last mid-December, even though it has faded to less than naked eye brightness. Harvard College Observatory has found that it is now magnitude 10 although in April it had decreased to magnitude 13. At its best, Nova Herculis was about second magnitude and brighter than many well-known stars.

Science News Letter, June 8, 1935

MENTAL HYGIENE

Medical Course Is Strain On Students' Mental Health

HUMAN tragedies encountered by the young medical student in the course of his training put a severe strain on his mental, as well as his physical health, members of the American Psychiatric Association learned from Drs. Edward A. Strecker, Kenneth E. Appel, Harold D. Palmer, and Francis J. Braceland, of the University of Pennsylvania, and the Pennsylvania Hospital in Philadelphia.

But the development of professional ability serves as a sort of balance wheel to relieve these strains and improve the mental health, these investigators found.

Suffering, sickness, tragedy and death are part of the daily environment in which the young medical student must get his training, the physician pointed out. Birth and death, hopelessness, misery, love and courage, he meets in stark forms. His religion, his ideals, and his standards of right and wrong are constantly being assaulted and tested.

The effect these daily stresses have on the personality and mental health of the individual student was studied by means of a questionnaire which was filled out anonymously by many medical students.

Frank and illuminating were the replies. They told of increased consumption of alcohol, a changed attitude toward women, disturbing palpitations of heart, and even sometimes of atheism.

Neurotic symptoms and instability develop in the majority of students some time during the course of their study, it was found.

As the students developed professional ability, however, these problems were cleared up. Their acquisition of capacity and technique contributed in an important way to their mental health.

Science News Letter, June 8, 1935