

SCIENCE NEWS

THE ERUPTION OF MT. ETNA

Science Service

THE present eruption of Mt. Etna is a purely individual exhibition and not connected with the activities of any other volcano, not even with the eruptions of the near-by Vesuvius and Stromboli. Such is the opinion of Dr. Henry S. Washington, volcanologist at the Geophysical Laboratory of the Carnegie Institution.

Etna erupts with a sort of irregular regularity and it sometimes happens that these eruptions correspond with those of Vesuvius. But Etna is isolated while Vesuvius belongs to a whole group of volcanoes extending along the Alban Hills. The other members of this family are now dead, Vesuvius being the only survivor. The difference in the family relationship of Etna and Vesuvius is shown in the different chemical composition of the lava and gases emitted. Stromboli is another isolated individual, and being in moderate eruption at all times naturally does so simultaneously with Vesuvius and Etna.

Etna is older than the glacial period and has been periodically erupting since that time. A wide, deep valley down the southeastern slopes was formed by some tremendous eruption in prehistoric times. The first prehistoric eruption occurred in 693 B. C., and was referred to by Aristotle and early Greek and Roman historians. Since then eruptions have been known to occur at fairly frequent intervals, although during the Middle Ages few records were kept.

Since the eruption of 1669, which was one of the greatest of record, it is estimated that the volcano has poured out a cubic mile of lava. Some eruptions, notably those of 1169, 1669 and 1693, have caused great loss of life as owing to the great fertility of the disintegrated lava the lower slopes of the volcano are among the most densely populated regions of the earth. Dr. Washington said there was no danger that the lava would reach Taormina, one of the beauty spots of the world, and reported in some dispatches to be threatened. The configuration of the land would save it.

Volcanic activity in the Mediterranean has no relation with present eruptions of Pacific volcanoes or with earthquakes in Persia and other parts of the world. While not much is known about volcanoes it is certain that each draws its stores of lava from near-by, probably not more than ten miles beneath the earth's surface; while earthquakes, although frequently accompanying

volcanic eruptions, occur usually from causes entirely different from those to which eruptions are due.

THE MEETING OF THE AMERICAN
MEDICAL ASSOCIATION AT
SAN FRANCISCO*Science Service*

THAT eighty to ninety per cent. of all cases of illness can be treated successfully by general practitioners, and that ninety per cent. of all patients can be cared for efficiently in their own homes or in physicians' offices without the need of a hospital was the opinion expressed by the council on medical education and hospitals of the American Medical Association in a report to the House of Delegates on June 25. The meeting was the first of the annual convention of the association.

The council further suggested that modern medical knowledge and practice can be furnished to even rural communities if the citizens of such communities will guarantee the physician an income of \$2,500 or more each year for a term of five years. It was stated that the number of hospital beds in the country has greatly increased in recent years, so that there are now about 6,570 hospitals, sanitoriums and homes in the United States. There are also listed 3,294 dispensaries and clinics which care for approximately eight million patients a year.

The average age of medical school graduates is now 26.8 years, owing to the lengthening of the courses of study in most colleges and schools, the council reported. Indications are that the number of medical graduates will be increased during the next five years by about 900 a year, reaching 4,500 in 1925.

A ruling of the federal prohibition authorities preventing a firm of pharmaceutical chemists from securing large quantities of alcohol on the grounds that it did not sell patent or proprietary medicines was called to the attention of the delegates by the bureau of legal medicine and legislation. An effort is being made to find the basis for the action by the prohibition commissioner. Efforts have been made to reduce the tax on physicians under the Harrison anti-narcotic act, and to secure advance notice of narcotic regulations so that they may be discussed before being made effective.

Dr. Olin West, secretary of the association, reported a present membership of 88,519 physicians

out of approximately 150,000 practicing in the United States.

PREVENTIVE MEDICINE

Science Service

PREVENTIVE medicine was the main topic of discussion at the session of the American Medical Association on June 27.

"Health," said Dr. Oscar Dowling, state health officer of Louisiana, "implies right conditions for the growth and development of the child, proper heredity, prenatal care of the mother, recreational direction and ideal environment. In securing these results every part of the body politic bears reciprocal responsibility."

A plea for more efficiency and less spectacular advertising in public health work on the part of volunteer organizations was made by Dr. Frederick D. Stricker, of Portland, Oregon. "There is need for some sort of regulation to prevent 'blue sky' health propaganda," he said in demanding that the public be informed just how the money contributed for public health is expended by volunteer agencies.

Constructive health activities were urged in the public schools by Dr. John Sundwall, of the University of Michigan. "School children should be taught ineradicable health habits," he said, "and should be instilled with a keen appreciation of the fact that maintenance of healthy bodies and their proper development are moral obligations they owe to society and to their country."

Babies catch cold because their parents and friends have colds for them to catch, Dr. W. T. Winholt and Professor E. O. Jordan, of the University of Chicago, told the delegates. They had made a study of babies with and without colds which showed such to be the case. Colds were more dangerous to babies than to grown-ups, as they tended to derange the digestion and other bodily functions.

An appeal to mothers to nurse their babies was made by Dr. M. L. Turner, of Des Moines, Iowa. "Animals nurse their young as they have done for centuries," he declared, "only the genus *Homo* has gone astray." Dr. Turner urged physicians to tell mothers that the good of their babies and the good of the race demanded that they give their infants their natural food which no artificial product could equal.

The case of a 19-year old girl who reverted for one month to a period in her life corresponding to the age of four years was described. She showed for this time nothing but childish traits and lost all memory of recent happenings. Later

she recovered and remained normal for five years. A severe recurrence ending in death followed. An autopsy showed no apparent abnormal condition other than a general inflammation of the membrane covering the brain.

An infection of the human eye by the eggs of the sheep-bot, a common sheep parasite of the southwest, was described by Dr. H. H. Stark, of El Paso, Texas. This is the first case of its kind recorded in the United States. The patient was a 16-year old girl who suffered from inflammation of the eyeball until the offending organisms were removed. An eye infection by the organism known as filaria, common in the tropics, was reported by Dr. J. W. Kimber, of Kansas City, Missouri. This is also very rare in this country, cases occurring commonly only in returned missionaries or others who have lived long in tropical countries.

ITEMS

For the first time an accurate map of the ancient Maya empire that flourished in Central America before the time of Christ has been made by the Carnegie Institution of Washington. A surveying party consisting of Oliver Ricketson, Jr., and W. A. Love, of the Institution's scientific staff, and Jerome O. Kilmartin, of the United States Geological Survey, has just completed three months of exploration in the bush of Guatemala. Equipped with a standard United States Navy wireless receiving set, accurate chronometers, magnetic and other scientific instruments, these scientists accurately located ruins of ancient Maya cities in the department of Petan in that country. Latitude, longitude and altitude were determined and at many places observations were also made to determine the dip and variation of the compass. Itsimte, Tayasal, Ixlu, Tikal, Uolantun, Uaxactun, Nakum, Naranjo, Ucanal, Xmakabaktun and Xultun are the names of some of the cities that were geographically located after having been deserted for centuries and long over-grown by tropical forests. Lack of water hampered the explorations at times, the scientists reported. Archeological research into the past of the great Maya empire will be greatly aided by the topographical work that has just been accomplished, officials of the institution believe, and the observations obtained will reveal new facts about this ancient American civilization.

As a result of the recent rubber depression in the Federated Malay States, extensive experiments are being made in the cultivation of various crops suitable to the development of more diversified farming.