ARCHAEOLOGY

Emperor's Edict on Stone Linked to Holy Sepulchre

Newly Deciphered Orders Protecting Tombs Possibly By Tiberius, Who Ruled at Time of Christ's Crucifixion

NINETEEN hundred years after the death of Christ a public statement by Caesar which may relate to Jesus' tomb has come to light in a museum here, and is provoking eager interest of Biblical scholars.

In fact, the edict may have been issued as the result of discovery of his empty sepulchre. And the pronouncement of Caesar might be considered the beginning of the centuries of proteceion afforded the shrine of Christendom.

Death Penalty

The edict was originally written in Latin, then translated into Greek and carved on the stone. Text of newly revealed stone slab mandate, specially translated for Science Service, reads as follows:

"It is my pleasure, with reference to graves and tombs, that, whoever has made them for veneration of forefathers or children or friends, they remain unchanged forever. And if anyone proves that any person has destroyed or in any other way cast forth the dead, or removed them to other places with evil intent to the injury of the remains, or removed the inscriptions or the stones, for such a person I order a trial, just as though for sacrilege to the gods in the human worship, for it will be much more necessary on the whole to honor the dead. Let no one be permitted to change them. But otherwise I desire that such a one be condemned to capital punishment on the charge of grave-robbery."

The royal statement is inscribed on a stone slab two feet high. The stone was found in Nazareth years ago, but was added quietly to the collection of a Frenchman who kept his archaeological treasures almost fanatically secret, even from the eyes of his fellow collectors. Following his death recently, the stone came to the Cabinet des Medailles here where its historic importance was soon recognized.

The inscription has no date. It is headed simply, "A Mandate of Caesar."

French clerics are divided in opinion as to whether the stone can actually be documentary evidence of official correspondence over the death of Christ.

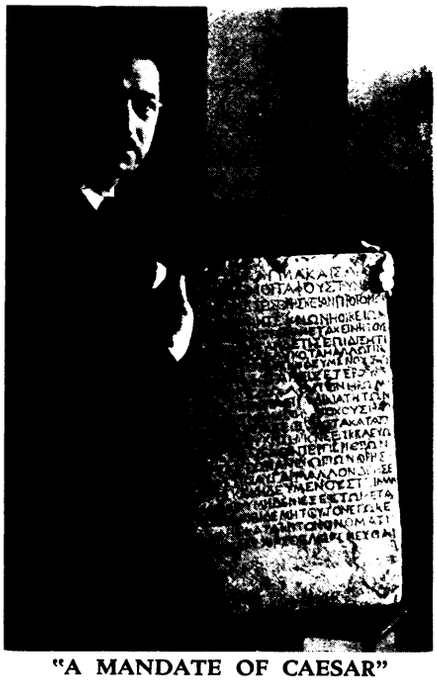
They are practically agreed that the document belongs to the age of Christ, either to the reign of Augustus, who ruled up to 14 A. D., or to the reign of Tiberius, who ruled at the time of Christ's death. The style of Greek lettering on the stone is a clue to its age.

If Tiberius wrote the mandate, says M. Franz Cumont, French Biblical scholar, one is tempted to link this decree with the greatest event that occurred in Palestine during Tiberius' reign. According to the Gospel, when Jesus' tomb was found empty, the priests of the temple had the soldiers say that certain disciples had stolen the body during the night. This accusation gained credit, at least among the Jews themselves.

It is likely, M. Cumont believes, that Pilate noted this accusation against disciples and asked for instructions from Rome. The mandate would be Caesar's reply.

If Tiberius did not write the mandate, the alternate view is that some disturbing incident occurred during Augustus' reign to call forth a statement from Rome. Such an incident occurred when the Samaritans broke into the Temple of the Jews at Jerusalem and scattered human bones there, desecrating the Temple.

This national feud, it is pointed out, might have resulted in a notice from Caesar when hostilities reached such a stage that the dead as well as the living were treated with contempt.



"A MANDATE OF CAESAR"

—held by M. Jean Babelon of the Cabinet des Médailles in Paris which recently acquired the stone for scientific study.

Science News Letter, March 26, 1932

PALEOBOTANY

Venezuela Once Had Forests Like Those of California

RAIN-FORESTS like those that now clothe California hills once stood on the uplands of Venezuela, and woods like those on the Pacific slope of Panama today once stood in the valleys of Oregon and Washington.

This mutual cousinship between the plant communities of now and long ago in North, Central and South America has been traced by an expedition under the auspices of the Carnegie Institution of Washington, led by Dr. Ralph W. Chaney, of the University of California. Dr. Erling Dorf of Princeton University, who accompanied the expedition, has revealed some of its discoveries.

Dr. Dorf summarized the work of the trip as proving a more definite relationship than hitherto thought to exist between the forests of the eocene period in the northern hemisphere and living ones in Central and South America. Discoveries made in the course of the expedition verify the theory that forests which existed in North America 60,000,000 years ago were pushed south as the climate became increasingly cold and dry, prior to the Ice Age.

The temperate rain-forest located in the Venezuelan Andes southeast of Lake Maracaibo was found to bear a close resemblance to primeval forests of western America, while a striking similarity was observed between ancient forests in the states of Washington and Oregon and present day ones on the Pacific slopes of Panama. Specimens of trees native to Central and South America were collected in great profusion.

Departing from Boston on December 22 and returning to San Francisco on March 1, the party pierced in the intervening period the densest jungles of the West Indies and South America.

Science News Letter, March 26, 1932

ENGINEERING-SEISMOLOGY

Giant Blast Felt as Quake By Distant Seismographs

THE BIGGEST SHOT ever fired intentionally—two hundred fifteen tons of dynamite and other high explosives set off in one enormous blast in a limestone quarry near Manistique, Mich.—registered itself as an earthquake on seismograph instruments at points as remote as Buffalo, N. Y., Madison, Wis., and Washington, D. C. Timed at their starting point on an accurate chronograph brought into agreement with radio signals from the U. S. Naval Observatory, the waves were picked up as they swayed the sensitive pendulums of seismographs at several observatories.

The time at Manistique was clocked by E. J. Brown of the U. S. Coast and Geodetic Survey. A steel shelter was erected about 2,000 feet from the charge to house Mr. Brown and his instruments. His timepiece was a break circuit chronometer, which was accurately set by time signal from Washington. The shock was recorded chronographically against the chronometer by means of a pendulum type seismometer placed in the circuit with the chronometer pen. The instant of the explosion as determined visually was manually recorded on the chronometer. The pendulum seismometer indicated the duration of the local shock.

Lasted Ten Seconds

At Buffalo, Rev. John P. Delaney, in charge of the seismograph station at Canisius College, wired Science Service that an earthquake train lasting ten seconds recorded itself on his instruments three minutes and fifty-six seconds after the blast was detonated in Manistique, at two minutes after three p. m., central standard time.

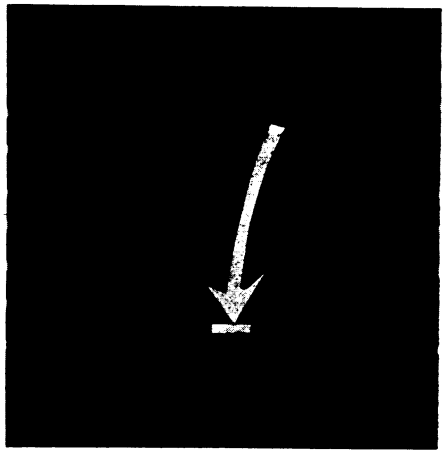
The waves apparently travelled along the surface of the earth's crust. Since Buffalo is approximately 400 miles east of Manistique, this means that the waves moved at a rate of about a hundred miles a minute.

From the seismological station of the University of Wisconsin came the report of a clear record of waves of small amplitude, the first arriving two minutes and three seconds after the firing of the blast. Madison is about 300 miles west of Manistique, so that again the waves are shown to be moving at a high rate, this time approximately two miles a second.

The sensitive vertical Galitzin instrument at Georgetown University, Washington, D. C., recorded the arrival of the first wave five minutes and three seconds after the moment of firing in Manistique. Washington is at a distance of more than 600 miles from the scene of the great explosion, so that the waves either travelled faster along the surface, or else took a short cut through the deeper rocks of the earth to make this record. The Georgetown instruments have, so far as is known at present, set a record for distance in perceiving the effects of an explosion.

Although the detonation was the largest commercial blast in history, larger amounts of explosives have been set off. The destruction of the Lake Denmark, N. J., Navy storage depot in 1926 is recalled by Army and Navy officers. The largest of several blasts there was caused by the destruction of 1,700,000 pounds of T. N. T. Lightning was the cause. Although these explosives were on the surface, a hole forty feet deep was torn in solid rock beneath them.

Far greater effect was achieved by the smaller quantity which was carefully planted at Manistique. A crew of more than fifty men worked ten days to load these explosives in the 5,000 holes and to hook up the wiring that fired the many separate charges at the same time.



SIGNATURE OF THE BLAST

—as it inserted itself into the microseismic "wiggles" on the record of the seismograph at Canisius College, Buffalo, N. Y., shown beneath the short white bar.

The holes were from ten to fifteen feet apart and had an average depth of thirty feet.

Still and motion pictures of the explosion were taken from Army planes for study by the Bureau of Mines.

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ASTRONOMY

Belgian Astronomer Sights New Object in Heavens

A HEAVENLY object hitherto unsighted by astronomers, probably a new comet, was discovered at the Royal Belgian Observatory by Prof. E. Delporte on March 12, observed again in the early morning hours of March 15 by Dr. P. Stroobant and for a third time on March 16, by Prof. M. Muendler, of Heidelberg Observatory. It has since been sighted elsewhere. Notification of the discovery came to America through a report to Dr. Harlow Shapley, director of the Harvard College Observatory, Cambridge, Mass., which acts as the American clearing house for astronomical information.

The "Delporte object" as it is now tentatively called was of ninth magnitude when sighted and therefore could be seen through telescopes of moderate size. It was located at right ascension 12 hours 2 minutes 20.3 seconds and declination north 3 degrees 35 minutes and 15 seconds in the constellation of Virgo, which is now visible in the evening skies near the eastern horizon. No tail was reported.

The Royal Belgian Observatory, where the discovery was made, is located at Uccle, near Brussels, Belgium.

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