

of Palestine, and Transjordan has heretofore been unaffected by Arab uprisings. But when sudden disturbances broke out east of the Jordan in March, British officials held up permission for digging at the Solomon port. For a time, all Prof. Glueck's arrangements for convoys, camps, and supplies seemed likely to end in no expedition at all.

Strife in Palestine has not stopped the digging at the place most closely associated with wars—ancient Armageddon. The Oriental Institute of the University of Chicago has just finished six months work there, though the road from Megiddo—as it is called today—to Jerusalem is traveled only when armored cars lead and follow private automobiles that travel the highway. On the last day of digging, an ivory “protective instrument” belonging to a woman of 1400 B. C. was found.

Before summer is over, Americans may be telling of discoveries in Iran, in Turkey at the site of ancient Van, in Cyprus, Egypt, Bulgaria, to name other regions where archaeological news may break, in the determined search for the forgotten past.

*Science News Letter, July 29, 1939*

The exact tone required for automobile horns is specified in Argentina.

The Chinese 4,000 years ago realized that goiter generally attacked people who lived inland, and they treated it with seaweed and other sea medicines many of which contained the helpful iodine.

## ● Earth Trembles

Information collected by Science Service from seismological observatories and relayed to the Jesuit Seismological Association resulted in the location of the following preliminary epicenter:

*Monday, July 17, 10:26.6 p.m., EST*

In North Pacific Ocean, 300 miles west northwest of Vancouver, B. C. Latitude 49 degrees north. Longitude 130 degrees west.

For stations cooperating with Science Service in reporting earthquakes recorded on their seismographs see SNL, June 17.

## AERONAUTICS

# New Air Route May Link Philippines and East Indies

## Airway Would Have Terminals in Manila and Batavia, Capital of Java; Political Complications Considered

A SERIES of agreements under which a new air route linking the Philippines and the Netherlands East Indies would be operated by Pan American Airways and K.L.M., the Royal Dutch Air Lines, is expected to be successfully negotiated during the next few months.

Terminals of the airway would be Manila and Batavia, prosperous capital of the island of Java. Several alternative routes could be flown. To Pan American, the line would represent a further extension of its transpacific service, which now goes to Hong Kong. To K.L.M., it would be a side branch of their Amsterdam to Australia run, which goes to Sydney, Australia, via Penang and Port Darwin.

Considerable difference of opinion about the wisdom of admitting the Dutch to Manila exists in Federal government circles, but necessary landing rights will be granted, it is understood, with the proviso that an American concern be entitled to operate into the East Indies. Political complications brought about partly by coming Philippine independence are feared by those opposing the grant.

If Pan American and K.L.M., whose full name is Koninklijke Luchtvaart Maatschappij voor Nederland en Koloniën, thus connect, it will be possible to fly around the entire world in American airplanes, as K.L.M. has long used American ships exclusively.

Pan American expansion plans actually under way feature a route from San Francisco to New Zealand via Hono-

lulu. A U. S.-Australia line, which might be an extension of the present transpacific service, has also been discussed by Pan American officials, as has a U. S. operated link between Australia and New Zealand across the Tasman Sea. The proposed Manila-Batavia service could fit into the Australian route as the direct flight passes over a group of colonial islands which would not provide profitable stopping points. Imperial Airways is about to launch New Zealand-Australia service.

The proposed route to Batavia, which might stop over at Saigon, capital of French Indo-China, landing rights at which the French would probably grant upon request, brings up the vision of a round-the-world airline entirely under the American flag. Pan American, whose lines stretch from Hong Kong to Marseilles via the United States, already spans a larger portion of the earth's surface than any other commercial air company.

The agreements necessary before the Manila-Batavia line could become a reality include landing rights for the Dutch at Manila and for an American company at Batavia, and for intermediate points as well. An agreement between Pan American and K.L.M. on operating questions might also be necessary. A Panam official has already stated that needed airplanes and other equipment are available.

*Science News Letter, July 29, 1939*

## PHYSICS

# Molecular Activity Likened To Mountainous Terrain

IF YOU think of chemical molecules as having “populations” of atoms, you can picture chemical reactions between molecules as the interchange of various members of these populations. These interchanges are accomplished over a barrier of electrical force between molecules which can be likened to a mountain range between two valleys in which the atom populations dwell.

Prof. Victor K. LaMer of Columbia

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