

ordering of world affairs will depend upon the international handling of such matters as emigration and others with which the Union deals, and it may be hoped that the Union will prosper under the chairmanship of Sir Charles Close, who has succeeded Dr. Raymond Pearl in that office.

Greek Earthquake of Sept. 27-28

DURING the night of Sept. 27-28, a severe earthquake occurred in the Chalcidice district of Greece. Seven villages were entirely destroyed, more than 3000 houses were ruined, and 141 persons were killed and 403 wounded. In Salonica, several of the public buildings were damaged. From the brief accounts so far received, the epicentre seems to lie between Salonica and Mount Athos. Montessus, in his "Geographie Seismologique" (p. 253), defines three seismic zones in this part of Greece, near the towns of Salonica, Izvoro and Kavala, respectively, the recent earthquake being probably connected with the second of these zones. The shocks were strongly felt in Bulgaria, in the Strumitza valley, in or near which the great earthquakes of April 14 and 18, 1928, occurred, but the epicentres of these earthquakes lay about eighty miles to the north of the area recently disturbed.

West Indian Hurricane Season of 1932

THE West Indian hurricane season of the present year will rank as one of the notable ones, since two storms of the first magnitude have already been reported. The particulars of the more recent of these that have appeared in the *Times* of Sept. 28 indicate a phenomenon of an intensity very much above the average, the speed of the wind being said to have reached 120 miles an hour at times in Puerto Rico on Sept. 27, where at least two hundred people have been killed. The storm is said to have been even more destructive there even than that of Sept. 13, 1928, and to have been the worst in the island's history. An official figure for the maximum speed of the wind will unfortunately not be available owing to the fact that the anemometer on the roof of the Weather Bureau at San Juan was destroyed with the tower on which it was mounted. The particulars given of the track do not indicate anything very abnormal. Many September storms pass to the south of San Domingo, as did the recent storm; they generally move towards west-north-west. In this case, however, the centre passed near the Virgin Islands and was on Sept. 28 apparently moving directly towards Jamaica, which suggests a nearly due westward motion. Such tracks are more common in August than in September and have generally passed close to the north coast of Yucatan to Mexico, without having begun the 'recurve' to a north-eastward movement characteristic of northern tropical hurricanes, which carries so many West Indian storms into the Gulf States.

Cloudburst near Bakersfield, California

A CLOUDBURST is reported to have occurred late in the night of Oct. 1 near Bakersfield, California, and

to have caused water to advance like a tidal wave 40 feet high down a narrow cañon, sweeping away fifteen bridges, destroying railways and overturning locomotives, with considerable loss of life. Bakersfield lies within the American counterpart of the northern Sahara and the subtropical deserts of Arabia and Persia. The disaster must have occurred within or very near to an area with a mean annual rainfall of less than ten inches, which makes it appear at first sight the more remarkable. Cloudbursts are, however, regarded by meteorologists as nothing more than extreme examples of 'instability rainfall' of the thunderstorm type—they are in fact often accompanied by thunder—and their incidence in normally dry regions has therefore nothing very anomalous about it. The disastrous floods at Louth (Lincolnshire) on May 29, 1920, due to an exceptionally severe thunderstorm combined with an unfortunate accidental blockage of the narrow valley down which the water might otherwise have passed with little damage, occurred in one of the driest parts of the British Isles. The extent of the damage is often governed by such accidental circumstances, and it is interesting to note that a fall of rain at Cranwell (Lincolnshire) on July 11 of this year almost exactly equalled the heaviest fall measured in and around Louth on May 29, 1920, and came in a shorter time, without disaster.

Climatic Changes in Central Asia

THE theory that Central Asia, particularly the Tarim basin, furnishes evidence of progressive desiccation during historic times is refuted by Lieut.-Col. R. G. F. Schomberg in a paper on alleged changes of climate in Southern Turkestan in the *Geographical Journal* for August. Lop Nor, he maintains, is not drying up. Its change of level is due to the loss of the Qurug River water. That river changed its course and though its waters reach the lake they do so by a longer course via the Tarim River and so presumably are partly lost on the way. The Qurug is said now to have returned to its old course. Col. Schomberg gives reasons for denying that any of the rivers are drying except where increased cultivation calls for more irrigation water. He lays no value by the so-called evidence of depopulation in a land where the population is always sporadic and insecure. Dust storms, moving sand, and insect pests may easily cause abandonment of peopled sites. He denies that the many dead *toghrags* or desert poplars necessarily imply want of water. Sometimes they are killed by the rapidly growing tamarisk, sometimes by disease and sometimes even by too much water. The paper is full of valuable arguments bearing on this much-debated problem.

New Antarctic Lands

AFTER about a century's neglect the Enderby Land area of Antarctica was revisited in the summer of 1929-30 by Sir Douglas Mawson in the *Discovery*, of the British, Australian and New Zealand Antarctic Research Expedition, known for convenience as B.A.N.Z.A.R.E. The *Discovery* continued her work