

often results in wide differences for any given month on adjacent estates. At some of these gaging stations practically continuous records have been kept for many years; this is especially true of the gages at Christianssted, King Hill, and Frederiksted, where the records cover a period of 72 years (1852 to 1923). The average of these three stations has been tabulated by months for this period (see Table 1) and is accepted as the average for the Island. The Unit of Measure of rainfall used in this report is the "Line" (equal to 1-8 inch), which is the unit in common use on the Island.

36. From Table 1 it is seen that the mean annual rainfall is 368 lines (46 inches) or practically an average of a line a day. It is also seen that there is an annual dry period of 4 consecutive months namely, January to April, and that July and December are also below the average; and that the months of greatest rainfall are September, October and November. These dry months are to be expected to a greater or lesser degree every year, and in a normal year, or even a wet year, the rainfall during the dry period is not sufficient for the needs of crops. This being the case, if water could be stored during the wet months, it would be of very great value even though sufficient water could not be impounded to carry over for use during a cycle of dry years.

37. The annual rainfall as shown by Table 1 is shown graphically on Plate 1. A study of this graph shows that the common belief, that the rainfall is reducing with time, is not borne out by fact, as the average for the last 20 year period is about the same as that of the first 20 years of record. The graph also shows that there are occasional long dry cycles, the most pronounced being as follows: 1858 to 1864; 1871 to 1875; 1910 to 1914; and 1920 to 1923. The last, or present, dry cycle contains the lowest year of record, namely 1922, with only 212 lines of rainfall; the average of this cycle is also lower than that of any of the others; so it may be said that the Island is now passing through the most drought stricken period of its history.

38. The rainfall is also tabulated in this report (see Tables 2, 3 and 4) from gaging stations located within the three catchment basins considered for storage reservoirs, and the monthly means at these points are compared with the means for the Island. By this comparison it is seen that the mean annual rainfall at estate Annaly (Table 2) which is near the west end, and is also in the mountains, is nearly 50% greater than the average for the Island; that at estate River (Table 3) which is at the foothills near the Bethlehem Sugar Factory, and several miles east of Annaly, the rainfall is about 5% greater than for the Island and that of estates Glynn and Windsor (Table 4) which is on the flat lands east of the River station, the rainfall is about

5% less than the average for the Island. See general map of the Island [Plate A] for location of rain gages. This lessening of the rainfall at points farther east is explained by the fact that the storms generally come from the northeast and increase in intensity as they pass over the Island due to the cooling effect of the land.

39. Runoff: Though elaborate records have been kept of the rainfall, there have been practically no measurements made of the runoff on the Island. This being the fact, any irrigation studies made at this time must necessarily be largely speculative. Careful inquiry disclosed but one brief record of runoff, namely, a few months record of the runoff and rainfall at Jolly Hill, kept by a Danish engineer in 1906-07 who was connected with the sugar Company now known as the La Grange Sugar Factory [See Table 6]. From this record the percentage relation of the runoff to the rainfall has been computed for the separate months, and also by combining the months so as to show the percentage runoff for each storm. These data were plotted [see Plate 2] and a curve was then drawn showing in a general way, as near as the brief data would permit, the percentage of runoff that might be expected from any monthly rainfall. From this curve it is seen no runoff may be expected from a monthly rain of 10 lines or less; a 30 line rain will runoff 14%; a 60 line rain, 50%; and 122 lines, 80%, which is the maximum percentage figured.

Sad Accident on Board the U. S. Battleship "Mississippi"

FORTY SIX MEN KILLED AND TWENTY INJURED.

San Pedro, Calif., June 12th. -Forty-six men were killed outright and twenty injured, many severely, today when turret No. 2 on the battleship "Mississippi" blew up while the dreadnought was firing practice on the San Clemente drill grounds off here. Vice Admiral Wley, commanding the battleship division, reported tonight to the Navy Department as follows: "During battle practice, 'Mississippi' at 1 p. m. today the powder bags of two right guns of second turret were ignited. Although not yet fully known, believed there were 43 men and three officers killed. Also there were several men very badly burned. When further details are received they will be forwarded." It is reported the accident was caused by a flareback that carried the charge through the breech of the gun, instead of out through the muzzle. The gun crew were preparing to fire as one unit the great sea fighter's powerful broadside, when a sailor called for the electricity to be turned on for the charge. The switch was thrown on to

ignite the shell before the breech was locked and in another moment the interior of the turret was littered with dead and dying.

TELEGRAMS.

ST. CROIX STATION.

New York, June 11th.—Continued. Liberal offerings brought a further decline of 1 cent in the raw sugar market today, to the basis of 5.02 for Cuban, duty paid. The demand for refined sugar was quieter at former prices, which ranged from 6.30 to 6.65 for fine granulated. Refined futures were nominal.

Bari, Italy, June 11th.—United Press. With the capture of Elbassan, the whole of Albania is now in the hands of the insurgents, according to latest advices. It is confirmed that Zegu has fled to Jugo Slavia.

Honolulu, June 11th.—There were four violent earthquakes in the region near the volcano Kilauea yesterday, at four hour intervals, and the emission of steam, notable for several days, still goes on. The fall of sections of the craters slip into the depth below has ceased again, however.

Winnipeg, June 11th.—Sensational advances in wheat of 4cts. recorded today. Brokers had hard times filling orders. The buying came from all quarters, much of it from the United States export houses and mills. Brokers state they still have heavy orders from the United States to fill.

London, June 11th.—The Evening Standard, owned by Lord Beaverbrook, in an editorial on the gravity of the remarks of Premier MacKenzie King and Mr. Arthur Meighen, Conservative leader in the Canadian House of Commons, early this week, during the debate on the Lausanne Treaty, says: "The difficulties of a common foreign policy for the empire no doubt are enormous, and while we may need to be reminded that the empire is a world power, rather than a European power, the Dominion must also not forget the stern geographical fact that makes the center of the empire virtually interested in the vicissitudes of Europe, which for some generations to come may be the decisive field in the world politics. The business of thinking imperially is in the main a British necessity. We must get out of the habit of insular preoccupation and cease to imagine that our political decisions are limited in their effects to these islands. Otherwise misunderstandings will accumulate and the solution of great imperial problems will become yearly more difficult."

Scarborough Eng., June 11th.—In the Davis Cup matches yesterday Louise Raymond and P. D. B. Spence of South Africa, beat A. A. Godfree and M. Weesnam of England 11-9, 7-5, 6-4.