had hardly died down when Yeats opened a new chapter in his history and closed it with the outbreak of April 1916, which in violence and destructive effect is thought to have surpassed all other outbreaks of that violence, with the exception of those of the years 1914 and 1918. Then, nearer to our own hearts and homes, the tragedy of San Francisco was enacted—the worst in all history, in almost exactly four months by the still greater tragedy of Valparaiso, in Chile. Before the close of 1916—so far which had also touched in its early days the mutilated districts of Oruro in Bolivia, of Maracaibo in Colombia, and of Cartagena in Colombia—of St. Lucia—a great part of the city of Arica lay in ruins. And now, with the beginning of the year 1917, the annual-volcanic registry records the eruptions of Mount Lassen and Etna, the continuing vast flows of lava from the Sinaloan volcanoes in the Samoan Islands, and the appalling disaster which has converted the capital of the island of Java into a mass of debris.

In all these events, we see the earth in the making—a process now, as ever, destructive. While this quarter-century of the population of the globe has been diminished by less than 1,000,000, as does in developmental catastrophe. Possibly the figures should be even larger, for the records are incomplete.

ANGELO HELEDINO.

Philadelphia, January 1917.


That Josiah Willard Gibbs advanced science the world over more than it has ever been given to any other American researcher to do, can hardly be questioned. He published but one separate book, his "Elementary Principles in Chemical Mechanics." (Charles F. Kettering's!), which appeared in the Yale Bicentennial Series in 1900; the year before his death. Another volume in the same series, written by his pupil, Edwin B. Wilson, was based on his lectures. His other printed remains are the papers now collected, which are few but fundamental. They are sub- stantially limited to three, not counting an unusually small, number of supplementary contributions.

The first, relating to diagrams and models representing the effects of temperature and pressure on all sorts of substances, was the beginning of a new chapter in this country. His second work, on the equilibrium of heterogeneous substances, taught chemists how to reason about the final results of reactions (without reference to the processes by which they were reached), and it stands to-day as the best in the field of the corner of theoretical chemistry. The monograph in (which, by the way, was first given the new-and the "phase rule") occupies three hundred pages of the first of these two volumes, a good many more pages being substantially parts of the same whole.

The second volume is essentially occupied with Gibbs's peculiar calculi called "vector analysis," which was designed to super-

THE NATION.


The ascent of Mount Roraima, the ancient Mountains of the Moon, last summer, was described in a lecture delivered at Rome on January 7 by the Duke of the Abruzzi. In little over a month he climbed the eastern highest peak, made a survey of the range, determined latitudes, fixed the waterfalls, and mapped and photographed the whole region. The principal scientific results are that the range consists of six principal groups, 38,500 feet being the altitude of the highest peak. The limit of perpetual snow was about 14,000 feet, and of the lower glacier 12,777. None of the glaciers were of the first order, and they showed signs of retreating.

Finance.

THE BREAK IN THE STOCK MARKET.

About the middle of last December, after having held remarkably strong in the face of extremely tight money, repeated failures in New York bank reserves, and prohibitive rates charged in London for carrying American securities, Stock Exchange prices suddenly began to give way. Since then, the decline has been almost continuous, up to the present writing. During the five-week period, striking declines in the price of important railway stocks have been scored as 20 points in Chicago and Milwaukee, 30 in Boston and Providence, 25 in Detroit, 20 in Portland, 45 in New York, central 20 in Reading, 30 in North Carolina, and 30 in Great Northern. People, learning of such a fall in prices, might easily infer either that a serious disaster had befallen the world of investment, or else that the Stock Exchange was a system in which people traded in a highly advantageous turn in our side of prophecy.

And, in fact, the violent fall in prices last week and at the opening of this week, has put the ground from under the feet of speculators—who had been holding huge lots of stocks with money borrowed.