

CHARACTERISTIC VIEWS IN VALPARAISO, CHILEAN SEAPORT DEVASTATED BY EARTHQUAKE AND FIRE

Valparaiso, capital of the province of Valparaiso, is the principal city on the South American west coast. It is Chile's fortified seaport and has a population of about one hundred and fifty thousand, having grown from six thousand in 1825. It is one of the most progressive cities of South America.

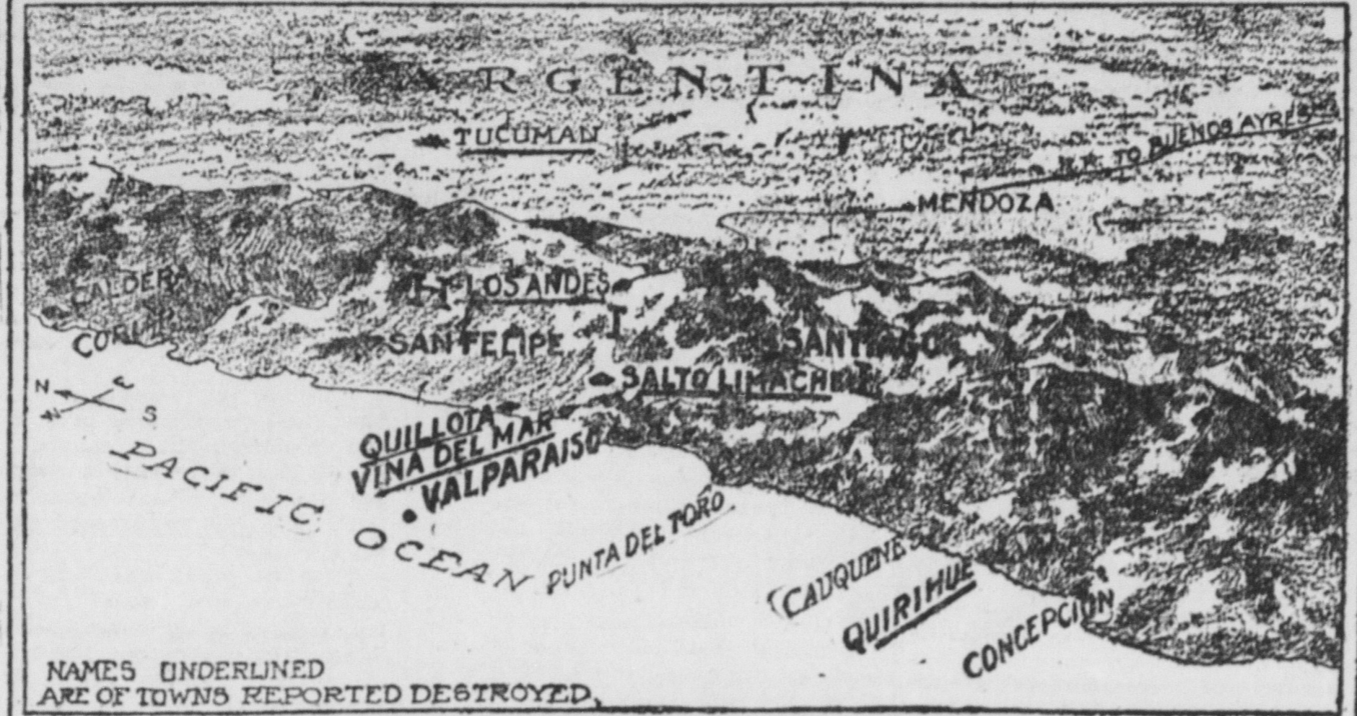
It is connected by rail with Santiago, the capital, sixty-eight miles distant.

Paralleling the Chilean coast of twenty-three hundred miles is the same mountain chain which lies at the back of the State of California, and through which the earth's tremors ran which so completely transformed San Francisco.

There are two sections of Valparaiso, one devoted to commercial activity and the other to domestic life, that part of the city fronting the water, on which immense warehouses and spacious docks and quays are built, having been in the early days of Valparaiso the centre of its thrift. As Valparaiso began to grow there was a gradual movement back from the shore front, until to-day the slopes leading to the heights are occupied by magnificent residences, the homes of the big merchants of the city, all built to endure, and forming one of the show sights of the Chilean city.

Of course, the streets in the old quarter are crooked and narrow, but the enterprise which struck the city three decades ago is seen in the regular, wide and perfectly equipped thoroughfares in the Almendral. In a southern direction from the city run the Nuevo Malesco and Gran Abanida, joining out in the country in what is known as one of the best thoroughfares in the world.

Valparaiso's harbor is protected on



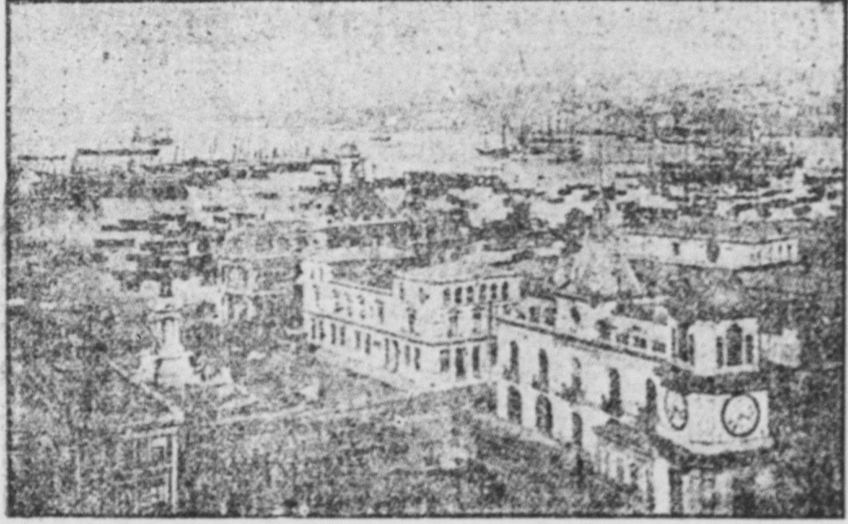
loons which have been known to sailors of all nations for over fifty years. They are called the "Fore-top," "Maintop," and "Mizentop," respectively, and are still frequented by the crews of sailing ships in the harbor. Valparaiso is one of the few remaining ports where sailing ships can be seen in any numbers. The majority of them are engaged in the nitrate carrying trade.

The town is situated in what seismologists term the "earthquake

belt," and has always been subject to shakes more or less severe. Several shocks have been felt in Chile this year, and have caused considerable alarm to the inhabitants. At one

pany, but it is now owned by a local concern.

About 20,000 persons are employed in Chile by British companies in the extraction and preparation of nitrate



THE PORT OF VALPARAISO.

three sides by steep hills, which rise to a height of 1700 feet, and are fringed by rows of wooden houses. The finer buildings of brick and stone, are situated below on the level, which is practically all made ground.

The harbor is open to exposure from the north, and is a dangerous anchorage for vessels at all seasons of the year. In ordinary weather there is always a heavy surf, and when a storm occurs vessels are frequently torn adrift from their anchorages and dashed to pieces on the beach. The Chilean Congress recently decided to have a breakwater constructed to protect the shipping at a cost of \$20,000,000.

There are several wharves on the water front where ships of small tonnage can go alongside, but the larger steamers have to anchor in the bay and discharge and load their freight by lighters. The principal steamship line to Valparaiso is the Pacific Mail Steam Navigation Company, which operates a service from Liverpool via the Straits of Magellan and a coast service between Valparaiso and Panama.

The town section of the City of Valparaiso is called the Almendral. In it the principal business houses, the Park, and the Plaza Victoria are situated. The streets are broad, reg-



A BIRD'S-EYE VIEW OF VALPARAISO.



CALLE BLANCO, IN VALPARAISO.

ular, and well built. One of the finest new stone houses in this section is the five-story building erected and owned by the Mercurio newspaper. The terraces on which the wooden houses are situated are reached from the lower section of the city by means of electric elevators.

To the northwest of the Almendral is the quarter known as the Puerto, in which the public buildings, warehouses, and docks are situated. The streets in this older section of the city are narrow and crooked and the majority of the buildings old in structure and design.

The "Puerto" has three famous sa-

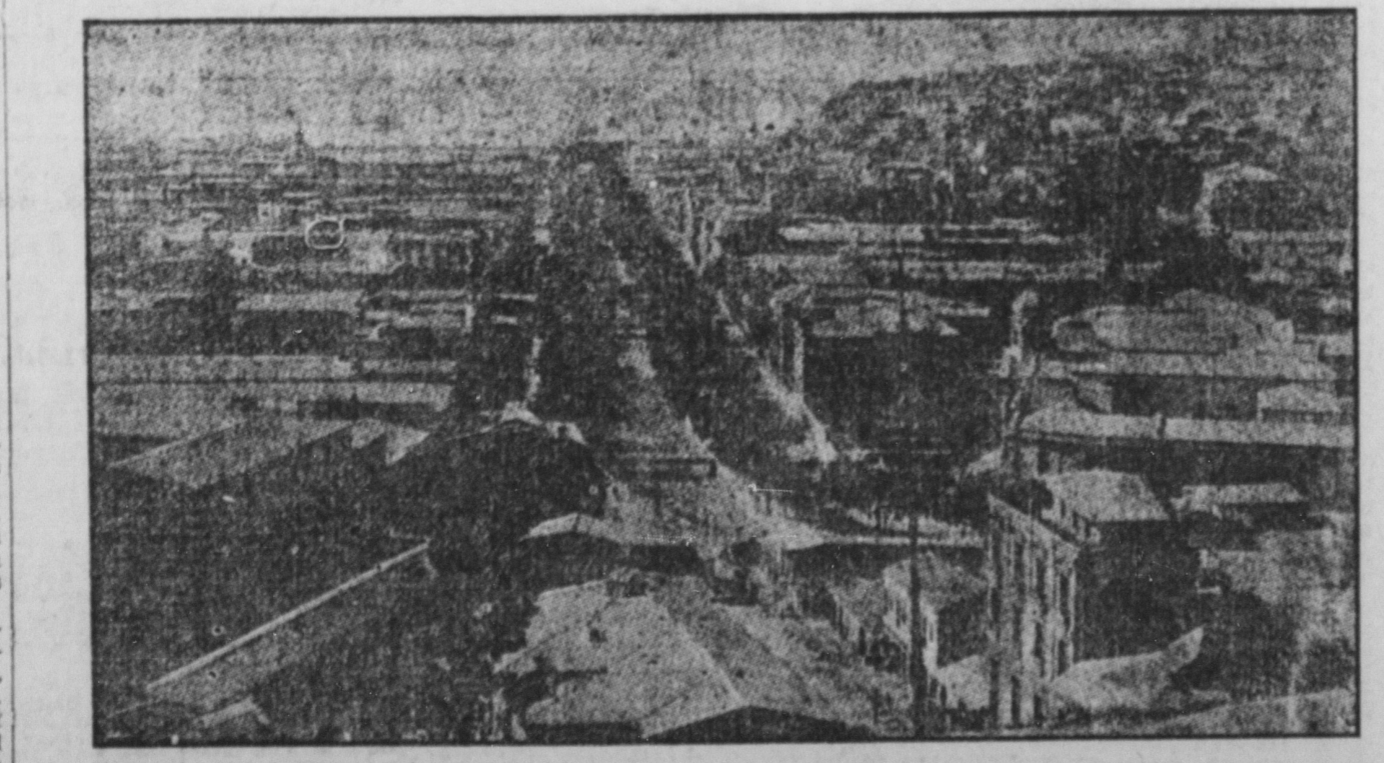
and bring Chile two weeks nearer to Europe. It is expected that the line will be opened toward the end of 1908. Another railway is being built from the Peruvian frontier to the Straits of Magellan, with branch lines to coast ports, mining districts and agricultural centres.

Chile has been visited by severe earthquakes about every sixty years. In the last severe earthquake, in 1835, the Isle of Santa Maria was uplifted in three different localities, eight, nine and ten feet, but all this land subsided a few weeks afterward. At the same time two great waves rolled over the town of Talcahuano.

Valparaiso's chief manufactures are cotton goods, machinery and iron goods. Much mineral water is bottled there, while the sugar refineries and the brewing and distilling interests are large. From the city are exported nitrate, in which millions are invested, grain, wool, leather, guano, saltpetre and copper, although this mineral has not been developed to its fullest extent.

Valparaiso suffered a disastrous earthquake in 1835, it was bombarded by the Spanish in 1866 and suffered from a terrific tidal wave on June 30, 1899, which wrecked the railroad and did a great deal of damage in other directions.

Chile threw off the yoke of Spain in the early part of the nineteenth century. It consists of twenty-four provinces and territories and contains 290,829 square miles.



GENERAL VIEW OF COMMERCIAL SECTION OF VALPARAISO LOOKING TOWARD THE BAY—RESIDENTIAL PORTION SHOWN ON HILL AT THE RIGHT.

THE MYSTERY OF VOLCANOES

THEIR STRANGE ERUPTIONS MAY BE DUE TO RADIUM.

Mayor Dutton's Theory and Argument Form a Neat Application of What is Known About Radioactivity—How He Accounts For the Lava.

"New applications of new physical conceptions are always interesting when there is any ground for them," says the Electrical Review. "Every new discovery in science is followed by multitudes of letters or articles appearing in the newspapers or journals, applying the new ideas to explain many physical manifestations which, to the writers, seem to need new treatment. By far the greater number of these discussions are of little or no value. The authors seem to know little about the subject they are discussing, and it is the novelty of the idea, rather than its scientific value, which appeals to their imagination."

"On the other hand, every new discovery in science necessarily suggests explanations of phenomena hitherto unexplained, or offers an idea of the action which seems to be nearer the truth than the one previously held. The discovery of radioactivity naturally was followed by many attempts to utilize the new conceptions in explaining long-known facts. Many of these ideas have been of much value, and the more we learn about radium and its allied elements, the wider does their possible field of action seem to become. A flood of light is let in on ground hitherto obscure, so that the scientific view takes on a different aspect, and phenomena which before seemed entirely dissociated now seem to be closely related."

"One of the latest interesting uses of the idea of radioactivity is due to Major C. E. Dutton of the United States army, who thinks that it offers the long-sought-for explanation for volcanic action. While a discussion of volcanic action may seem to be a little out of the province of the electrician, when the volcanist adapts to his purposes phenomena closely allied with electrical reaction, the former has some excuse for showing an interest in the discussion. Since, therefore, Major Dutton turns to radioactivity to explain a phenomenon which he has studied for many, many years, the electrical man is justified in indicating his interest."

"In brief Major Dutton's argument is this: The body of molten lava which is thrown out of a volcano is insignificantly small compared with the bulk of the earth, and for various reasons which he has set forth at length during the past twenty years, this lava, he believes, is contained in a shallow reservoir. If these facts are admitted, it seems inconceivable to Major Dutton that this molten rock can have existed for the aeons during which the earth has been cooling from a molten condition, for ages ago such small masses would have become solid. Some explanation must therefore be found to account for the molten mass. He suggests that radioactivity is this agent, for radium is known to be present in the crust of the earth. It is known to develop heat, which, if not conducted away as rapidly as it is set free, will accumulate. If this accumulation goes on for a sufficiently long time and at a sufficiently high rate the rocks where this action is taking place will eventually melt, and water, which is always present, will be transformed into steam, and the lava extravasated. After relief has been found in this way the accumulation of heat will begin again, and the eruption repeated at a later period. From the small amount of data which have been accumulated, it is believed that the amount of radium contained in the earth's crust is sufficient to develop the heat required by this explanation."

"This is a neat application of the theory of radioactivity. It seems to fit the case very prettily. The next step necessary will be to investigate the radioactive phenomena of volcanoes for a confirmation of this theory would be of world-wide interest. Who knows but that before many years have passed we will be able to draw up a schedule of the volcanic eruptions to be witnessed for a long time to come, and thus take time by the forelock, avoiding the destruction of property in the surrounding country, or even running excursions to view the magnificent phenomenon. All that will be necessary will be for us to know the amount of radium present and the physical characteristics of the volcano's interior."

WHILE THE SULTAN PRAYS.

Incidents of the Service as Witnessed by a European.

A writer in M. A. P., describing the ceremony accompanying the Sultan's visit to the Mosque, says that the service lasts about half an hour, during which time a muzzelin or priest appears on the balcony of the high minaret of the mosque, and in a droning call of peculiar penetration calls upon all the faithful round about to join their master in prayer.

While the service was going on we were regaled with Turkish coffee in beautiful little eggshell cups, rose-leaf jelly, of which one is supposed to take a spoonful into the mouth and wash it down with cold water, and cigarettes bearing the imperial cipher such as one sees on all Turkish coins and stamps.

At the close of the service the bands play again, the crowds cheer, and his Majesty appears at the door

of the mosque. Now, up to this time no one but himself ever knows how he will return to the palace. In the laudau if he is not feeling well, or driving a sort of spider phaeton with his own hands, or mounted upon one of several of his favorite Arab steeds, which are always drawn up in readiness if he should choose them. On that day he chose to drive himself in the phaeton. Followed by cheers, and marching troops, and fat pashas running up the slight hill at the side of the carriage, he disappeared within the palace gates. In a few moments the watching thousands and troops all had marched away, and we still sat waiting his Majesty's pleasure, making polite conversation with the attendant officials.

PAINTED HIS OWN FENCE.

Work Might Have Been Done Better by a Professional.

Louis Weis, who recently built a home in Virginia place, East St. Louis, is willing to acknowledge, says the St. Louis Globe-Democrat, that there are a few things a professional can do better than an amateur. One of them is painting a fence. The next time Mrs. Weis has any billboard decorating to do he will hire a man. It happened this way:

Last Monday night Mr. Weis had a little spare time on his hands. The back fence was in need of kalsomine, and after purchasing a can of paint for \$1 and a brush for 50 cents he started in to do the job. It was then about 7 o'clock and Mr. Weis remarked to his better-half that he would have the 25 feet of boarding properly dyed in "about three shakes of a sheep's tail." The sun went down and the supper hour passed, but Mr. Weis went on painting. It was too early for the moon to rise and as it seemed necessary to complete the job, Mrs. Weis offered to hold a lamp while Mr. Weis painted.

The neighbors attracted by the unusual scene, went over to investigate, thinking perhaps burglars were at work. Most of them remained to criticize, extol or offer suggestions. At midnight the job was finished, and Mr. Weis took an inventory. He found that he had ruined one \$25 suit of clothes and one \$10 dress belonging to Mrs. Weis, not to mention the damage suffered by his temper. A painter who viewed the job next morning said it would have cost about \$2 to do it right.

NEW SOURCE OF COTTON.

Valuable Product of Tree Peculiar to British India.

London Commercial Intelligence prints a letter from J. R. Spence, written at Wellas Cotton Plantation, Deese, who claims to have discovered a variety of cotton tree, indigenous to India, capable of revolutionizing the cotton industry of that country. He says:

"I have had the good fortune to discover that there exists a tree, practically indigenous, at present growing in various parts of the Bombay and Madras Presidencies, which produces a cotton infinitely superior both in classification and staple to American cotton and in classification alone cannot be equaled in Egypt. It is an astonishing fact that the value of this tree's product has not up to this time been discovered by any one in the cotton trade, notwithstanding the fact that the tree has been known to exist since the time of the mutiny and probably for hundreds of years previously. The only uses to which the cotton it produces has so far been put are the manufacture of wicks for lamps in Hindu temples and the stuffing of beds and pillows. After carefully examining it I unhesitatingly expressed the opinion that it possibly would ultimately revolutionize the cotton cultivation of India."

KITE FLYING AS A HOBBY.

Heights to Which Men May Be Sent Up Into the Air.

This year has witnessed a remarkable development of the hobby of kite flying, which its devotees hotly maintain is a scientific pursuit rather than a mere pastime, says the London Mail.

"You would be astonished," declared Major F. S. Baden-Powell, a well known expert, "at the number of people who have taken to kite flying recently. If I were living in a suburb I should certainly adopt it as a hobby. It is a fascinating sport."

The War Office has been making exhaustive experiments with man-lifting kites at Aldershot, and has reached a point in the development of the kite where men can be sent up to the tremendous height of 3000 feet, practically immune from danger from shot or shell, and in a commanding position for taking observations.

The Meteorological Office also makes use of the kite in its works, sending up kites with self-registering instruments attached, and thereby gaining valuable information to be used in the weather forecasts. Bird's eye photographs are obtained in the same way.

The box kite (the invention of an Australian) is the type used for high ascents (the record altitude is 14,000 feet) but the diamond shape is still greatly favored by amateurs.

John Phillip Sousa the American band leader, has been gazetted officer de l'instruction publique of France. This gives him the golden palms and rosette of the French Academy.

Matting to the value of \$2,543,498 was exported from Japan last year; 90 per cent of it went to the United States.

Isn't It the Truth?
"Say, paw," queried little Tommy Foddes, "who are the city authorities?"
"The city authorities, my son," replied Toddles, Sr., "are officials who claim to have no authority when the dear public wants something done."
—Chicago News.

Few Diamond Weddings.
Only one couple in 11,000 live to celebrate their diamond wedding.

Who's Hoosier.
An Indiana woman has just died at the ripe old age of 112. It is unfortunate, if true, that she has left no written record of the Indiana poets and novelists she had met.
—Chicago Inter-Ocean.

Not All of Life.
The young have to learn to live; the old, to die. It is difficult to decide which is the more disagreeable process.
—London Truth.

Profound Observation of a Traveler.
If a man had to wait half as long for his dinner at home as he does at the swell city cafe he would do things that would give the neighbors something to talk about for weeks.
—Washington (Kan.) Register.

Remembers War of 1812.
Mrs. Ruth Allen Smith, of Putney, Vt., who is in her 102d year, distinctly recalls the departure of her brothers to the war of 1812.

King Carried Joy to Newcastle.
King Edward didn't carry coals to Newcastle on his recent visit, but he carried joy. Heretofore Newcastle's chief magistrates have been plain mayors; henceforth they are to be lord mayors.

Prince and Pauper.
Most any man can make a fool of himself. It is where he wants an elegant job and doesn't care for the expense that he gets some woman to help him.
—New York