

SCIENTIFIC MISCELLANY.

A new German exciting liquid for electric batteries, called "Calcidum," consists of oxychloride of calcium dissolved in a solution of sal ammoniac. This is cheap, a good conductor of electricity, and does not crystallize even at zero temperature.

A copper mask, believed to be unique, is an interesting object found in the wrappings of a mummy at Chimbote, Peru. It was shaped from a single nugget of copper by hammering on a mold, and the features, except the dwarfed nose, are well formed and distinctive.

Striking changes in New Zealand have followed the volcanic eruption of 1886, which destroyed the famous Rotomahana terraces. A visitor of this region, Mr. H. M. Cadell, reports that the shower of fine volcanic ashes has made the surface water-tight for miles, causing the streams to become raging torrents after every rainfall, and to excavate deep gorges. Shortly after the eruption, two new lakes, with a combined area of twenty-five acres, had taken the place of the terraces, but five years ago the water had risen 400 feet, uniting the two lakes in one of 5,600 acres.

Te "pine-barren region" of the eastern coast of the United States, with a flora quite distinct from those of the neighboring hill and mountain regions, becomes wider and more continuous toward the south, and in the Carolinas often extends back from the coast about eighty miles. Mr. T. H. Kearney reports finding miniature pine-barrens in sandy spots high up in the Appalachians. These islands of coastal vegetation, with their pitch and scrub-pine and the associated herbaceous plants, are especially to be seen along the French Broad river, in East Tennessee and western North Carolina.

Some curious experiments with liquid air have been reported by M. D'Arsonval to the Paris Biological society. A guest who had been handed a glass of champagne containing half an ounce of liquid air drank the mixture without waiting for it to thaw, and in a few moments suffered from a great distension of the stomach, which, however, was soon relieved by a sudden violent explosion of food and gas. On pouring liquid air upon the hand, it at once assumed the spheroidal state, breaking into globules which scattered in various directions. Dried bacilli and bouillon cultures of diphtheria and other disease germs were placed in liquid air, in one case remaining for six days until the liquid air had evaporated, but, contrary to what had been expected, this had little effect upon the subsequent growth of the organisms.

Volcanic flames are so rare that, while they have been described by credible observers, their existence has been doubted. They had not been noticed on Vesuvius for eighty-four years until last April, when the phenomenon was so conspicuous as to be convincing, and to lead to speculation as to its cause. Prof. E. Semmola supposes that the orifice may have been closed by a fall of the crater wall, the pent-up gase becoming heated until a chimney was formed through which they escaped in flames. Prof. V. Matteucci noted that the small flames were of longer duration than the larger ones, and that the latter did not last without intermission for more than nineteen or less than fifteen days, and ultimately became small and quiescent like the others. He concludes that the greater part of the gases evolved from volcanoes has the power of producing flames.

WESTERN NEWS ITEMS.

Sergeant Charles H. Rheinhaus, company M, Twentieth Kansas, has been given a thirty days' sick furlough.

Corporal Patrick Ahern, company B, Fifty-first Iowa, died at the division hospital, San Francisco, of typhoid fever.

Omaha Stockman, Sept. 9: J. M. Jensen was here from Logan, Utah, with eight double-deck cars of western sheep.

An explosion of four sticks of giant powder in a prospect hole at Unionville, Mont., killed Charles Pratt Sunday, his body being blown to atoms.

Capt. W. J. Garland, who served through the Civil War in an Illinois volunteer regiment, died at Cheyenne, Wyo., Sunday, of heart disease. He was 60 years of age.

W. W. Bradley of Parma, Ida., was foully murdered Saturday by J. A. Lyons, because the former had protected the latter's little girl from the cruelties of her father.

A sheepherder known as "Baltimore Bill" was burned to death at Helena, Mont., Saturday morning in the feed stable of W. Budd Timber. Thirty-five horses were also cremated.

Maj. John A. Rafter, surgeon of the Twentieth Kansas, has been recommended to the President by Gen. Miller for appointment as brigade surgeon, and for assignment to the First brigade.

The body of Casper Feuse, a sheepherder, was found Saturday three miles northeast of Argenta, near Helena, Mont. It is believed he had fought a duel and had been shot through the body.

W. B. Casey, a rancher, was killed Sunday morning six miles of Phoenix, Arizona, by John Mander. Witnesses say the killing was in self-defense. Mander escaped and has not been captured.

The Idaho state campaign is about to begin in real earnest. Headquarters are to be established at Boise by the Silver Republicans and Hon. C. E. Arney will act as secretary of the state central committee.

There are now 306 patients in the division field hospital, San Francisco, twenty-four in the Red Cross Convalescent home, seven in other hospitals, six in private residences and 100 on furlough. One patient was discharged from the hospital Sunday.

Henry Bracken, a molder employed at the Union Iron Works in San Francisco, was drowned in the river while bathing Sunday. Bracken leaves a brother, who resides at Butte, Mont., and a sister at Port Townsend, Wash. The remains have not been recovered.

It is expected that the new torpedo boat Farragut will be in condition to make her trial trip on next Tuesday. The port cylinder which was rendered inoperative when she was recently speeded on the bay, has been replaced by the Union Iron Works, which built the vessel.

Dickinson Kershaw, a popular young man of Preston, Ida., died there Thursday of typhoid fever. Kershaw was born in Clayton, near Bradford, Yorkshire, England, June 21, 1873, and was therefore in his 26th year. Funeral services on Sunday at 2 o'clock from the Preston meeting house.

The silver and Democratic conventions are being held in Reno, Nev., and a warm time has already been in evidence, although to date, no killings are

reported. Thursday was given over to preliminary work and much discussion concerning the rights of certain parties to seats in the convention.

Governor Lord, of Oregon, has completed his investigation of the condition of the 330 recruits of the Second Oregon volunteers, and has telegraphed to the secretary of war that he found everything satisfactory. The governor and Col. Tuttle, adjutant general of the national guard of Oregon, left San Francisco for home Sunday night.

William O'Connor, superintendent of the Rocky Fork coal mines, was shot and fatally wounded at Red Lodge, Mont., Saturday by Tom Salmon, ex-president of the Red Lodge Miners' Union. There were threats of lynching, and Salmon was hurried out of town to escape it.

American miners on the Yukon have joined in an urgent request for the United States government to locate an assay office and government bank depository at Circle City. Their object is to protect miners against the money brokers, who charge what are considered extravagant fees for drafts or exchange.

The steamer Rosalie arrived at Seattle Sunday night from Skaguay, Alaska, with sixty passengers from Dawson, who brought out about \$500,000 in gold dust and drafts. William Stanley, of Seattle, had about \$160,000 in drafts. The 800 pounds of gold on which they were issued, was shipped down the river to St. Michael.

William D. Baker, a young man from Augusta, Me., attempted suicide by gas asphyxiation in a lodging house in San Francisco Sunday. He was supposed to be dead when found, but was received at the receiving hospital. He was formerly clerk in the office of the United States Legation at Tokio. Despondency was the cause of his act.

This week is expected to be a busy one at the naval recruiting rendezvous in San Francisco. A large number of the men at present with Admiral Dewey in Manila have completed their terms of service and the local recruiting officer has received instructions from Washington to enlist 300 men. Machinists, firemen, yeomen, musicians, seamen and ordinary seamen are all wanted.

The Nampa, Ida., Leader says: While returning home from town Saturday evening, September 3rd, Charley Moore, 14-year-old son of G. T. Moore, was thrown from his horse and instantly killed, when within about half a mile of his home, four miles east of town. It is supposed the horse gave a sudden jump to one side which broke the boy's neck, as he was an experienced rider and not easily thrown, and his body was not bruised, which would probably have been the case had his neck been broken by the fall.

The arm and hand of a woman, who was probably not over 25 years of age, was found in Lake Merritt, Oakland, Cal., Sunday evening by two girls, Irene Monroe and Bertha Waller, who were strolling along the shore at Eighth street. Taken in connection with the recent discovery by some boys of a woman's head floating in the bay near Berkeley, this ghastly find strongly points to the commission of a murder, as yet undetected. The head was not recovered, but the arm is now in possession of the coroner, who will make a searching investigation. The arm was broken off at the elbow, apparently by violence.

As no orders have been received