

after the conclusion of a battle. Now, the argument of Mr. Powers is lame in this point. He takes no precise account of the length of the interval between the conclusion of a battle and the commencement of rain; nor does he show that the interval is less than it should be if the battle had no influence in the production of the rain; and in particular he takes no account of the cases unfavorable to his theory, in which rain follows a battle only after a very long interval."

Some of the cases, however, which may be cited where the fall of rain seems to have been caused by the discharge of cannon are very striking. During the siege of Valenciennes by the allied armies in June, 1793, the weather, which had been remarkably hot and dry, became violently rainy after the cannonading commenced. Two hundred pieces of heavy artillery were employed in the attack and 100 in the defense of the city, the whole of which were frequently in action at the same time.

At the battle of Dresden, August 27, 1813, the weather, which for some days had been serene and intensely hot, during the progress of the battle suddenly changed. Vast clouds filled the skies, and soon the surcharged moisture poured itself in a torrent of rain. At Waterloo, according to Siborne, the weather during the morning of June 17, 1815, had been oppressively hot. It was now a dead calm; not a leaf was stirring, and the atmosphere was close to an intolerable degree, while a dark, heavy, dense cloud impended over the combatants. The 18th Hussars were fully prepared and awaited the command to charge, when brigade guns on the right commenced firing for the purpose of breaking the order of the enemy's advance. The concussion seemed instantly to rebound through the still atmosphere and communicate like an electric spark with the heavily charged mass above. A violent thunder clap burst forth, which was immediately followed by rain which has never probably been exceeded even in the tropics. In a few moments the ground became perfectly saturated.

Humboldt says that when a volcano bursts out in South America during a dry season it sometimes changes it into a rainy one. It is well known that in very hot, calm weather the burning of woods, long grass, and other combustible materials produces rain. Very extensive fires in Nova Scotia are so generally followed by heavy floods of rain that there is ground for believing that the enormous pillars of smoke have some share in producing them.

Captain James Allen, acting signal officer of the War Department, in reply to interrogatories recently addressed to him regarding the probability of producing rain by artificial means, said: "One fact would seem to be easily admitted, that an attempt to explode gunpowder in order to practically demonstrate the advisability of attempts in rain production should at first be made

after most careful consideration of the atmospheric conditions. For example, if these explosions should be made in the center of a high area, as shown by our weather maps, or even after a low area has past any point, we may be absolutely certain no rain will follow. The first experiments should be undertaken to the southeast or east of a low area, and 300 to 600 miles from the center.

"Observing stations should be established every 5 or 10 miles for 200 miles to the eastward of the point of explosion. If the explosions are made in a comparatively clear sky, and after that unmistakable clouds are observed to the eastward and not to the westward, some connection may be surmised. It must be said, however, that even if the production of rain be practicable, it can only be for a very limited area, and it is believed that any benefit which can possibly arise from such rain can never amount to the expense of the enterprise."

The opinion of Captain Allen is similar to that of President H. C. Russell, of the Royal Society of New South Wales, contained in an anniversary address delivered in 1884. He says: "It would seem unreasonable to look for the economical production of rain under ordinary circumstances, and our only chance would be to take advantage of a time when the atmosphere is in the condition called unstable equilibrium, or when a cold current overlies a warm one. If under these conditions we could set the warm current moving upward, and once flowing into the cold one, a considerable quantity of rain might fall, but this favorable condition seldom exists in nature."

The experiment of producing rain by exploding dynamite is about to be tried, and the result will be awaited with much interest.—*Scientific American*.

A STRANGE DREAM.

Probably your numerous readers may be somewhat interested in the following strange dream. I forward it to you for publication. Thomas Cooper, a master mechanic, of Kansas City, can boast of one of the most thrilling experiences which has ever fallen to the lot of any man. What great mystery lies behind his remarkable adventure will probably never be known. A box filled with human bones, rotted by its long confinement in the earth, not more than two feet long and one wide, is now in Cooper's possession. On a table in his room is a similar box, in which lie several silver dollars of ancient date, discolored and stuck together, and two small diamonds, and several bits of gold jewelry. All these things go to confirm Cooper's story as to the remarkable manner in which a dream influenced and controlled his actions.

Cooper was foreman of a gang of carpenters at work on the Coates House. One morning he called the contractor on one side and said: "I can't work today, and would like to be excused." "Why, what's the

matter, Tom?" was asked. Cooper informed him that for three successive nights he had been troubled with a dream which never varied. The figure of a woman with a little child in its arms would appear to him and say: "Go to Westport, thence three-fourths of a mile west. There you will find a farm house, and off to the right a tall tree. Dig under said tree, and you will find an infant's bones and that which will reward you for your trouble."

At first, Cooper said, he thought nothing of the dream, but its singular repetition troubled him. The woman and child appeared three nights in the same manner and each time the woman spoke the same words. So sad did they sound that Cooper said he seemed to hear them all day while at work, and he was so troubled over the matter that he determined to cast the burden off his mind by following the dream woman's directions. Getting permission to quit work he started out for Westport.

So clearly had the woman described the place that he recognized the house at once. He called and borrowed a spade on the pretence that he wished to dig herbs. He then went to a tall tree off to the right, which answered the description given so vividly in his dreams, and there dug according to the instructions given by the woman. At a depth of three and a half feet he found a box filled with bones, but nothing else. He returned home somewhat satisfied that some supernatural power had controlled his actions, but that very night he was again troubled with the dream. For three nights more the dream was again repeated to him, and at last he took another trip to Westport, and again dug under the same tree. This time at the depth of four feet he found another box. He opened it, and to his surprise found \$15.50 in silver coin, stuck together, two small diamonds, since valued at \$50, and some bits of jewelry of small value. Without digging further he came back to the city, and now has the relics on exhibition to all comers, as a proof of the truth of his queer vision. Some people are prone to believe that there is nothing of us left after death; to such I would seriously ask what it was that prompted Cooper in his dreams. Fuller information if desired can be obtained from Mr. Thomas Cooper, mechanic, Kansas City, Mo.

DR. JOHN COOK,

LAKE SHORE, Dec. 15, 1890.

New York, Dec. 26.—An explosion occurred this morning in the cartridge house of the American Fireless Powder Company at Lake Sapaticong, N. J. Two workmen were killed instantly.

Cobourg, Ont., Dec. 26.—While returning from a dancing party twenty-two persons broke through the ice on Rice Lake. All succeeded in getting out, but many were severely frozen, and later Miss Elsie Johnson died.