

with senecious and polygonums, of another the remnant of the mammoth, the tufts of hair peculiar to burial places, and evidently decomposed animal matter. The foot frequently tumbles over osteological remains, some elephants' tusks measuring as much as twelve feet in length, weighing more than two hundred and forty pounds. Nor is the formation confined to Escholtz Bay. It is observed in various parts of Kotzebue Sound, on the River Backlund, and in other localities, making it probable that a great portion of North-western America is underneath a solid mass of ice. With such facts before us, we acknowledge that terrestrial heat exercises but a limited and indirect influence upon vegetable life, and that to the solar rays we are mainly indebted for the existence of those forms which clothe with verdure the surface of our planet.

"A curious fact is stated respecting the condition of the vegetable world during the long day of the Arctic summer. Although the sun never sets, while it lasts, plants make no mistake about the time, when if it be not night, it ought to be; but regularly as the evening hours approach, and when a midnight sun is several degrees above the horizon, droop their leaves, and sleep even as they do at sunset in more favored climates.

"If man," observes Mr. Seaman, "should ever reach the pole, and be undecided which way to turn when his compass becomes sluggish, his timepiece out of order, the plants which he may happen to meet, will show him the way; their sleeping leaves tell him that midnight is at hand, and at that time the sun is standing in the north." — *Fitchburg Reville*.

#### POISONED VALLEY.

A singular discovery has lately been made near Batten, in Java, of a poisoned valley. Mr. Alexander Loudon visited it last July, and we extract a paragraph from a communication on the subject, addressed by him to the Royal Geographical Society:—

"It is known by the name of Guevo Upas, or Poisoned Valley; and following a path which had been made for the purpose, the party shortly reached it with a couple of dogs and fowls, for the purpose of making experiments. On arriving at the mountain, the party dismounted and scrambled up the side of a hill, at a distance of a mile, with the assistance of the branches of trees and projecting roots. When at a few yards from the valley, a strong, nauseous, suffocating smell was experienced; but on approaching the margin, the inconvenience was no longer found. The valley is about half a mile in circumference, of an oval shape, and about thirty feet in depth. The bottom of it appeared to be flat, without any vegetation, and a few large stones scattered here and there. Skeletons of human beings, tigers, bears, deer, and all sorts of birds and wild animals, lay about in profusion. The ground on which they lay at the bottom of the valley appeared to be a hard sandy substance, and no vapor was perceived. The sides were covered with vegetation. It was proposed to enter it; and each of the party having lit a cigar, managed to

get within twenty feet of the bottom, where a sickening, nauseous smell was experienced, without any difficulty of breathing. A dog was now fastened to the end of a bamboo and thrust to the bottom of the valley; while some of the party, with their watches in their hands, observed the effect. At the expiration of fourteen seconds he fell off his legs, without moving or looking around, and continued alive only eighteen minutes. The other dog now left the party and went to his companion. On reaching him, he was observed to stand quite motionless; and at the end of ten seconds fell down; he never moved his limbs after, and lived only seven minutes. A fowl was now thrown in, which died in a minute and a quarter; and another, which was thrown in after it, died in the space of a minute and a half. A heavy shower of rain fell during the time that these experiments were going forward, which, from the interesting nature of the experiments, was quite disregarded. On the opposite side of the valley to that which was visited, lay a human skeleton, the head resting on the right arm. The effect of the weather had bleached the bones as white as ivory. This was probably the remains of some wretched rebel hunted towards the valley who had taken shelter there, unconscious of its character.

#### CONDENSED HISTORY OF STEAM.

About 28 years B. C., Hero of Alexandria formed a toy which exhibited some of the powers of steam, and was moved by its power.

A.D. 450, Anthemius, an architect, arranged several cauldrons of water, each covered with the wide bottom of a leathern tube, which rose to a narrow top, with pipes extended to the rafters of the adjoining building. A fire was kindled beneath the cauldrons, and the house shaken by the efforts of the steam ascending the tubes. This is the first notice of the power of steam recorded.

In 1543, June 17, Blasco D. Garoy tried a steam-boat of 209 tons with tolerable success at Barcelona, Spain. It consisted of a cauldron of boiling water, and a moveable wheel on each side of the ship. It was laid aside as impracticable. A present, however, was made to Garoy.

In 1650 the first railroad was constructed at Newcastle on Tyne.

The first idea of a steam engine in England was in the Marquis of Worcester's "History of inventions," A.D. 1663.

In 1710 Newcomen made the first steam engine in England.

In 1718 patents were granted to Savery for the first application of the steam engine.

In 1734 James Watt made the first perfect steam engine in England.

In 1736 Jonathan Hulls set forth the idea of steam navigation.

In 1778 Thomas Paine first proposed this application in America.

In 1781 Marquis Jouffroy constructed one on the Saone.

In 1785 two Americans published a work on it.