

Ma petite Ame vagabonde,
Compagne, hôtesse de mon corps,
Qui vas partir pour l'autre monde,
Comment seras-tu chez les morts ?
Avec ta gaieté constante ?
Ou pâle et nue et grelottaute ?

Ah ! gentle, fleeting war'ring sprite
Friend and associate of this clay !
To what unknown region borne,
Wilt thou now wing thy distant flight ?
No more with wonted humour gay,
But pallid, cheerless and forlorn ?

— We noticed, some time ago, the publication of a volume of poetry by Mr. Lemay, of Lotbinière, near Quebec, containing a beautiful translation of the poem of *Évangéline*. We are happy to learn that the literary effort of our young compatriot has met with the sympathy and approbation of the great American poet, as will be seen by the following extract of a letter addressed by Mr. Longfellow to Mr. Lemay, which has been communicated to us by a friend :

" Allow me to congratulate you on the appearance of your volume, and on the many felicities of thought and expression it contains, and the unmistakable evidence it bears of poetic talent and deep sympathy with nature. More especially, let me thank you for that portion of your work which is devoted to *Évangéline*. I feel under great obligation to you for this mark of your regard ; not only that you have chosen this poem for translation, but that you have performed the always difficult task with so much ability and success."

SCIENTIFIC INTELLIGENCE.

— M. Pouchet has sent a paper to the French Academy on the effects of freezing animals. He finds that no animal really frozen is susceptible of revivification, as freezing disorganizes the blood. The temperature at which the death of insects, grubs, and snails becomes inevitable, is far below the freezing point (from 7° F. to —2° F.). Animals may be surrounded by ice without themselves being frozen, unless the temperature is very low. M. Pouchet states, that when an animal is frozen, the capillaries contract so as to prevent the passage of the blood, and the nuclei of the blood corpuscles escape from the envelopes, and become more opaque than in a normal state.—*Intellectual Observer*.

— M. Paul Bert informs the French Academy of fresh experiments in grafting the tails of rats upon other rats. He finds that his curious process has succeeded after certain tails have been removed from the animals to which they belonged, and placed under the following conditions : 1. Exposed to the action of air in a closed tube for 72 hours, at a temperature of 44° to 46° F. 2. After exposure to a humid heat of 135° F. 3. After exposure to a temperature of 3° F. 4. After complete desiccation. 5. After complete desiccation, and exposure to dry heat of 212° F. The so-called " complete desiccation " was effected in *vacuo*.—*Id.*

— M. J. A. Villemin states in *Comptes Rendus* that he has in several instances produced tubercular disease in the lungs and intestines of rabbits by introducing beneath the skin of their ears small quantities of tubercular matter from a patient who died of consumption.—*Id.*

— The *Astronomische Nachrichten*, No. 1555, contains a long letter from Louis Grosch, detailing observations made at Santiago de Chile during the solar eclipse, 25th April, 1865, and accompanied by a drawing. We translate the principal passages in his *résumé* of what occurred. " The greater part of the sky was covered with cirrus and stratus cloud. Before the beginning of total eclipse, the sun disappeared behind thick stratus. Before the emergence of the sun, the protuberances (red flames) appeared like a serrated border. The protuberances altered in colour from carmine to cherry red : on the moon's edge the colour was yellow. Before the bursting forth of the first sun ray, there appeared from the heretofore sharp circular moon rim, serrations with three greater projections. During the whole time of total eclipse, the dark disk of the moon was sharply defined, and only surrounded by a milk white corona. In the western part of the corona, one spot marked in the drawing was for a moment very strongly illuminated, as if a bright pencil of sunlight streamed behind the moon at this spot. The protuberances extended in a curve about 60°. The highest point of the protuberances was 0.13 of a division of the micrometer (*lignes Theiles des mikrometers*). The protuberances were seen for 2½ to 3 seconds." In another passage he says, that when the colored appearance of the protuberances vanished, thin dark projections appeared to start forth from the moon just where the protuberances were highest. Were these, he asks, lunar mountains ? They appeared and vanished in a moment, and if

mountains, must have been of true sugarloaf form. In *Comptes Rendus*, No. 22, 1865, will be found a letter from P. Secchi, with extracts from letter of P. Capelletti, giving his observations on the eclipse of 25th April (which he dates 15th April). He writes from Concepcion, Chile, and says, " The first impression I received after the disappearance of the sun, was that of an immense mountain of fire, like a rose coloured horn, at 57° from the zenith towards the W." This was seen while the eclipse was total, that is for 2m. 22s. Almost diametrically opposite to it was a smaller one of the same shape, and of a somewhat lighter colour. About 38 seconds after this, coloured flames appeared, so that the sun seemed to be on fire. It looked as if a train of powder caught fire in rapid succession. This rose coloured arc was 90° broad. When the sun disappeared, three bands of light showed themselves in a direction perpendicular to the moon's border. The most luminous was so brilliant, as to dazzle the eye applied to the telescope, and in the same position as the great protuberance ; with this peculiarity, that on its western side it was cut straight like a prolongation of the lunar diameter ; on the other side it was bounded, not by a curve, but by an inclined line. The darkness was greater than he expected, and was increased by a fog. " An iridescent arc appeared at a distance of more than 30° from the sun, and disappeared when the eclipse ceased to be total. This arc had the form of a crescent, its extremities resting on a line tangential to the lower limb of the sun. Several stars of first and second magnitude were seen during the darkness." P. Secchi remarks on the novelty of this arc, and cannot suggest an explanation, except by supposing it due to a fog in the sun's atmosphere. With reference to the bright bands of light, he asks whether such rays may not be seen on other occasions, and he states that on the 8th August, M. Tacchini being at sea, noticed a double jet of light after sunset, which followed the sun and seemed to belong to him. On the same day, P. Secchi observed on the sun a large facula, the upper part of which was very brilliant, and terminated in two jets like two leaves, which he considers may have been the very objects seen by M. Tacchini under different circumstances.—*Id.*

— *The Earth in the Comet's tail.*—Our readers will recollect this was the title of a paper in our vol. i. p. 63, in which Mr. Webb furnished, from his own observations, reasons for corroborating the conclusion arrived at by Mr. Hind, that on the evening of June 30th, 1861, or a little earlier, our earth was in the tail of the comet then visible. M. Liass at the same time thought we had actually passed through the second tail of this comet. He now states, in *Comptes Rendus*, that more complete calculations confirm this belief. He computes that the axis of the second tail of the comet must have cut the earth's orbit at Ch. 12m. 10s. in the morning of the 30th June, at Rio Janeiro, and at that time he considers that we were plunged 110,000 leagues deep in the tail. From the velocity of the earth's motion he estimates that our entrance into the tail was four hours earlier. Rio Janeiro is in long. 43° 7' 15" west of Greenwich. M. Liass adds that if, as certain European observers thought, the tail was a little curved, we might, instead of simply passing through it, and across it, have moved for some time in the direction of its long axis. The breadth of the tail he estimates at 378,000 leagues.—*Id.*

Danger from Contact with a Person Struck by Lightning.—It might be supposed that, when any one is struck by lightning, the electric fluid immediately passes away, on account of the conducting power of the animal body, and of the objects in contact with it, especially if moisture is present. This, however, does not always occur ; though our present knowledge of the laws of electricity will not suffice to explain the exceptional cases. Two instances illustrating this subject have been brought before the Academy of Sciences by M. Boudin. One occurred on the 30th June, 1854. A man was killed in the *Jardin des Plantes* at Paris, by lightning, and his body was exposed for some time to heavy rain. When, however, two soldiers attempted to remove it, they received, the instant they touched it, a very violent shock. The other happened on the 8th September, 1858. Two artillery men, at Zara in Dalmatia, were appointed to remove telegraph posts ; on attempting to lay hold of them after a thunder-storm, they were thrown down and greatly injured, especially one of them. When a comrade endeavoured to assist him that was most hurt to rise, both were dashed violently to the ground ; the comrade was burned in the arm, and was afterwards affected with nervous symptoms.—*Id.*

New and Simple Mode of Reproducing Drawings, etc.—The drawing having been made with a solution of gum, glue, varnish, or any other fluid which will impart hardness, it is transferred to a plate of plaster of Paris, chalk, or anything else that is easily pulverized. This plate, having been allowed to dry, is brushed until the material between the lines of the drawing—which is not affected by the process—is removed to a sufficient depth. After which it is immersed in gum, or glue, to harden the entire surface. The result is an admirable copy of the drawing in relief, and from this a *fac simile* in metal may be obtained in the usual way.—*Id.*