

Miscellaneous.

Carrier Pigeons.

Mr. John Galloway publishes a letter in the *Manchester Guardian* (Eng.), wherein it is commenting on the reported arrival of the two carrier pigeons from Sir John Ross, in which we find something very interesting relative to those birds. He says "an express flyer of pigeons would just as soon think of tying a letter to a bird's tail, as under its wing. The practice is to roll some fine tissue paper neatly round the leg, secured with thread or silk; and thus the bird can travel, without the paper causing resistance or impediment to its flight. Then, more marvellous still, the creature must have flown 2,000 miles! a considerable distance of which must have been over snowy or frozen regions. In modern times, no such distance as 2,000 miles have been accomplished by any trained carrier pigeon. The merchants and manufacturers of Belgium have done more to test the capabilities of pigeons than any other people. Their annual pigeon races produce an excitement almost equal to our horse races. In 1844 one of the greatest races took place, from St. Sebastian, in Spain, to Verver. The distance would be about 600 miles. The printed programme in French I hand for your perusal. Two hundred trained pigeons, of the best breed in the world, were sent to St. Sebastian, and only 70 returned. In another race to Bordeaux, 86 pigeons were sent and 20 returned. A strange and mistaken notion prevails that it is only necessary to send a carrier pigeon away from home and that its instinct will invariably lead it back. Let any one try the experiment, and send the best-bred carriers at once to Birmingham, and I venture to assert that not one will return to Manchester without previous training—viz., taking them short distances at a time and then increasing by degrees. It has been asserted that pigeons are guided on their return home from long distances by instinct. Instinct is said to be unerring; not so the pigeon's flight. If instinct be the guide, why not fly through foggy weather with equal speed and felicity as in clear sunshine? This it is notorious they cannot accomplish. When the ground is covered with snow, pigeons seem to miss their points of guidance, and are lost. This would seem to favor the opinion that they travel by sight, and are less indebted to instinct than is generally imagined. Carrier pigeons do not fly at night; they settle down if they cannot reach their home by the dusk of evening, and renew their flight at daylight next morning. The velocity of a pigeon's flight seems to be greatly over-rated; and, no doubt, your readers will be surprised to learn that a locomotive railway engine can beat a carrier pigeon in a distance of 200 miles."

Pigeons have been extensively used in America, for carrying the news about the drawings of lotteries, and the news by mail from Halifax. The telegraph has destroyed the business of pigeon training—the flying express has given way to the lightning one.

Railroad Telegraph.

We have been informed by Mr. Post, engineer of the N. Y. and Erie Railroad, that a line of wire for an exclusive telegraph of the railroad, has been laid down. This is a measure which he recommended two years ago. This is a right worthy measure, and one which we have advocated, about the same time, nearly. Every railroad in our land should have an exclusive telegraph, more especially those who have no more than a single extended track each. We rejoice to know that with our go-ahead people the telegraph has been signally successful, but we are no more than in the infancy of telegraphing. We learn that one of our Telegraph Companies, whose wires extend between New York, Philadelphia, Baltimore, and Washington, with stations at all the intermediate places of any consequence, have increased their facilities for the prompt transaction of business, and have also made arrangements by which persons travelling through the places of any of the Telegraph Way Stations, can telegraph to any other

place along the line, without having to leave the cars. A boy will pass through the cars at each station, and receive the dispatches, so that it will only be necessary for travellers to have their dispatches written before the cars stop, to secure their being safely sent to the desired place.

"A Snail Telegraph." Wonderful Discovery.

The Paris correspondent of the *Literary Gazette* writes:—"I have an astounding announcement to make to you, the marvels of the electric telegraph are annihilated, and the means of instantaneous communication between man and man, at any distance whatsoever, to the extremities of the earth, has been discovered! Yes, the last and most majestic of human discoveries has fallen from its height almost at the very moment at which it dawned on the world, and it is replaced by one a thousandfold more glorious, and which, if it only partially realise the commencement, will totally change the face of the world! And the means by which this wonderful thing is done are even more wonderful than the thing itself; snails, aye, snails, galvanic and magnetic influence! Do not think that I am hoaxing you, it is on the authority of the 'Presse' that I speak, one of the most important newspaper organs of Europe, in talent, character and circulation; and it is not to be believed that such a journal would be a party to an impudent and stupid attempt to bamboozle the public. In its numbers of Friday the 25th, and Saturday the 26th ultimo, there are two *feuilletons* signed by M. Jules Allix, No. 92 Rue Richelieu, roundly, formally positively asserting that the secret of effecting instantaneous communication, without regard to distance, and, consequently without continuous lines, as in the electric telegraph, has been brought to light; nay, more, that on the 3rd of this present month a question asked at the said 92 Rue Richelieu, received an almost immediate reply from the depths of America! and that this was done chiefly by the instrumentality of snails! The inventors or discoverers of the alleged marvel, are a M. Benoit, of the department of the Herault, and a M. Biat, of America. After many years observation and experimentalism, they, it is asserted, have ascertained that certain descriptions of snails possess peculiar properties or sympathies, which cause them to feel, no matter at what distance they may be, the sensation, or commotion, when acted on in a particular way by galvanic and magnetic influences.

Placed in boxes in such a way that, on being touched, they agitate particular letters, the operator has only to make snail A give a kick (*sic*) and snail A in a corresponding box, which box may be in the backwoods of America or the deserts of Africa, repeats the kick, and so on for every letter of a required word. The snails must of course previously be put in sympathetic communication, and the boxes, with all their apparatus, which is rather complicated, must be alike. The shock which the snail in box 2 feels is said to be caused by an electric or magnetic fluid, carried by the earth with extraordinary rapidity, and in a manner unknown to man; in other words, it is the electric telegraph without the connecting wire. All this seems absurd, does it not? but I am describing the thing as it is said to be."

[This telegraph, we apprehend, is well named the "Snail Telegraph." France is a great country for new discoveries. We would not have noticed the above, only we have seen it copied into a number of papers. It is a piece of French nonsense.

Explosion of a Steam Boiler.

At 7 o'clock, last Saturday morning, the boiler of the steam propeller *Resolute* burst, while lying at pier No. 13, East River, this city. The engineer, William Shepard, was killed on the spot, and four others were so badly scalded that they have since died. The boiler was considered safe, according to an inspector's certificate, obtained a few days ago, but the cause was over-pressure, there can be no doubt of that.

Harvard College has, this year, 311 professional students and resident graduates, and 293 under-graduates—total 604.

Form of the Blast Furnace.

Sir—I am aware that the old form of the old blast furnace, with flat boshes, was considered to give a necessary support to the materials, and the assertion has been received as a truth, without any particular inquiry into the fact. But I think this opinion may easily be seen to be an error in every case, and that they never afford any greater degree of support, though a great deal of obstruction. If a perpendicular is erected from the edge of the hearth in the section of a furnace of this construction, until it meets the side wall of the lining, a triangular space will appear, forming in the filled furnace a prism of materials, the base resting on the boshes, so that as the mass tapers upwards, the smallest possible quantity of matter is supported. If another line is drawn upwards from the same point at an angle representing the course of the rushing blast in its expansion, a second prism will be displayed, lying behind, out of the direct action of the blast, in which dust, and all the semi-liquified requisites for scaffolding, used to effect a comfortable lodgement. This line, in a properly constructed furnace, will coincide with the lining, and if the first line be erected in the section of such a furnace, sufficiently widened above the boshes, a space will appear, which, taken in connection with the wider diameter, exhibits fully three times the cubical contents, as being supported by the boshes, and bearing directly upon the centre of motion. The truth is, it was discovered to be necessary to have the furnace of considerable wider diameter than the hearth, in order to prepare the materials; that enlargement was obtained in the way most convenient to the builder, without the least reference to principle, and its defects perpetuated by imitation. In Mr. J. Gibson's pamphlet "On the Construction of the Blast Furnace," he details the observations which led him to question the propriety of his form of structure; and having matured his views, he staked them on the construction of an entirely novel furnace, taking the action of the blast as his guide. The bold experiment proved most successful, effecting a saving of 30 to 50 per cent. in the fuel alone. His plans soon became general in Staffordshire, and are spreading throughout the kingdom, but in very numerous cases by the mere force of imitation, with as little knowledge of the origin and principles of the improvement, as had previously existed regarding the meaning and demerits of the old construction. DAVID MUSHET.

[The above is a letter of Mr. Mushet to the *London Mining Journal*, and will be of considerable interest to many of our readers. Mr. Mushet is well known to be one of the most experienced mineralogists in the world.

The Complexion.

There are six or seven various complexions of the human race, but they imperceptibly approach, and are lost in each other. The white and brown complexions include the Europeans, Western Asiatics, Chinese, Tartars, Northern Hindoos, and Africans, the Anglo-Americans, Spaniards, and descendants of Europeans in all parts of the Torrid or Middle Zone. Many of the higher classes in the tropical regions, who are not much exposed to the sun, are of a brown olive complexion, particularly the females. The greater part of the Mulattos, or yellow colored people, are in China and Eastern Asia. The copper or bronze-colored Indians, are nearly all in America.—The Burmans, Malays, and Australians are mostly dark brown or tawny; the central and southern Africans and Hindoos, jet black.

Glass Palace for the Industrial Exhibition.

It will not do for our people to call Uncle John Bull a slow fellow, or to call the English a people fond of sticking to old things,—they are the reverse. The London Glass Palace, for the Grand Exhibition, will be one of the seven wonders—the greatest wonder of the Fair. To add to its decorations, a proposition, and a good one, has come from America. The *London Times* says:

"We have seen a letter addressed to the Commissioners, from which the following curious particulars are gathered:—Benjamin Hardinge, of Cincinnati, has proposed to cov-

er the iron columns, pilasters, entablatures, &c., with a kind of porcelain or variegated enamel, giving them all the richness and beauty of the choicest polished marble and precious stones, viz., the agate, chalcedony, jasper, and other silicious formations. He also proposes to apply liquid silicates to the glass, in variegated colored crystals, in prismatic or softly blended rainbow tints, which are said to be translucent and beautiful; giving a mellow light, which supersedes the heretofore contemplated blinds. The expense is comparatively small, the material being composed of quartz or white sand, dissolved in large quantities through the agency of hydro-fluoric acid and other solvents, the colors of oxydes of minerals, &c. It is said to be the cheapest finish upon iron, or other substances, ever before known; and is applied with great facility, and so hard as not to be moved by a file."

Mr. Hardinge is now at the Howard Hotel, superintending his chemical works in the north part of this city.

World's Fair in London.

The slow Committee appointed by Gov. Fish, for the State of New York, to examine articles intended for the World's Fair, are to meet at the American Institute on the 3rd Dec., at which time all persons residing in the State of New York, intending to exhibit at the World's Fair, must make known their intentions to the Committee, and receive its sanction, otherwise their articles will not be received at the Fair in London.

The Government vessel which is to convey articles from the United States to the Fair, will sail from the city of New York on or about the 10th day of January next. Vessels engaged in the Revenue service of the United States will be detailed by the Secretary of the Treasury for the purpose of conveying to N. Y., all articles from the various seaports along the coast, to be shipped in said vessel.

We understand that arrangements have been made at the Navy Yard, Brooklyn, to receive and store all goods, until ready to be shipped.

Wreck of the Lexington.

We find in the *Boston Daily Mail* an interesting account of the operations of Mr. J. E. Gowan, of that city, upon the wreck of the ill-fated steamer *Lexington*, which was burnt and sunk off Huntington Light, in Long Island Sound, Jan. 13, 1840. By means of their celebrated sub-marine armor and diving apparatus, a complete survey was made of the wreck, which was found in twenty-one fathoms of water, or one hundred and twenty-six feet below the surface. The hull was found full of mud, and completely "honey-combed" by worms, lying by a reef of sand which had been thrown up by the current, running N. E. and S. W. Their object was the recovery of a safe containing the sum of \$80,000 in bills and gold. They have succeeded in raising one of her anchors and the anchor and cable of another company who had made an unsuccessful attempt upon the wreck. They also recovered portions of the machinery, some gold and copper, and human bones of the ill-fated passengers. They are sanguine of recovering the safe as soon as the weather will permit.

Stame—Steam.

Mr. James Frost, of Brooklyn, delivered a lecture at the American Institute, on Thursday evening, last week, on his new discovery of Stame, (steam heated apart from water,) which was described in our last volume. The audience was small but respectable. The lecturer illustrated his subject by experiments. The principle of this discovery is, that steam, heated apart from water, doubles its volume with about every four degrees of heat. Mr. Frost has an engine with a boiler, the steam of which is carried through hollow grate bars, to test the experiment. As Mr. Frost's pamphlet was published, nearly in full, in our last volume, we refrain from saying anything more about it.

A person in this city has engaged to build a yacht of 150 to 180 tons, to be ready to sail during the World's fair in London, and to beat any vessel brought against her, or the builder is to receive no compensation for his labor, otherwise he receives \$30,000.