

## Miscellaneous.

## Foreign Correspondence.

LONDON, 14th March, 1851.

The Crystal Palace exhibits a scene, every day, of great interest and excitement. The packages of British articles, and those of other nations which have arrived in London already, are neither few nor far between. Another test of the strength of the galleries has taken place, whereby every square foot was tested with the rolling weight of 100 lbs.: There was not the least sensible vibration. The corps of sappers and miners belonging to the army, attend to the unloading and arranging of bales. They are a very expert set of soldiers, being mostly all able machinists, carpenters, &c., and are educated and ingenious.

The Commissioners of the Exhibition have appointed thirty juries—one for each section. There are to be 270 jurors—135 of them to belong to other nations than England. If any exhibitor accepts the office of juror, he then ceases to contend for a prize. The juries are to commence their duties on Monday the 12th of May. Each jury is to consist of about an equal number of foreigners and British subjects. The Commissioners are decidedly of opinion that medals should be awarded for articles of merit upon their individual merit, without the competition question, and independent of the degree of merit as standing in competition with other articles. The juries are empowered to take evidence and call in adventitious aid. The Royal Agricultural Society is to test the merits and decide upon the agricultural implements. When the Commissioners are not sitting, all important business is to come before Prince Albert. The gentlemen under whom the whole management is placed, are men of celebrity, and some of them of world-wide fame.

One article in the shape of a smoke damper and fire extinguisher, has come up from Liverpool, and is worthy of attention in the United States. It is intended to be built in the chimney of every house, and consists of a chimney arch, bevelled inwards and upwards, to receive a wedge-shaped brick arching, thus allowing the cold air of the apartment to mingle gradually with the heated air in the chimney; a frame is attached to this, determining the size of the mouth of the chimney; from this frame spring two supporters of the frame of the damper, which can be put in and taken out at pleasure; and, as these supporters guide the brick-setter, they secure those gradual contractions in forming the throat so essential to a good going chimney. The second modification is contrived to obtain those gradual contractions which may have been neglected at first. A frame-work is prepared as above, for fixing in, determining the size of the mouth, and carrying the supporters for the damper, which are to be built up behind, and rendered as effectual as if done at first. A small rod at the back of the grate, connected with a chain passing over a pulley, and moved two inches, regulates the damper to the full size of the chimney, or renders it perfectly tight, thus effectually stopping all back smoke when no fires are used, and, by shutting it, in case of the chimney being on fire, will speedily extinguish it. Everything is important that adds to domestic comfort; and surely it is no little relief to get quit of a smoky chimney.

The Crystal Palace viewed by moonlight is a most imposing structure. The glitter of the moons pale beams on the glass sides of the building, set off by the graceful and ornamented shadows of the arched iron work, impresses the mind with feelings which carry the imagination to some vast oriental palace far away in a sunny clime. EXCELSIOR.

## A Barn of Glass.

An English farmer intends to cover a large barn, 110 feet long, 28 feet wide, at his farm, at Heavitree, with a glass roof, after the model of the palace of glass. The expense will not be over two-thirds of the cost of slate, and he anticipates several advantages from the novel roof: among others, it may be applied to the drying of corn during a wet harvest.

## Human Life at the East vs. Human Life at the West.

The Economist published at Cannellen, Indiana, has a very excellent article upon the subject set forth in the above caption. It speaks of the feelings of the people at the East in reference to the supposed fate of the Atlantic, and the joy that was manifested at her safety, and then it says:—

"On the morning of January 27th, or one month after the sailing of the Atlantic, an inland steamer was ascending the Mississippi river, bearing on board more than two hundred souls. The darkness of night had not yet been interrupted by the breaking of day. Onward the steamer kept its way, steaming with giant power the rolling of the "Father of Waters." Not a note of danger was breathed—no one saw the angel of death flapping his dismal and shadowy wings over the ill-fated vessel. But the unseen hand of destruction at last gave the blow, and in an instant more than one hundred and thirty unfortunate human beings were launched into the great hereafter. The muddy waters of the intruding stream drowned even the death-shrieks of those who awoke only to enter upon the sleep "that knows no waking." That boat was the John Adams.

Yet where have been heard the expressions of sympathy, anxiety, and regret, such as were called forth by the circumstances connected with the Atlantic? Where that intense excitement which indicates the deepest feelings of our nature? Alas, with the waves that closed the dying, almost subsided every thought or care for those who perished. Death snatches his victims by scores and hundreds upon our Western waters, and yet his bloody fingers alarm not those who can stay his ravages.

Ye men of the West, how many hecatombs of human beings will ye offer up to appease the appetite of the Destroyer?

But is not human life not as valuable at the West as at the East? Are not the affections and the social qualities of persons here, of the same kind and value with those at the East? Are not parents and children, brothers and sisters, bound together here by the same cords of love that unite them there? Why then this difference between regret for calamities here, and calamities there?"

## Novel Ice Explosion on Lake Champlain.

An extraordinary disruption of ice, according to a well authenticated account lately published in the Burlington Free Press, occurred in the solid and before unbroken field of ice in Champlain, near Alburgh, during the night of the 16th of February, 1851.

On that morning a hole or break in the ice of five or six rods in extent each way, was discovered by M. F. Mott, an intelligent gentleman residing on the shore, who, proceeding to the spot, found the broken space filled with pieces of ice; while at distances of seven and ten rods, out on the unbroken field, lay two large solid floes or blocks of ice, seventeen inches in thickness, and measuring from two to three rods in width, the largest being estimated to weigh more than twenty tons.

The explosive force which thus threw these immense floes of solid ice from their beds to distances varying from one to nearly two hundred feet, must have been tremendous, equaling that of many barrels of gunpowder.

It seems there had been a violent wind on the night in which the event is supposed to have transpired, which, after blowing from the South during the evening before, suddenly veered and blew in a fierce squall from the West. And we can think of no other more satisfactory solution of the mystery, than that it was occasioned by the confined air which was driven by the force of the wind in under the ice at some more or less distant crack or open glade, and forced forward by the first impulse and the undulations of the main body of the ice, till reaching this spot near the shore that prevented its expansion, it became compressed to such a degree as to occasion the explosion in question.

Be that it may, however, the incident constitutes an interesting phenomenon connected with the ice in that lake, and is well worthy of scientific investigation. Will the editor

of the Scientific American give us his opinion of the remarkable occurrence?—[Greene Mountain Freeman.

[Our contemporary offers the only reasonable solution of this phenomenon. It is well known that confined air frequently splits up the ice on our northern lakes in cracks a number of feet wide and miles in length. The sound of the rending of the ice is like that of the rolling of distant chariots and is heard at the distance of many miles.

## Bad Water, and the Western Fever.

A correspondent writing to us from the western part of this State, says he has lately been devoting some time to the study of the causes of fever in the western parts of our country. The first inquiry he made was, "what substances are contained in the waters at the West that render them so unhealthy?" And what substances would purify it? He believes that the prevailing substance is ammonia, which is produced by the decomposition of vegetable and animal substances, and is a gas that water will absorb in considerable quantities. He believes that filtering the water through substances for which the gas has an affinity, would be the means of purifying it and making it healthy.

There can be no doubt of the fact that bad water is the fruitful cause of many diseases. It has generally been remarked that the people who inhabit districts, where the water is pure, enjoy good health, and exhibit the same in their countenances. There can be no doubt that water containing ammonia is injurious to health. In the East Indies it is customary to boil the water intended for drinking, and then expose it to the atmosphere until it cools. The ammonia, being very volatile, is expelled by boiling. Lime is an absorbent of ammonia, and so is plaster of paris and charcoal. It is wonderful how small a quantity of any deleterious matter, in food or water, causes disease; but the atmosphere is as often, if not oftener, the element whereby disease is communicated to the frame. Were we living in the West, and suspected that the water we used contained deleterious substances, we would filter it through sand and clay, and perhaps some charcoal. The charcoal, unless employed as the upper layer, carries down some of its particles and discolors the water, but this can easily be prevented, and the water will appear like crystal. Filtered water should always be dropped from some height and exposed to the air before it is drank; this is to absorb air, for, without air, it has a rain-watery taste. We believe that too little attention is paid to the purifying of the water that is used for cooking and drinking; and were more attention paid to the purifying of it, some places that are now famous for some diseases, would soon know nothing about them but as things that were.

## A Patent Claim.

MESSRS. EDITORS—In your notice of my disclaimer, in your paper of the 22nd inst., you state that it is one of the most extensive that has come within your notice, and that the papers were originally surely made out with a great disregard to correctness, &c. A word of explanation would seem to be due to the solicitor who drew the papers, as well as to myself.

Attached to my specifications are two drawings, the one being a colored drawing representing the machine and several parts arranged for operation, upon this drawing are represented, or partially represented, the several things disclaimed. The wheel, figure 8, the invention of which is disclaimed, is a modified form of the machine, which may be used instead of the present arrangement mentioned in the specifications, you will observe that I do not disclaim the arrangement when thus used, but simply the invention of the wheel. The collar, with sliding tooth, cord pulley, and treddle, are partially represented on this colored drawing, but they are not referred to in any manner in the specifications of my patent, nor do they, as I believe, form any part of it.

The other drawing, and the one to which the specifications mainly refer, is a lineal drawing, and neither of the things disclaimed are represented thereon, but only so much of the machine as is my invention; it is proper

also to add that there is not a single word in the claim of my patent referring in any manner to the several things disclaimed, nor do I think such an inference could be drawn from the claim or specifications, and I do not think that a disclaimer was at all necessary, but as it was supposed by some that such a construction might possibly be put upon them, I was induced, for greater caution, and to guard against misconstruction and mistake, to disclaim the matters, although I thought it wholly unnecessary. Please set the matter right in your valuable journal, and oblige,

A. J. WILLIAMS.

Utica, March 24th, 1851.

[Friend Williams would see that our comments were made in no unfriendly spirit. We are glad to see such an explanation of the matter, and we believe that Mr. Williams will now consider that we have done a good act in drawing it out.

## Geological Discovery.

The following interesting geological discovery has just been made by General Cullen at Cochise:—A question having been raised as to the relative positions of that most mysterious of rocks, laterite, and the shell limestone on which in this quarter it was said to rest, General Cullen caused a well to be dug from the top of the cliff, about 40 feet above the level of the sea, downwards to this depth; it was about 80 feet inland. At the depth of 37½ feet he came to shell limestone—a well sunk near the sea 84 miles to the south-west gives precisely the same results. The limestone is one of the most modern of our formations. The shells contained in it seem all recent—the lignite and fossil remains are close by. The supposition that the laterite is nothing else than decomposed granite, or trap *in situ*, is thus completely and at once disposed of; by knowing what it is not, we may by-and-by be led to infer what it is. It is not every one who is in a position to dig a well 40 feet deep through a solid rock to ascertain the relation of two sets of strata.

## The Dry Dock at Pensacola.

The floating Dry Dock, constructed by Gilbert & Secor, on the Balance plan, at the Pensacola Navy Yard, was launched on the 19th March, without the slightest accident. This dock is capable of receiving a steamship of 6,400 tons or double the tonnage of the Collins' ships. Its dimensions are, length 350 width 105 feet.

A very ancient ship was found, a month ago, in the old port of Jaffa, in Syria. It is calculated that this wreck, which is, nevertheless, in a very excellent condition, is one of the ancient galleys of the country when it was governed by the Romans. A Dr. Johnson, who was present when this curiosity was discovered, obtained from the government consent to have it taken to London. Perhaps it will be seen at the exhibition.

## The Late Hungarian General Bem.

At a public sale held at Aleppo on the 22d of January of a portion of Bem's effects considerable anxiety to obtain *souvenirs* of the late general. An odd cotton sock, worth 4d., sold for \$1; a cotton coat, worth 25s., sold for \$12; a pair of fur-lined inexpressibles, worth 30s., sold for \$30.

Capt. Henry Shreve, the early steam navigator of the Mississippi, died at St. Louis on the 7th inst. He commenced flat-boating in 1808, and in 1814 took charge of a steamboat, the third built on the Western waters. He was the man who broke up the Livingston and Fulton western monopoly. He was the inventor of the Steam Snag Boat.

The Morning Post says that unhappy Londoners positively live on shams and delusions. "Our milk contains everything but milk, our bread is we know not what, our water full of fighting devils of most ferocious aspect, our white pepper consists chiefly of ground rice, and our black of iron filings and the sweepings of the Custom-House floors, and the component parts of coffee are chicory, burned beans, and roasted wheat, colored with burned molasses."