## $\mathfrak{Z x i e n t i f i c} \mathfrak{A l m a x i c a n .}^{\text {. }}$



Foreign Correspondence.
London, Sept. 12, 1851.
The gratifying news to Americans has arrived here, that our little honorable voluntary expedition fitted out for the search of Sir John Franklin has discovered the first camping ground of the crew of the Erebus. The graves with the names of the deceased on them has been sent to the Lords of the Admiralty, by surgeon Kane of the expedition.

With respect to the lock controversy, we are glad to hear that Messrs. Bramah intend raising no captious objections as to the award of the arbitrators, having determined to pay Mr. Hobbs the 200 guineas reward offered by them. We hear that the lock exhibited by Mr. Hobbs is itself to be immediately teoted by an English mechanic.
The English lock makers especially Chubb \& Son, have betrayed a mean and despicable spirit. After Mr. Hobbs opened their lock, spirit. After Mr. Hobbs opened their
they wrote the following to the Times:
"It is stated that Mr. Hobbs, the American pick-lock, accepted the challenge we had given him to try his skill upon one of our locks, and has succeeded. Will you allow us to state that this is wholly false, as we have twice challanged him to a fair trial, and he has refused in both cases." Mr. Hobbs could not remain silent before such a gross falsehood, and he immediately sent the following documents to the Times which were published :-Sir-I would gladly abstain from offering ary statement of mine upon the present position of what is called the "Lock Controversy." In consequence, however, of a note signed "Chubb \& Son, which appears in your paper this morning, I feel it a duty to myself and the public to put you in possession of two documents in reference to the alledged picking of one of Messrs Chubb's locks by me, them in your columns. After perusing them them in your columns. After perusing them
it will be for the public to determine how far it will be for the public to determine how
I have been successful in picking their lock.
I have been successtul in picking their lock.
Your obedient servant, A.C. Hobss. Crystal Palace, Sept. 3.
[Enclosure No. 1.]
Gentlemen-An attempt will be made to open a lock of your manufacture on the door of a strong room at 34 Great George street, Westminster, to-morrow, Tuesday, at 11 o'clock A. M. Youare respectfully invitad be present to witness the operation.
Yours respectfully, A. C.Hоввs.
"American Department, Crystal" Palace, July 21 .
"To 'Messrs Chubb \& Son, St. Paul's
Churchyard. Churchyard.
"N. B.-Messrs. Chubb took no notice of this communication.

## [Enclosure No. 2.]

London, July 22, 1851.
"We, the undersigned, hereby certify that we attended with the permission of Mr. Bell of 34 Great George street, Westminster, an invitation sent to us by A. C. Hobbs, of the city of New York, to witness an attempt to
open a lock throwing three bolts, and open a lock throwing three bolts, and
having six tumblers, affixed to the iron door of a strong room or vault, built for the depository of valuable papers, and formerly occupied by the agents of the South-Eastern Railway Company; that we severally witnessed the operation, which Mr. Hobbs commenced at 35 mi nutes past $11 \mathrm{~A} . \mathrm{m}$., and opened the lock within 25 minutes. Mr. Hobbs having been requested to lock it again with his instruments accomplished it again in the short space of 7 minutes, withoutthe slightest injury to the lock or door. We minutely examined the lock and door (having previously had the assurance of Mr. Bell that the keys had never been accessible to Mr. Hobbs, he having had permission to examine the keyhole only.) We found a plate at the back of the door with the fol-
lowing inscription:-"Chubb's new patent (No. 161,461,) St. Paul's Churchyard, London, (No. 161,461,) St. Paul's
maker to Her Majesty."
Mr. Hardley, 26 Great Earl street
Mr. William N. Marshal, 42 Charing cross.
Mr. W. Armstead 35, Belitha-villas Barnsbury park.
Mr. G. R. Porter, Putney-heath. $\stackrel{\mathrm{Mr}}{\mathrm{Mr}} \mathrm{c}$

Mr. A. Shanks, Robert street, Adelphi Mr. T. Shanks, Robert street, Adelphi. Col. C. W. Clifton, Morley's Hotel. Mr. Elijah Galloway, 42 Southampton buildMr.

Mr. Paul R. Hodge, 8 Adam street, Adel-
Mr. Charles H. Peabody, 1 Norfolk street Strand.
I am thus particular about these facts, not only for presentinformation, but for future reference; as the time may come when the efforts of Mr. Hobbs will be disputed here when his back is turned, but with this testimony in neiled to the table.
Among the diurnal experiences of the exh bition none are more curious or suggestive than those which its police arrangements furnish. So excellent have those been through out, that the vast and valuable amount of property collected has been minutely inspected by several millions without the occurrence of a loss by theft worthy of the name. Such vigilant superintendance is unprecedented, and reflects the highest credit upon the efficiency of the body to whom the safety of the Crystal Palace and its contents is intrusted. So well Palace and its contents is intrusted. So well
is the place protected that the swell mob have not once dared to attempt a concerted action in the interior, and where pocket-picking has been tried it has almost invariably been by clumsy performers from the country "singlehanded." Their operations at once attract the attention of some sharp-sighted detective, and while they fancy themselves in perfect security they are suddenly laid hold of and marched away to the station, where the persons they have plundered soon follow to idenify and redeem their property.
A great number of things have been lost and found in the exhibition, and it was remarked that the number of articles belonging to frmale naranhernalia greatlv nredominator
some of these being of a kind which it seemed almost impossible to drop or leave behind accidentally.
Of all of the stray property found at the exhibition and handed over to the police for the discovery of ownership, the most remarkable and the most perplexing items come under the head of children. But for the intervention of the force the Royal Commission must have been by this time in the delicate predicament of assuming the paternity of some 80 or 90 boys and girls who had lost their parents or friends in the building. With such heavy fa-
mily cares, what would have become of the mily cares, what would have become of the
surplus? Happily the station-house at Prince's Gate provided a mode of escape, and thither all the stray little ones have been regularly sent; one boy was kept there all night, and a bed having been made for him with greatcoats, he was next morning forwarded to his relatives at Winchester. Another little fellow was taken to lodgings in Brampton Row, and was claimed there next day by his friends from Epsom. From 18 to 20 children have been forwarded to various parts of town by the constables going off duty, and no less than 60 have been clained at the station by their parents.
Verily this exhibit on has exhibited some of the strangest sights and acts ever witnessed in the history of the world.
With reference to the removal of goods With reference to the removal of goods
from the exhibition when it closes, it has been from the exhibition when it closes, it has been
determined to leave exhibitors almost entirely to themselves in that matter. Each must look after his own property, and get it removed as speedily as possible. The two blank days intervening between Saturday the 10th and Wednesday the 15 th of Oct., will be devoted to the clearing of space of packing operations by the removal of carriages and such like bulky objects. During that quiet interval, also, jewellers and silversmiths will beallowed to take away the yaluable objects contributed by them.

Excelsior.

## For the Scientific American.

Curious effects of Metallic Vibrations. I have noticed singular effects from the vibration of metallic substances, which may be tific American. When holding a small rod of hardened steel at nearly a direct line with the diameter of a grindstone going at a high speed. the vibrations will sometimes produce a shrill
piercing sound, and if the steel be then held through the top board of the bench, in which in the hand, it, the hand, will be burned as is a semi-circular plate with a curved slot really as if grasping a hot iron, and yet the through it, and fixed to the said bottom board; steel will be perfectly cold. I have lately the curved slothas flanches on its sides which burned my hand in this way so as to feel the : form a semi-circular inclined plane, fitting in effect for a day or two: the heat is not produ- ithe recess of the shank of the anvil, as spoken ced by friction, for the burning effect is not of above, and bearing against the upper surface produced except the rod is held at a suitable of the shank in the recess, so that when the angle to make it vibrate; and it will not pro- semi-circular plate is turned, the inclined duce the effect if it is constantly held in con- plane draws down the shank and holds the tact with the stone.
Cobalt, Ct.
L. P.S.

The Patent Ofllce-.-Its Architect.
In the article published on page 387, Vol. 6, illustrated with diagrams, by Mr. Robert Mills, Architect, exceptions are taken to the statements which were made in the article published by us in No. 20 of the same volume. Knowingly we never do injustice to the claims of any man, and we would not, on any consideration, willingly do injustice to Robert Mills ; but having leisure this week to look over some documents in our possession, we proceed to make a few statements which appear to bear out the alledgments in our article referred to. Mr. Mills states that the Bill, as passed by the Senate, for the erection of the Patent Office, contemplated "a brick building with wooden floors;" but the Committee of the House, who reported in favor of the Bill, uses this language, "The Committee on the Patent Office, having approved of the plan submitted, among others, by Wm. P. Elliot. for a fire-proof building, and having framed the bill making the appropriations for the erection of the same, upon the estimates and details furnished by him, do therefore recommend his plan for adoption by the President of the United States." This committee consisted of Gorham Parkes, James Harper, and Samuel F. Vinton. The Committee of the Senate, of which the Hon. JohnRuggles was the Chairman, concurred in the above on the 4th of :Iulv 100. unu aays atterwards
tren, Jackson signed the bills for the Treasury and Patent Office Buildings, using this language -"The plans hereby adopted, which are, in their general outlines, to be, as to the Treasury Building, that p annexed by said Mills, and as to the Patent Office that annexed by said Elliott." Mr. Mills acknowledges that he followed substantially the outline of the plan approved by the President, but that a perspective of the whole facade was afterwards made at his office for exhibition. This we do not dispute; but plans of the various floors made by Mr. Elliott, with vertical, longitudinal, and transverse sections, and a perspective view, used to be (if they are not there yet) in the Patent Office. By an Act of Congress, passed in 1837, Mr. Elliott was paid $\$ 300$ for drawings of the Treasury and Patent Office Buildings. These public documents would seem to render the statements in No. 20 incontrovertible.

## New Window Sash Fastener

Mr. J. B. S. Hadaway, of Uxbridge, Norfolk Co., Mass., has invented and taken measures to secure a patent for a very ingenious and beautiful fastener for windows. Quite a number of window fasteners have already been brought before the public, but we have seen none like this: there is a small box cast, with
a neat short handle in it attached to a small via neat short handle in it attached to a small vi-
brating plate catch, and this is puton the window sash, with the lever handle at the inside and the catch acting on the window frame (out of sight) to retain the window at any point. A spring in the small box makes the catch self-acting so as to keep it in its proper place and position, and all that has to be done is to touch the small handle spoken of, when it is desired to shove the window up or draw it down, when it becomes free and the window can be moved. There is one thing about it, catch it must, and moved out of place it cannot be, unless a force is applied to the handle it is a sure and a very neat fastener.

## Improvement In Securing Anvils like tools to Benches.

Mr. John Wright, of Rochester, has taken measures to secure a patent for an improvement, which he has recently invented, to sebenches. He employs a vertical shank attached to the bottom of the anvil; said shank orming a cut around it near its lower end
anvil firmly to the bench. It is a very simple and complete method of securing such tools to benches, and it deserves attention.

## Improvement in Picking and Furrowing Min

Messrs. S. W. \& R. M. Draper., of Boxborough, Middlesex Co., Mass., have invented and taken measures to secure a patent for useful improvements in picking, furrowing, and dressing mill stones of every description.They employ a machine having a vibrating shaft, (the motion of which is communicated by a cam) which carries a hammer and pick by which the stone is operated, the said hammer being capable of sliding along the shaft, the said shaft and frame being adjustable to admit of the hammer and pick moving in various directions across the stone, the pick being capable of adjustment to the hammer to vary the position of its edge while the strength of the blow is regulated by springs applied for that purpose.

Passages of the Atlantic Mail steamers... euarter from July 2 to Sept. 28, 1851 . nd July, B.), arrived at N. Y., O Wednel 21st June, at 2 P. M.—passage 10 d .20 h .
Baltic (A.), arrived at N. Y., on Saiurday, baltic (A.), arrived at N. Nuly, at $5 \frac{1}{4}$ P. M. Lett Liverpool, June 5th July, at $5 \frac{1}{4}$ P. M. Lett Liverpool, June
25 th, at $63-4$ P. M.-passage 9 d. $223-4 \mathrm{~h}$. 25th, at 6 3-4 P. M.-passage 9 d. 22 3-4 h.
Asia (B.), arrived at N. Y., July 16th, at 8 \& Asia (B.), arrived at N. Y.. July 16th, at 8 8.
A. M. M. M. Lussage 10 d .16 h .

Pacific (A.), arrived at N. Y., Monday 21st July, at 9 P. M, Left Liverpool, July 9th, at 5 1-4 P. M.—passage 12 d .3 3-4 h. Broke her port engine when 8 days out, made the rest of the passage with one engine.
Niagara (B.) arrived at N. Y., July 31st at 41-2 P. M. Left Liverpool 19th at M.-passage $12 \mathrm{~d} .41-2 \mathrm{~h}$.

A tlantic (A.), arrived at N. Y., on Sabbath, 3rd August' at 6 A. M. Left Liverpool 23rd July at M.—passage 10 d. 18 h .
Arctic (A.), arrived at N. Y., on Monday, 11 th August. at 7 A. M.-passage 11 d .18 h . Africa (B.), arrived at N. Y., Tuesday evening, August 12th, at 6 P. M.-passage trom Liverpool 10 d .5 h .
Baltic (A.), arrived at N. Y., Saturday, Aug. 16 th at 6 A . M. Left Liverpool at 20 m . past 4 P. M. on the 6 th—passage $9 \mathrm{~d} .132-3 \mathrm{~h}$., the astest passage ever made across the Atlantic. Asia (B.) arrived at N. Y., Thursday, August 28th, at 6 P. M. Left Liverpool 16th at $1 \mathrm{P} . \mathrm{M}$.-passage 12 d .5 h .
Atlantic, (A.), arrived at N. Y., Sept. 1st, at5 A. M. Left Liverpool 20th Augustat 3 P. M. -passage 11 d .14 h .
Niagara, (B.), arrived at N. Y., Thursday, 11th Sept., 41-4 P. M. Left Liverpool 30th August at M.—passage $12 \mathrm{~d} .33-4 \mathrm{~h}$.
Pacific (A.), arrived at N. Y. Sabbath, Sept 14th at 8 1-2 A. M. Left Liverpool at Sept 14th at $81-2$ A. M. Left Liverpool at
M. 1-2, on 3rd,-passage 10 d .16 1-2 h. reported M. 1-2, on 3rd,-passage $10 \mathrm{~d} .161-2 \mathrm{~h}$. repor
to have been below on previous evening.
thave been below on previous evening.
Africa (B.), arrived at N. Y., on Wednesday, 24 th Sept., at 7 A. M.-passage 10 d .18 h . 40 minutes.
Baltic (A.), arrived at N. Y., Sabbath, at 71-2 A. M. Left Liverpool Sept. 17th-passage 10 d .23 h .50 minutes.
It will be observed that the Asia, which had before the last quarter been considered much faster than the Africa, has been beaten by the latter; in fact, the Africa has shown herself to be a very fast sailer, having made her last passage in shorter time than the Baltic; but her shortest passage, 10 d .5 h ., was beaten by 16 h . by the Baltic's shortest; but next to the Baltic, she has made the best passages during the last quarter.
The Baltic made her three passages, this quarter, in 30 d .11 h .15 m . The Africa her three in 31 d .19 h. , a difference in favor of the Baltic of 1 d .7 h .45 m .
We shall review the number of passages
made in one year in a subsequent article.

