

Many of the articles are such as have obtained the sanction of learned societies in Europe and America. The authors of many of the inventions and improvements recorded in the volume, have been honoured with medals and other rewards for their ingenuity, bestowed by gentlemen fully competent to appreciate their value. The foreign articles are derived principally, from the following respectable sources. The Transactions of the society for the encouragement of Arts, Manufactures and Commerce; Tillock's Philosophical Magazine; Nicholson's Philosophical Journal; The society of Agriculture for the department of Seine; the Reportery of Arts; retrospect of discoveries; Annales de Chimie; the Bath and West of England Society; Journals of the Royal Institutions of G. Britain; papers of the commercial board of Agriculture; Aikin's Athenaeum; Annales des Arts et Manufactures; Johnson's History of animal chemistry; Bibliothecque Physico; Economique; the transaction of the Economical society of Leipsic; Hunter's Geographical Essays; The Journal de Physique; Bulletin des sciences des lettres et des Arts; Journal des Mines; The annals of Medicine; the Decade Philosophique; the Translations of the Economical Society of Petersburg; and Translations of the royal Academy of Stockholm.

Among the inventions described in this work, for which the authors received premiums from foreign societies, are, a machine for grinding colours; description of a wheel drag; implement to enable shoemakers to work in a standing position; cheap engine for raising water; apparatus for driving copper bolts into ships, and a method of relieving cattle or sheep when they are hoven or swollen.

Among others which appear to possess great utility, are, a process for watering hemp; purification of fish oil; on steam as a vehicle for conveying heat; on bleaching powder; Dutch method of preserving herrings; a cement for preserving vessels from worms; on raising and dressing hemp; on the form of animals; on the analysis of soils; on making glue; on pruning orchards; on promoting the growth of young fruit trees; on grass land; on bleaching cotton; on preparing radical vinegar, &c.

In that part of the work which is expressly devoted to American improvements, we have a sketch of manufactures, manufactories, bridges, canals, patent inventions, &c. The most prominent articles are, an account of Trenton bridge; of Schuykill bridge; artificial mineral waters; the Lehigh coal mine; Mr. Evan's improvements in steam and mill machinery; the Pennsylvania Academy of fine arts; the Philadelphia museum; the pneumatic cock and hydrostatic blow pipe, by Mr. Robert Mare, jun.

The English mode of forming iron rail ways is described at length, p. p. 236, 239, 282.—From the latter we learn that it has been found by experiment that "one horse, value 20l. on a declivity of an iron road, five sixteenths of an inch in a yard, drew 35 tons, overcoming the vis inertia with ease."

"In a great many cases (says the author of the article referred to) it will occur, where a rail way, either connected with a canal or not, will be the mode of a cheaper conveyance than water would be. It clearly appears in the case of the Ashby canal, that their rail way, which is now executing, and a double one will cost two thirds less than a canal would have done in the district of their rail way, where the ground for a canal is unfavourable, and furnish the article of lime, which it is chiefly intended to convey, at two fifths less than a canal would have done. A rail way is more certain than a canal, being more easily repaired; neither do frost nor dry seasons affect the trade thereon."

In most parts of the United States the vicissitudes of the seasons, which affect canals, are greater than in England, and the reasoning in favour of iron rail ways will, of course, apply still stronger in this country than in G. Britain.

From the foregoing slight sketch of the "Register of Arts," the utility of the work is obvious, and will, it is hoped recommend it to the attention of the publick.



"He comes The noisy herald of a busy world."

FOREIGN.

The British brig Tom Barry, Capt. M'Dougall, arrived at New-York on the 6th instant in the short passage of 36 days from Scotland, by whom the Editors of the New-York Gazette have received London and Glasgow papers to the 27th of August.

The London Gazette of August 20, contains the following dispatch from Lieut. General the Earl of Chatham to Viscount Castlereagh, dated Middleburg, August 16 —

My Lord—I have the honour of acquainting your lordship, that, on the 12th instant the batteries before Flushing being completed, (and the frigates, bombs, gun-vessels, having at the same time taken their stations) a fire was opened at half past one, P. M. from fifty-two pieces of heavy ordnance, which was vigorously returned by the enemy. An additional battery of six twenty-four pounders was completed the same night, and the whole continued to play upon the town, with little or no intermission, till late on the following day.

On the morning of the 14th instant, about ten

o'clock, the line of battle ships at anchor in the Dutch passage, led by rear admiral Sir Richard Strachan, got under weigh, and ranging up along the sea line of defence, kept, as they passed, a most tremendous cannonade on the town for several hours, with the greatest gallantry and effect. About four in the afternoon, perceiving that the fire of the enemy had entirely ceased, and the town presenting a most awful scene of destruction, being on fire in almost every quarter, I directed Lt. Gen. Sir Eyre Coote to send in to summons the place; Gen. Monnet returned for answer, that he would reply to the summons as soon as he had consulted a council of war; an hour had been allowed for the purpose, but a considerable time beyond it having elapsed, without any answer being received, hostilities were ordered to recommence with the utmost vigour, and about eleven o'clock at night, one of the enemies batteries advanced upon Sea Dyke, in front of Lieut. General Fraser's position, was most gallantly carried at the point of the bayonet, by detachments from the 36th, 71st and light battalions of the king's German legion, under Lieut. Col. Perk, opposed to great superiority of numbers; they took forty prisoners, and killed and wounded a great many of the enemy.

I must not omit to mention, that on the preceding evening, an entrenchment, in front of Major General Graham's position, was also forced, in a manner equally undaunted, by the 14th regiment and detachments of the king's German Legion, under Lt. Col. Nicholls, who drove the enemy from it, and made a lodgment within musket shot of the walls of the town, taking one gun and thirty prisoners.

About two in the morning, the enemy demanded a suspension of arms for forty-eight hours, which was refused, and only two hours granted, when he agreed to surrender according to the summons sent in, on the basis of the garrison becoming prisoners of war.

Lord Chatham proceeds to state that articles were discussed and settled. Though the French were in a situation to hold out no longer, Lord Chatham states that the enemy having broken the dykes and flooded the country, rendered a speedy surrender necessary to the British.—About 6000 regular troops were captured at Flushing.

A subsequent return of Lord Chatham states that the towns of Zeirikee and Bowershaven, and the islands of Schowen and Duiveland have also surrendered. In England it is considered very questionable whether any thing more can be effected either in the Scheldt or on the coast. As stores and ordnance are preparing to be sent off at Woolwich it is conjectured by some the expedition will proceed to Spain.

It was believed in London from different accounts received from the continent, that Gen. Armstrong was at Amsterdam, having failed in his attempt at negotiation, and that he was desirous of returning to America.

The following is the copy of a letter brought over by the Ox Packet, dated Flushing, 18th Aug. 1809.

"This place was not altogether evacuated by the French until this day. A great part of the town is destroyed, and thousands of the inhabitants have perished. The Stadthouse, a large church, and several other public buildings, have been consumed.—Most of our ships of war have proceeded up the Scheldt, and Sir R. Strachan will follow with the remainder to-morrow. There are ten French ships of the line and fifteen frigates, with about fifty gun-boats, (as we now learn) beyond fort Lillo. There are also a line of battle ship and two smaller vessels building in Flushing."

Letters from Paris, of the 8th inst. speak of the probability of a decree, interdicting all communication with America.

The mysterious veil which has covered the negotiations between Austria and France, is at length drawn aside, and an appeal to arms has been once more resolved upon by the Emperor Francis. This important intelligence has certainly reached his majesty's ministers. Archduke Charles no longer commands the Austrian armies, and Prince John of Lichtenstein has been declared Generalissimo, with full powers. An official communication declaring this change, and at the same time announcing the determination of the Austrian government to persevere in the contest at all risks, rather than yield to the arrogant demands of Napoleon, was on Sunday evening received by Mr. Canning. This we state as a fact, which cannot be contradicted.—The Day.

Hamburgh accounts of August 16 are similar to the above.

NAPLES, July 27. The British have, very unexpectedly, received orders entirely to evacuate the islands of Illicia and Proseida. The troops and the sick are embarked. The Sicilian Prince, Leopold, who was on board the fleet, and the Dukes of Arcoli and Camera, two Neapolitan emigrants, have by this time returned to Melazzo. It would appear that considerable differences had taken place between them and General Stuart. Two British regiments had proceeded to Malta.

Paris accounts of August 10th state that a treaty of peace had been signed with Austria, and that preparations were making in that city for the Emperor's reception. This seems much more likely to be true than the accounts that hostilities had recommenced.

The 30th Bulletin, Dated Vienna, July 30.

The house of Austria took the field this campaign with 62 regiments of the line, 12 regiments of cavalry, 12 regiments of grenadiers, four free corps or legions, making in the whole 310,000 men; 250 battalions militia (landwehr) commanded by ancient officers, exercised 10 months; 40,000 men of the Hungarian insurrection, and 50,000 horse artillery, & miners composing in the whole from 5 to 600,000 men. With this force the House of Austria supposed herself to be sure of victory. She entertained a hope of shaking the power of France, if ever her whole force were united. But her armies are not withstanding reduced to one fourth part of her original strength, while the French army has been increased to double the number it consisted of at Ratisbon.

The duke of Dantzie has entered Tyrol with 25,000 men. He has occupied Lofers, and disarmed all the inhabitants; he must by this time be at Inspruck. Gen. Thielman has entered Dresden. The duke of Abrantes is in Bayreuth, and has pushed his advanced guard to the frontiers of Bohemia.

French accounts state that they gained a decided victory in the battle of Talevera, that the British loss was immense, that they lost an entire Regiment of Cavalry, and were compelled to retreat. Their own loss is stated to be comparatively trifling.

Cuesta has resigned on account of his great age and infirmities—Wellesley has been appointed to command the Spanish army—Romana has been recalled on account of his violent oppressive conduct.

DOMESTIC.

The Lectures in William and May College, will commence on the 3d monday in October.

On Sunday the Bishop consecrated the Church of which the Rev. Mr. M'Kornick is Rector, in the city of Washington, and admitted a respectable number to the rite of confirmation. A brilliant audience attended, among whom were the President of the U. States and his Lady.

The Republican ticket for members of Assembly has prevailed in the States of Maryland & Vermont. Jonas Galusha is elected Governour of the latter. At an election in Philadelphia on the 11th instant Doctor Adam Seybert was elected representative to Congress by a great majority over Mr. Smith.

The diving-bell of Buckstown, Maine, continues to be successfully employed in raising articles from the ordnance brig, which we understand, lies in sixty feet water. The bell, which takes its name from its shape, is sufficiently large to contain two persons with ease. It is sunk with weights, and hoisted on a signal. The sides and top are perfectly tight; but it has no bottom, the air keeping out the water.—The persons who go down are supported on seats, till it descends to its object, they then proceed to work. The bell is accommodated with windows; and contains air sufficient to sustain a person one hour and thirty minutes. Subaqueous visits are often made by citizens of the towns on the banks of the Penobscot, for their amusement.

On the 26th of Sept. was had the first examination of the students of the Theological Seminary of Andover in Massachusetts. Thirty six students were examined and their progress in Theology and sacred literature was highly commendable.

This College to form ministers of the gospel, has been founded, and is supported by the subscriptions of individuals—one gentleman has subscribed to it fifty thousand dollars. Doctor Griffith, of New-Jersey, one of the most eloquent men in the U. States, has been appointed professor of pulpit oratory—all the professorships are ably filled.



THE GUILLOTINE.

A Song by Joel Barlow.

[As the political character and poetical talents of Mr. Barlow have lately undergone some discussion, the following may be acceptable as a specimen of both.]

God save the Guillotine
Till England's King and Queen.
Her power shall prove;
Till each anointed knob
Affords a clipping job,
Let no vile halter rob,
The Guillotine.
Fame let thy trumpet sound,
Tell all the world around
How Capet fell:
And when great George's pole
Shall in the Basket roll,
Let mercy then controul
The Guillotine.
When all the sceptred crew
Have paid the homage due
The Guillotine;
Let freedom's flag advance
Till all the world, like France,
O'er Tyrants' graves shall dance
And peace begin.

THE LADY'S MAN.

'Not all the favours coquettes show,
And smiles the fox is heir to,
Could tempt me to become a beau,
And feel as beaux appear to.'
No malice, no envy inspires
The bard, his advice to disclose;
The favour a fopling acquire,
Will never disturb my repose.
Tho' sad, he must always seem gay;
Tho' restless, appear at his ease,
Must talk when he has nothing to say,
And laugh when there's nothing to please—
Must never look shy, nor afraid:
Approve of nonsensical clatter,
And smile at whatever is said,
Good, bad, or indifferent—no matter.
If Nancy say, 'Cressus was poor,'
'Tis his to say so, and agree;
Or Charlotte 'two threes are but four,'
Correct, madam, just four they must be.
Should Susan remark, 'it is hot,'
His answer must be 'it is so';
If Mary observe, 'it is not,'
To her he consents and says, so.
Would any dispense with his mind,
Bow, wheedle, sigh, whimper and pray,
And hoodwinked be led by the blind,
To such, I have only to say,
Quit Paley and study to please.
Read Chesterfield's system of laws,
And then you may back at your ease,
In the sunshine of coquettes applause.

A SONG.

Like a very gallant, I will compliment all,
I'll leer and ogle the pretty,
Tell the short ones they're neat, the majestic they're tall,
And call all the homely ones witty.
Thus agreeable falsehood passing for truth,
I shall tickle their vanity snugly,
Talk of prudence to age, and of pleasure to youth,
And console with a flourish the ugly.
To the pale I'll on delicate lilies begin,
To the florid I'll hold out on roses,
Call squinting a leer, find a smile in a grin,
And proportion where chins kiss with noses.

ERUPTION OF MOUNT-ETNA.

MELAZZO, April 23, 1809.

Monday morning the 27th of March was very hot and foggy, and the wind nearly south, but shifting to the westward, towards noon it became quite cool, and we were much astonished at this change, for as it still continued

foggy, we could not perceive what we conceive to have been the cause of the fog; but in the evening, when the fog cleared up, a most tremendous eruption of Mount Etna presented itself to our view. A large blaze, which I can compare to the nothing but the continuation of the explosion of a ship; issued from the top of the mountain; lower down was a smaller blaze, but from it we discovered an immense stream of red lava pouring down, and the view of its course towards the foot of Etna was only excluded from us by the ridge of mountains which is between this place and Mount Etna. For several nights after the blaze continued, with different degrees of violence, and the lava appeared to have taken two courses, one towards Randazzo on our right, and the other towards Lingua Grossa on the left.—I can say no more of the eruption as it appeared from Melazzo; you must, therefore, endeavour to form an opinion of it from drawings which you may have seen of things of the kind, or from your own ideas of a thing too grand and awful for language to describe.

"Our English curiosity is so great, that I am sure more than half the army have already been to see this wonder of nature. I went with two brother officers. Our first day's march (for we were on foot) was to Franca Villa, and on the road to Lingua Grossa; next day we saw the foot of the lava, it was then passing over a vineyard, and seemed to menace with destruction the house of a Baron of Franca Villa; the house was abandoned, and the pictures of Saints hung on towards the sea—a mean to turn its course. By day the lava has the appearance of a heap of rocks and stones, of a colour rather like ink, and you see the fire every here and there thro' the cracks; a great deal of smoke proceeds from it; when close to it, one perceives it is all in motion, by pieces falling down and the huge stones rolling over, and constantly, though slowly, making its progress over the ground.

"Except just at the crater, the lava cannot be perceived to be in a liquid state, because, towards the foot of it, it is either all congealed and only impelled along by what is continually pouring out of the mouth of the crater, or what still remains liquid at the bottom, and that at the top congealed into immense masses, which have the appearance of rocks. This is the stream of which I before spoke as taking towards Lingua Grossa; thither we proceeded, and having refreshed ourselves set out on mules for the craters which are about six miles or rather more from it; that is, the lower plain, for the upper one is about fourteen miles further and near the summit of the mountain.

"There are thirteen craters all in a line above each other towards the summit; these as we saw them from Melazzo, all appeared one, and are quite distinct from the upper plain. I will not trouble you with the description of a crater, for they are found in the same manner by the ashes which are discharged, and have the same shape as I once before described, when I wrote to you an account of my visit to the top of Etna. The lowest was the only one which was burning with any degree of violence when we arrived, the others occasionally threw up perhaps a column of black smoke or some red stones, and the lava from them was on the surface cold, going on but slowly. Near the lowest crater was a rising ground covered with trees, whose branches were all knocked off by the stones which had been thrown from the crater, (which indeed was the case with all the trees in the neighbourhood, for the eruption is in the woody region;) but between where we stood and the crater was a stream of lava which had flowed from the lowest, just below the rising ground, having taken its course round it.

"We thought it practicable, and wished very much to cross this first stream, and so got on the rising ground to get a nearer view of the principal burning crater; the guides said that it was impossible, and would not go a step further; but we ventured on a little way, always stepping from one large rock to another (they were very hot and burnt our shoes) and at length got across. It was by far the hottest birth I ever was in; every now and then we saw an immense mass of liquid fire under our feet, and perhaps had to step across it, to get on from rock to rock; and once, just as I had put my foot on a large lump, which I thought firm, off it went and laid me on my side! I then felt it very hot, and you may be sure I lost no time to recover my footing. When we got across we were not content, but thought our excursion would not be complete without crawling up the side of the crater, to look into the very mouth of it. This we effected with some difficulty, it being very steep and almost up to our knees in hot ashes every step, but when we arrived at the summit, we were most fully repaid for our pains. I am quite at a loss to know what to compare it to! Just under our feet we perceived the lava which came out of this crater in a liquid state and in motion, which was perfectly perceptible, and increased every now and then as a fresh emission from the crater took place. Immense stones were thrown, in a liquid state, high in the air, and we watched them, and saw them constantly changing their shape as they fell. Nearest the aperture was a constant blaze of liquid matter, and accompanied by such a tremendous noise that we could not hear ourselves speak. We retired from this about sun-set, and again crossed the lava in safety. As it got dark the whole of the lava downwards appeared red, and the eruption appeared to double advantage.

"I find that my description falls very far short of the impression which this wonderful spectacle has left on my mind; but I have not