By the Solar System is usually meant, the Sun, with the planets and comets which revolve round him, at various distances, but in stated and invariable periods, deriving light and heat from his rays. Of the globes which compose this System, the Sun, by far the most conspicuous, and which is generally supposed to be an immensely large spherical body of fire, about a million of times larger than the earth, is placed in the centre, revolving on its own axis, once in twenty-five days, and, by its beams, dispensing light and heat to all the different planetary bodies, that are within the sphere of its attraction. The planets, in the order of their distances from the Sun, are commonly named Mercury, Venus, the Earth, Mars, Jupiter, Saturn and Herschel, with four lately discovered, moving in orbits between those of Mars and Jupiter, and of such inconsiderable size, in comparison with with the others, as to be called Asteroids. The names given them are Ceres, Pallas, Juno, and Vesta.

As the Earth, a globe as far as has been discovered, similar in all respects to the other planets, is inhabited by above eight millions of intelligent beings, and provided with means of life and enjoyment, suited to their natures, it is reasonable to conclude, that the others are also inhabited with beings capable of serving and adoring the great Creator, and of enjoying a portion of his munificence.

Bright legions swarm unseen, and sing, unheard
By mortal ear, the glorious Architect,
In this his universal temple, hung
With lustres, with innumerable lights,
That shed religion on the soul: at once,
The temple and the preacher! O how loud
It calls Devotion! genuine growth of Night!
Devotion! daughter of Astronomy!
An undevout astronomer is mad.

YOUNG.

A comparison of the planets which compose our Solar Sytem with the earth we inhabit, their sizes, and probable sources of accommodation and comfort, as these may be drawn from the most correct discoveries of astronomers, will tend to convince us that they are the habitations of reasonable, intelligent beings.

The diameter of Mercury, the planet nearest to the Sun, is less than one half that of the Earth (3100 miles) and his distance from the bright luminary, little more than one third that of the Earth, (37.000.000 miles). On account of his proximity to the Sun, and no spots appearing on his disk, his diurnal rotation on his own axis, or the length of his day and night, is unknown. He revolves round the Sun, and completes his year, in about eighty-seven days; and in his revolution, moves at the rate of 105,000 miles in an hour.

Venus, the planet next in distance from the Sun, is about one third nearer (68,000,000 miles) to that orb than we are, and nearly as large as the Earth. (Its diameter is 7500 miles.) The length of its day and night is 25 hours, 22 minutes; and its year occupies about 225 of our days. It moves round the Sun at the rate of 76.000 miles in an hour. "When this planet appears to the west of the Sun, it rises before him in the morning, and is called the Morning Star, and when it appears to the east of the Sun, it shines in the evening after he is set, and is then called the Evening Star. Venus is in each situation, alternately, about 290 days; and, during the whole of her revolution, appears, through a telescope, to have all the various shapes and appearances of the Moon."

Fairest of stars, lost in the train of night,
If better thou belong not to the dawn,
Sure pledge of day, that crownest the smiling morn
With thy bright circlet, praise him in thy sphere,
While day arises, that sweet hour of prime.

MILTON.

Fair Venus shines
Even in the eve of day; with sweetest beam
Propitious shines, and shakes a trembling flood
Of softened radiance from her dewy locks

BARBAULD.

After Venus, in order from the Sun, the next planet is the Earth, the diameter of which is 7,920 miles, and its distance from the Sun above Ninty-five millions of miles. Its diurnal motion is performed in twenty four hours, and its annual circuit round the Sun, in 365 days, 6 hours, and 9 minutes. During its motion in its annual orbit, it moves at the rate of 58,000 miles in an hour; which, though 120 times swifter than the speed of a cannon ball, is yet little more than half the velocity of Mercury in his orbit. Round the Earth, and at the distance of 240.000 miles from it, revolves the Moon, a secondary planet or satellite, giving light in the absence of the Sun, by reflecting his rays towards the earth. Its diameter is 2180 miles, and it attends the Earth in her progress round the Sun, revolving round her in a direction the contrary to that of her daily rotary motion. But the Moon will require a separate paper; and we therefore refer our remarks on its revolutions, beauty, and usefulness, to that occasion. "In her daily motion, or revolution on her own axis, the earth moves from west to east, which occasions an *apparent* motion of the heavenly bodies from east to west, in twenty-four hours."

The orbit of Mars, the next planet, is beyond that of the Earth. Its diameter is about 5000 miles; and its distance from the Sun, (145,000,000) nearly double that of the Earth. Its diurnal rotation is accomplished in 24 hours, 39 minutes; and it moves round the Sun at the rate of 35,000 miles in an hour, completing its annual revolution, or year, in (687 days) a little less than two of our years. "Mars sometimes appears gibbous, but never horned, like the Moon, which plainly shows that his orbit includes that of the Earth, and that he shines not by any native light," but by reflecting the rays of the Sun.

The four smaller planets, called Asteroids, move in orbits of various distances from the Sun, beyond the orbit of Mars. The largest of these is Pallas, which is about the size of our Moon, and revolves round the Sun at the distance of 288.000.000 of miles, in about four years and eight months. The time of its diurnal rotation is yet to us unknown. The others are so small, and so little known, that no account yet given of them can be generally interesting. Still, however, what has been discovered of them, demonstrates that they are worthy the wisdom of the Creator of all, in the rich variety of his works.

(To be concluded in our next.)

From the Literary Gazette, Oct. 24, 1819.

REVIEW OF NEW BOOKS.

SKETCHES OF AMERICA.—*A Narration of a Journey of 5000 miles through the Eastern and Western States of America; contained in eight Reports, addressed to thirty-nine English Families, by whom the Author was deputed, in June, 1817, to ascertain whether any and what part of the United States would be suitable for their residence, &c. &c.*—By H. Bradshaw Fearon, London.

UPON the emigration to America, which agitates so many minds, this is by far the most important publication which has yet appeared. The mission of the Author: the hopes and wishes of himself and his friends, who are, moreover, designated as "*the Friends of Civil and Religious Liberty;*" the tone of his writing: and, in short, every part of his conduct, and every syllable of his Reports, afford abundant proof of the bias with which he visited the United States, or, as he chooses to call that country, *par excellence*, on his arrival, "this Land of Liberty." This land to which he and his friends desired to transport themselves, in order to avoid the evils they apprehended were about to assail Great-Britain! But though these parties had not strength of mind, or clearness of intellect, sufficient to enable them to resist the contagion of gloomy discontent, and see beyond the shadow of temporary difficulty, they were not so wildly imprudent as to rush, blindfold, into a new and untried course, out of that wherein, if they felt inconveniences, they knew their extent; if they dreaded dangers, they were aware that, even at last, the remedy of flight was in their power. They wisely despatched one on whom they could rely, to examine personally into the advantages and disadvantages offered by America, to induce or deter from emigration thither from England. Mr. Fearon reached New York on the 6th August, 1817, and left that city on the 10th of May last, having made the tour indicated in the title-page. We have already noticed the disposition of his mind; he is democratic in all his opinions. Were any proof necessary, in addition to his pursuit and the title assumed by his associates, we can adduce it in a few lines: Mr. Alderman Wood gives him a letter of recommendation;—he thinks highly of and visits Cobbett;—he denominates the King of Spain "the infamous Ferdinand;"—and he speaks, as if of a historical truth, of "the murder of American prisoners at Dartmoor!"—"the disgraceful conduct of Admiral Cockburn at Havre de Grace!" and "the buccaneering expedition against Washington!"

This is not a person to see things in a light favourable to Britain, and unfavourable to the United States; but we will do him the justice to say, that veracity and candour have prevailed over all his prepossessions and prejudices, and that he has laid before the public the most fair, particular, useful, and convincing statement which it has yet seen, on the momentous question of abandoning our native country and adopting another.

The work divides itself into two parts for review:—What relates to the main subject of Emigration, and the lighter anecdotes and observations which immediately occur in the "Sketches." Some of the latter are so distinct from the picture, that we shall detach them among our Varieties, the rest we shall trace as we proceed.

Mr. Fearon's observations furnish us with striking examples of the comfortlessness, oppression, selfishness, venality, bigotry, filthiness, immorality, political corruption, vanity, villany, barbarity, fanaticism, and sundry other *attractions* which are spread over the face of this "land of liberty;" and he records all the facts with so grave and palliating a manner, that it is only when we look at the general muster in our memoranda, that we feel, like the King of Brobdingnag, when Gulliver describes the invention of gunpowder to him, we have been listening to an account of "the most odious and pernicious reptiles that ever crawled on the face of the Earth." It shall be our duty to place a few of these features in a proper light.

"*New York*—Upon the whole, a walk through New-York will disappoint an Englishman; there is, on the surface of society, a carelessness, a laziness, an unsocial indifference, which freezes the blood and disgusts the judgement.

"*Administration of Justice, and Judges.*—Our case (a charge of ill usage, brought by the second steward of the vessel in which the Author went out, against the Captain) was called; it was not tried, in consequence of, I believe, the well-paid *managements* of Counsel. I am informed, on good authority, that great corruption exists in there minor Courts. The Judge is said to have *a good understanding* with the Constable: *he receives too a larger sum in cases of conviction than in those of acquittal.* It is indisputable that the Constables are remarkably anxious for jobs; and that the Judge strongly *participates* in their feelings. An important legal Officer here (New-York) has been long known to practise the most disgraceful imposition; but his political views are in agreement with those of the State Government, and, therefore, he retains his situation.

"I have been present in Courts where this (*the dependance* of Judges upon the Council) has been strikingly injurious to the cause of Justice. Some of the Judges are, doubtless, men of superior legal knowledge, and high standing in society; but there are others who certainly are not in possession of the former, though they may be of the latter qualification; as for instance, the Chief Justice of the Common Pleas, at Newark, who is a butcher—not a butcher retired from business, and become a lawyer, but he attends to both trades, even on the same day, selling at seven o'clock in the morning a leg of mutton, and at 11 supplying his customers with a slice of Blackstone. Much evil must necessarily arise from this heterogeneous admixture of ignorance with learning.

"*Filth.*—After a residence of three days at the Hotel (Philadelphia) I removed to a private boarding house, in one of the bedrooms of which I am now writing. The dining-room of this establishment is genteel; but the other apartments and more particularly the kitchen, are of a kind not much to excite admiration. I perceived here what—unpleasant as may be the discovery, I think I have observed elsewhere, and, worse still, what I fear pervades this new world, an affectation of splendour, or what may be called *style*, in those things which are intended to suit the public eye; with a lamentable want even of cleanliness in such matters as are removed from that ordeal. To this may be added, an appearance of uncomfortable extravagance, and an ignorance of that kind of order and neatness which constitute, in the sight of those who have once enjoyed it, the principal charm of domestic life.

(To be concluded in our next.)

PHILADELPHIA, MARCH 17.

From the Norfolk Herald, March, 10.

VERY LATE FROM ENGLAND.

The Parliament commenced its session on the 21st of January.

The papers announce the death of the Queen of Wirtemburg, and Maria Theresa of Parma, consort of Charles IV. of Spain, and mother of Ferdinand VII.

A Liverpool article says, "It was expected that the speech from the Throne would have been spoken by the Regent in person; but, on account of it being necessary to revert to the death of the Queen, and other family calamities, His Royal Highness preferred turning that duty over to commissioners, and to remain himself in private at Brighton."

LONDON, JAN. 21.

"This day, at half an hour after two o'clock, the Lord Chancellor entered the House of Lords and proceeding directly to the table, received the oaths as a Peer of Parliament. Soon after, the Noble Lord retired for the purpose of putting on his robes, and returned to the House, accompanied by the Archbishop of Canterbury, the Duke of Wellington, the Earl of Harrowby, and the Earl of Westmorland, who, with the Noble and Learned Lord, acted as the Royal Commissioners.

The Gentleman Usher of the Black Rod was then commanded to require the attendance of the House of Commons at the Bar, to hear the Prince Regent's Speech read.

The Commons soon after appeared at the Bar, preceded by their Speaker, when the Lord Chancellor, on the part of the Commissioners, read the following Speech:—

"*My Lords and Gentlemen,*

"We are commanded by His Royal Highness the Prince Regent, to express to you the deep regret which he feels in the continuance of His Majesty's lamented indisposition.

"In announcing to you the severe calamity with which it has pleased Divine Providence to visit the Prince Regent, the Royal Family, and the Nation, by the death of Her Majesty the Queen of the United Kingdom, His Royal Highness has commanded us to direct your attention to the consideration of such measures as this melancholy event has rendered necessary and expedient, with respect to the care of His Majesty's sacred person.

"We are directed to inform you that the negociations which have taken place at Aix-la-Chapelle, have led to the evacuation of the French territory by the Allied Armies.

"The Prince Regent has given orders, that the Convention concluded for this purpose, as well as the other documents connected with this arrangement, shall be laid before you: and he is persuaded, that you will view with peculiar satisfaction, the intimate union which so happily subsists amongst the Powers who were parties to these transactions, and the unvaried disposition which has been manifested in all their proceedings for the preservation of the peace and tranquility of Europe.

"The Prince Regent has commanded us further to acquaint you, that a Treaty has been concluded between His Royal Highness and the Government of the United States of America, for the renewal, for a further term of years, of the Commercial Convention now subsisting between the two nations, and for the amicable adjustment of several points of mutual importance to the interests of both countries; and as soon as the ratifications shall have been exchanged, His His Royal Highness will give directions that a copy of this Treaty shall be laid before you.

"*Gentlemen of the House of Commons,*

"The Prince Regent has directed that the estimate for the current year shall be laid before you.

"His Royal Highness feels assured, that you will learn with satisfaction the extent of reduction which the present situation of Europe, and the circumstances of the British Empire, have enabled His Royal Highness to effect in the Naval and Military Establishment of the country.

"His Royal Highness has also the gratification of announcing to you, a considerable and progressive improvement of the Revenue in its most important branches.

My Lords and Gentlemen,

"The Prince Regent has directed to be laid before you such papers as are necessary to shew the origin and result of the war in the East-Indies.