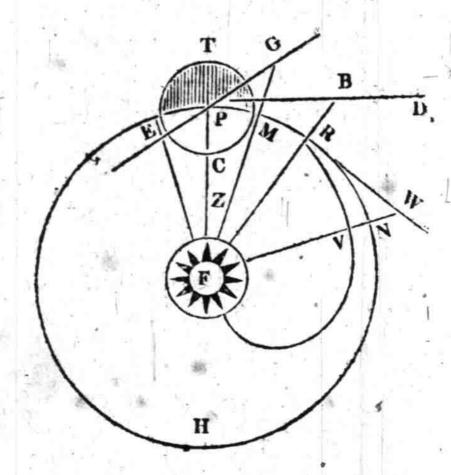
FOR THE REGISTER.

An attempt to discover the cause of Motion, applied to animal life.

Reader, whoever you may be, you cannot justly imagine the object of the following Chapters is a kind of hidden attempt against the antient foundations of the moral kingdom, or to make a God of the world. It is true, that man must be blind in his kingdom clouded in his understanding, who could deny the existence of a Deity, one of the first maxims of incorrupted intelligence. By any thing which may appear in the following inquiry, we would not wish directly, or indirectly, to destroy any true reasonable reverence to the First Cause, or relax the cords of religion or obligation which bind us unto Him, as moral agents; or by a vain philosophy, to tarnish the glory of that display he has been pleased to make of himself in the volume of his book, written of him, as the eternal word, our prophet, priest, and king, or the immortality thus brought to light among us animals, for the stability of both truth and virtue on the earth. Whatever may be supposed the views of this writer, he must maintain that every kind of motion, and life itself, is managed, by their own proper principles and unalterable agents. He has no apology to make for presenting them before the public eye in their present form, except that the subject is of consequence; that the following sheets, though they may be written in a stammering way, contain some truth. He is of the opinion many subjects do not admit of demonstration, but in toto, or in combination; for this reason, the reader will look over the latitude given to the inquiry. And the reader will do the writer the justice to remember, while reflecting on his work, that every step of his way has been through darkness, without previous guide-Should he only succeed in opening up this abstruse subject, for some other more successful attempts, he will be satisfied. He is sufficiently acquainted with his fellow gitizens, and of the common road to preferment, and too well acquainted with his own deficiencies, to make higher calculations; & if he can be believed by those who are on this chase, he would say, however agreeable the good wishes and opinions of others may be, it is not a solid kind of flesh which is altogether made by the smiles of the crowd; he has learned to live under its frowns, and has been, so far, held up, both in good and bad weather. Some men even of the weakest minds, seem to me to be qualified for different pursuits by Him who made us all, though the following investigations may embrace some things of consequence. I hope the weakness of the writer will not prevent you from giving your attention to the Chapters which will ap-

OF MOTION.



Let ETGMC, represent the earth with its attending atmosphere, revolving around the sun F on its annual orbit PMRNH, and on its diurnal revolution in the same direction of the annual orbit on the pole P. We here, in this figure, represent a polar view of the earth, and suppose ourselves at the north pole. The received opinion is, that some original impulse is given the earth ETGMC in the right line direction PBD; and that this direction would continue forever, if not resisted by some opposing power. It is supposed that opposing power is the centripetal power, which carries the earth when at B to R; and being at R, the impulse being the same, the earth would there be disposed to fly off again in a tangent, to its orbit in the line RW; but by the same opposing centripetal power, it is again drawn in its orbit to IV, and by the combination of these forces, the projectile and centripetal made to revolve on its annual orbit. It cannot be denied, that in the path of the annual orbit of the earth around the sun, that in this orbit, repulsion and attraction are equal; which could not be well understood how this equilibrium could be retained by any two conflicting and opposite

powers of agency upon it. I shall hereafter explain. The power which would remove the earth from its right lined direction PBD, to the orbit R, must necessarily diminish the projected power by as much as it is resisted by the centripetal force, unless we suppose there a is constant addition or generation of projectile force; but upon this ground of a constant increased projectile power, we make oid the theory advanced as being the cause of the motion; for we are forced to imagine a motion generated, without assigning any cause of that motion or impulse .-That the original impulse would be diminished, we may see plainly, for the impulse given (great or small) could only land the earth at the centre F, the end of all mo tion, and the point of rest; the line FB will then fitly represent the range of initial impulse. But if FB is a true representative of the original impulse, then BR will be the true measure of destroy d initial velocity or impulse. And thus, when the earth arrives at R, it cannot incline to fly off in the line RW; but if it was true, it had an inclination to fly off in a tangent, it would be in a tangent to the circle RV; for it is seen NV is equal to BR, but BR is equal the diminished initial impulse, and with the said diminished velocity in its motion from R, it would make the angle NRV equal to the angle BPR-and thus, without some constantly applied and generated force, the earth, by the conflicting agencies of initial and centripetal force, would pass on to the centre F, the point of rest, which is absurd. Thus, if repulsion is not generated by attraction, and attraction by repulsion, if the initial impulse is not forever the same, the destruction of motion will be the consequence. The idea of attraction and repulsion operating in right lines, independent of intermediate causes, is unfounded,-But of this we will enquire more particularly in the following Chapters. In the next Chapter I shall endeavor to explain given to th

TREASURY ESTIMATES.

When we published the Report of the Committee of Ways and Means, made towards the close of the late session of Congress, respecting the state of the Treasury, we had not room for the Documents appended to it. One of them, which will be found in the paper of this day, is so lucid an exhibit on the subject to which it relates, that we avail ourselves of the first opportunity to pub-

It has been charged upon Mr. Secretary Crawford, by those who, it must be presumed, knew no better, that, under his administration the Treasury estimates have proved erroneous, & less than heretofore to be relied upon. This has been repeated, or rather significantly hinted at, so often, that it is quite probable the impression is general that there is some foundation for it. That, accidentally, the results should have varied more than usual from the estimates, could not be a matter of surprise to any one who knows the uncertainty of commercial adventure, and the fluctuations of trade, to the operation of which these estimates are subject. Intentionally, the estimates could not have been supposed to have varied, without imputing to the Head of the Treasury motives as foreign to his nature as unwortny of his station. A glance at the facts, however, which have been brought together in the document to which we refer, will shew that the insinuations against Mr. Crawford's accuracy or perspica- one hundred thousand dollars.

city are not only destitute of foundation, but that the very reverse of these im-

putations is true. We have had occasion lately to remark, that there is no such thing as resisting the demonstrations of arithmetic-a few figures of which are often worth all the figures of rhetoric, and all the fictions of genius. Without the least disrespect to the memory of the patriotic Dallas, who died too soon for his country's good-or to the talent of the accomplished financier who presided over the I reasury during the administration of Mr. Jefferson-it is established by this document that, in point of accuracy of judgment, the present Secretary of the Treasury stands before them. We speak it not in their disparagement, because it is a matter which, after all, accidental circumstances have much to do in determining. We refer only to facts, disproving assertions made with a view to prejudice the high standing which Mr. Crawford justly enjoys in the

estimation of his fellow-citizens. His official estimates have been decidedly more accurate than those of any of his predecessors, instead of less. The broad statement of this fact is due to Mr. Crawford; and we particularly rely on the candor of those who have been deceived by misrepresentations on this head, to review their own statements, and retract the error into which, being themselves led, they have led others. Nat. Intel.

Official Paper, accompanying the Report of the Committee of Ways and Means to the House of Representatives, April 30, 1822.

A Statement shewing the annual amount of the total estimated receipts into the Treasury. and of the total actual receipts from 1802 to 1821, inclusive; and shewing particularly the amount estimated, and the amount actually received from customs.

	TOTAL RECEIPTS.		DIFFERENCE.	
TEAR.	Estimated.	Actual.	DIFFERENCE.	
1802	10,600,000	13,668,233 95	. Act. rec'ts .29 more than est'd rec'ts.	
1803	10,000,000	11,064,097 63	Do11 more do.	
1804	10,400,000	11,826,307 38	Do14 more do.	
1805	11,750,000	13,560,693 20	Do15 more do.	
1806	13,500,000	15,559,931 07	Do15 more do.	
1807	14,500,000	16,398,019 26	Do13 more do.	
1808	15,800,000	17,060,661 93	Do08 more do.	
1809	10,500,000	7,773,473 12	Do26 less do.	
1810	10,300,000	9,384,214 28	Do09 less do.	
1811	12,500,000	14,423,529 09	Do75 more do.	
1812	8,200,000	9,801,132 76	Do19 more do.	
1813	12,000,000	14,540,409 95	Do. 19 more do.	
1814	10,100,000	11,181,625 16	Do11 more do.	
1815	18,200,000	15,696,916 82	Do14 less do.	
1816	33,400,000	47,676,985 66	Do43 more do.	
1817	30,650,000	32,896,623 44	Do07 more do.	
1818	24,525,000	*21,060,171 04	Do14 less do.	
1819	24,220,000	24,559,617 16	Do01 more do.	
1820	22,500,000	17,840,669 55	Do20 less do.	
1821	16,050,000	+14,573,703 72	Do09 less do.	

RECEIPTS FROM CUSTOMS.		DIFFERENCE,	ř.
Estimated.	- Actual.	DIFFERENCE.	- Share
9,500,000	12,438,235 74	Act. rec'ts .31 more than est, rec'ts:	
9,600,000	10.479,417 61	Do09 more do.	
10 000,000	11,098.565 33	Do11 more do.	
11,280,000	12.936,487 04	Do15 more . do.	
13,000,000	14,667,698 17	10013 more do.	į
14,000,000	15,845,531 61	Do13 more do.	
15,300,000	16,363,550 58	Do07 more do.	
10,000,000	7,296,020 58		
9,800,000	8,583,309 31	Do12 less do.	
11,500,000	13,313,222 73		
7,500,000	8,958,777 53		
11,500,000	13,224,623 25		
6,000,000	5,998,772 08		
6,500,000	7,282,942 22		
21,000,000	36,306,874 88		
24,000,000	26,283,348 49		
25,000,000	17,176,385 00		
21,000,000	20,283,608 76		
19,000,000	15,005,612 15	Do21 less do.	
14,000,000	1 13,004,447 15	Do07 less do.	

If these twenty years be divided into four series, of five years each, it will appear that the actual receipts have either exceeded or fallen short of the estimated receipts in the following proportions:

In the first series, viz: 1802 to 1806, inclusive, 84 parts in 500, or 17 per cent.; and, in the customs. 79 parts in 500, or 16 per cent.

In the 2d series, viz: 1807 to 1811, inclusive, 71 parts in 500, or 14 per cent.; and, in the customs, 75 parts in 500, or 15 per cent.

In the 3d series, viz: 1812 to 1816, inclusive, 106 parts in 500, or 21 per cent.; and, in the customs, 119 parts in 500, or 24 per cent.

In the 4th series, viz: 1817 to 1821, inclusive, 51 parts in 500, or 10 per

cent.; and, in the customs. 55 parts in 500, or 11 per cent. The difference between the estimates and receipts is less during the last 5 years, than during any series of 5 years embraced in this statement,

From the year 1802 to 1813, inclusive, the estimates were made by Mr. Gallatin. From the year 1814 to 1816, inclusive, the estimates were made by Mr.

From the year 1817 to 1820 inclusive, the estimates were made by Mr.

Crawford.

* In consequence of the law repealing the "internal duties," this source of revenue, which was estimated at \$2,500,000, produced only \$955,270 20.

† In consequence of the law for the relief of the purchasers of "public lands," the proceeds of the sales of public lands, which were estimated at \$1,600,000, amounted only to \$1,212,966 46.

Law of the United States.

An Act making further appropriations for the military service of the United States for the year eighteen hundred and twenty-two, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, 'I hat the following sums be, and the same are hereby appropriated, to wit:

For fortifications, to each specifically, as follows, viz :

For Fort Delaware, twenty thousand do lars.

For Fort Washington, twenty-five thousand dollars.

For Fort Monroe, seventy-five thousand

dollars. For Fort Calhoun, fifty thousand dol-

For collecting materials for a fortification at Mobile Point, in the state of Ala-

bama, fifty thousand dollars. For the Rigolets and Chef Manteur,

For collecting materials for a Fort on the right bank of the Mississippi, opposite Fort St. Philip, thirty thousand dollars. For contingencies and repairs of forti-

For the national armories, three hundred and sixty thousand dollars.

fications, twenty thousand dollars.

For current expenses of the ordnance

service, viz: For the preservation of the arms and and other public property in store, including the hired workmen, and purchase of paint, oil, and other materials necessary for the purpose, eight thousand eight hundred and thirty-eight dollars.

To meet ordinary requisitions for army supplies, viz

For paint and oil for the preservation of the guns and carriages in the fortifications, and for artificers' and intrenching tools, six thousand three hundred and forty dollars.

For the miscellaneous expenses at arsenals, forage for public horses, scationery, &c. two thousand eight hundred and

sixty-two dollars. For the reparation of defective arms, including the wages of armorers, the purchase of iron, steel, coals, tools, &c. eleven thousand nine hundred and sixty dollars. For repairs of arsenals, one thousand

dollars. For the preservation of ammunition;

five thousand dollars.

For the payment of outstanding claims which accrued in one thousand eight bundred and nineteen and one thousand eight hundred and twenty, at Pittsburg, and not presented until eighteen hundred and twenty-one; and unpaid for want of an appropriation applicable to the object, one thousand seven hundred dollars.

For arrearages in the War Department prior to the first of July, one thousand eight hundred and seventeen, ninety thousand dollars.

For pay allowed by law to Indian Agents, twenty-two thousand three hundred dollars.

For sub-agents, eleven thousand three hundred and thirty-eight dollars.

For presents to Indians, allowed by the law of eighteen hundred and two, fifteen thousand dollars. For contingent expenses of the Indian

Department, seventy-five thousand dol-For making good a deficit of the appropriation of the last year, in the same, se-

venty thousand dollars. For the payment of a deficit in the appropriation for the Quartermaster General's Department, for eighteen hundred

and twenty one, seventy thousand dollars. For completing the barracks at Baton Rouge, twelve thousand dollars. For constructing new roofs for the bar-

racks at Carlisle, three thousand five hundred dellars. For the payment of the expenses of the

militia court martial in Pennsylvania, of which Lieutenant Colonel Thomas Moore and David Fore were successively presidents, eight hundred and forty dollars and eighty four cents.

For the payment of the expenses of the militia court marrial in Pennsylvania, of which Thomas C. Miller was president one thousand five hundred and ninetyeight dollars and seventy-eight cents.

For the payment of the expenses of the militia court martial in Pennsylvania, of which Colonel James Wood was president, seven hundred and ninety-eight dollars and eighty-four cents.

For the payment of the balance of the expenses of the militia court martial in the state of New-York, of which Brigadier General Gerard Steddiford was president, nineteen thousand two hundred and sixteen dollars and twenty-nine cents

For the balance of an appropriation made nineteenth of February, eighteen hundred and eighteen; to defray the expenses of employing a brigade of militia, being the amount thereof carried to the surplus fund, twelve thou and three hundred and seventy-four dollars and fiftyseven cents.

For replacing the like amount of appropriations made for the survey of certain ports and harbors, which has been carried to the surplus fund, the sum of one thousand three hundred and thirtyfour dollars and seventy-eight cents.

For replacing the like amount appropriated to procure medals for officers of the army, carried to the surplus fund, the sum of eight thousand two hundred del-

For replacing the like amount appro-priated for the relief of Colonel William Lawrence, and others, carried to the surplus fund, the sum of one thousand four hundred and forty dollars and twelve cents.

For carrying into effect the treaty concluded at Chicago, on the twenty-ninth day of August, eighteen hundred and twenty-one; the sum of eighteen thousand one hundred and seven dollars and ten cents.

For carrying into effect so much of the fourth article of the treaty of the eighth of January, one thousand eight hundred and twenty one, between the United States and the Creek pation, in relation to the compensation due to the citizens of Georgia by the Creek nation, fifty thousand dol-

For the purpose of holding treaties with the Cherckee and Creek tribes of Indians, for the extinguishment of the Indian title to all the lands within the state of Georgia, pursuant to the fourth section of the first article of the agreement and cession, concluded between the United States and the state of Georgia, on the twenty-fourth of April, one thousand eight hundred and wo, the sum of thirty thousand dollars.

Sec. 2. And be it further enacted, That the several appropriations hereinbefore made, shall be paid out of any money in the Treasury, not otherwise appropriated.

Sec. 3. And be it further enected, That no money appropriated by this act, or by the act entitled "An act making appropriations for the unlitary service of the United States, for the year one thousand eight hundred and twenty-two," shall be advanced or paid to any person on any contract, or to any officer who is in arrears to the United States, until he shall have accounted for, and paid into the Treasury, all sums for which he may be

Approved, May 7, 1822