NATIONAL INTELLIGENCER,

AND

WASHINGTON ADVERTISER.

VOL. V. WASHINGTON CITY, PRINTED BY SAMUEL HARRISON SMITH, PENNSYLVANIA AVENUE. NO. DCCXV.

FIVE DOLLARS PER ANNUM. WEDNESDAY, MAY 8th, 1805 *PAID IN ADVANCE.*

ANSWER TO LORD SHEFFIELD's PAMPHLET,

ON THE SUBJECT OF THE NAVIGATION SYSTEM:

Proving, that the acts deviating therefrom, which his lordship censures, were beneficial to our trade and navy, in the last war, and ought to be renewed in the present.

By S. COCKE,
Commercial and Public Agent to the Corporation of Liverpool.

[*Continued.*]

In 1792, the import value was fifty millions, the duty about five, as in the former year, with a similar proportion from France, Spain and Holland. The exports of 1792, were sixty millions, with a proportionate duty. The exports to France was somewhat greater than in the usual proportion to the imports; probably owing to the war which had commenced between France and Germany, and in which we were not yet engaged. Their war might lessen the number of commodities they could spare, and increase their demands for the commodities of Britain. But, whatever may have been the cause, such was the fact.

In 1801, the value of the imports was eighty millions; duty eight; being somewhat increased from 1800; and that increase was from the hostile countries, through the still more extensive operation of the dispensing acts. The value of exports was about one hundred and ten millions, with a proportionate duty.

From the preceding statements, it is evident that, in the three last years of the peace, the most flourishing period of trade which the commercial history of England had then to record, the amount of commerce and revenue was, beyond all comparison, less than the amount of the three last years even of war, only distant nine years from the period of peace; and it is evident, both from detail and result, that this increase at an unfavorable epoch, was greatly owing to that liberal change of policy which admitted a free trade through every conveyance by which Britain could be benefitted. If, as lord Sheffield professes to deem necessary to our salvation as a commercial and naval nation, Britain had rigidly adhered to the navigation system of the seventeenth century, the consequence would have been, that we should have had much less than half the commerce and revenue to meet the arduous contest in which we were engaged. This immense rise in our trade and financial resources, while our shipping interest was promoted more than ever; our mercantile sailors more numerous than ever; and our fighting sailors more numerous and resistless than ever; affords the strongest proofs of the wisdom of that change of laws which accommodates itself to circumstances. Can that be unwise policy which has so much encreased private and public wealth, the grand objects of political economy; and under which our chief bulwark of strength has become powerful beyond all example? When was the strength of France nearly equal to its present state? yet in what former war was her naval strength so completely surpassed by the British navy, as in the last years of the late war, and in the present? Even in the glorious times of Mr. secretary Pitt, was the French navy so much inferior to ours, that they durst not venture to look us in the face. Then they were beaten, as they always have been; but the difference was not so great as to crush competition. The resources of France are infinitely beyond what they were when she could venture to meet us at sea. Never had she half the means of making a powerful navy that she has at present; and never had she a ruler of more energy and enterprise, with respect to such objects as would be hostile to Britain. Yet, possessing such means of naval force as no potentate on the continent of Europe ever possessed; a most ardent desire to use those means; with as much invention and ability as any of our enemies could ever boast, Bonaparte, with all his transcendant power, is much less able to contend with Britain at sea, than any ruler of that country with whom we ever had to contest. When we are so far superior to the most powerful of our foes, is not that a demonstration that we ourselves have immensely risen in naval power? Even in the beginning of last war, before this departure from the navigation system, which was formed for the circumstances of the seventeenth century, the French strength was so considerable that they met us with confidence on the ocean; and, though uniformly defeated, they were only defeated after a very arduous struggle.

The acts dispensing from the navigation system, though passed in 1795 and 1796, did not fully operate in the extension of our commerce and advancement of our navy, to an undisturbed superiority over France and her allies, until some years after.

In 1797 the Dutch dared to meet admiral Duncan, and the Spanish admiral Jervis, and in 1798 the French themselves ventured to oppose admiral Nelson; but since 1799 [from which year the increase of our wealth and revenue, through the employment of neutral carriers, has so much augmented our resources, and enabled us to employ such numbers of fighting sailors,] neither the French nor any of their dependent allies have ventured to meet us at sea. Our superiority, always manifest, is now such as to prevent dispute. No fleet or squadron can encounter us; and can that be unwise policy under which our enemies, instead of combating us as before dare not risk an encounter with us: and are the mightiest armaments which France ever prepared being blocked up for months by our fleets, proofs that our naval power is weakened? What other proofs his lordship can bring, that our naval power is weakened by the departure from a system which was right one hundred and fifty years ago, I cannot divine; hitherto he has brought none: his attempts at proof are all either repetition of assertions and prophecies, or merely assumptions, that, because a measure is contrary to what was done at a very distant period, and in very different circumstances, therefore it is wrong in the present circumstances, and at the present period. His lordship seems to frame his reasoning on principles more agreeable to the opinion of lawyers, than the policy of senators or statesmen. If you consult a lawyer on the propriety of an act of parliament to be framed, that would make a change in some department, he will immediately tell you, that it is a departure from precedent and the authority of the court; or at variance with some antecedent statute. That the senator or statesmen, knows as well as he does; but they would not enquire what hitherto had been; but what henceforth was right to be.

A great part of his lordship's reasoning consists of dissertations tending to prove that the present deviation is a change of the navigation system. That I most readily admit. Every deviation from any system, as far as it extends, is a partial change of that system. By these acts, says his lordship, you prevent British ships from being duly navigated. When that phrase is explained, what does it mean? It means the proportion of foreign sailors to British, is greater than the navigation laws permitted. Of course, the object of the change is, to allow a greater number of both foreign ships and sailors to be employed as carriers, for our convenience, than the navigation laws permitted; but the very fact which he alledges, and which is unquestionably true, though not to the extent which he asserts, that more foreign sailors than usual were allowed to navigate British ships, was the cause that so many more British sailors than usual could be spared for our navy —and thereby that we have risen to such an immense superiority of naval power. Our ships were not duly navigated, if due navigation consist in exact conformity to the rules of the seventeenth century. But if due navigation consists in so navigating British ships, as most effectually to promote British commerce and naval power, they have been duly navigated; and the proof is, that commerce and naval power have risen to so very high a pitch.

His lordship enters into a long detail of the increase of American commerce and shipping; and this increase, he predicts, will be prejudicial to Britain. Predictions are indeed the only arguments which he uses, except assertions. One of these is, that every step which deviated from the established navigation laws, has proved an injury to the trade, which in wiser times has been so cautiously encouraged as one of the most fertile sources of political consequence and national wealth. Against this broad assertion, I shall simply refer to actual facts and documents, which completely prove that the deviation, so far from having injured the trade of Britain, has raised that trade to more than double its former amount in the most favorable periods.—From the statement of his lordship, it is endeavored to be proved, that the American tonnage has increased more in proportion than the British tonnage; but that is not the question. The question simply is, whether the trade of Britain is increased or diminished by the laws which departed from the navigation system.

His lordship alledges, that even if the act of 1795, for securing the property of Dutch emigrants, was proper, being a deviation from the navigation laws, it ought not to have been continued after that object had ceased to exist. But the security of Dutch property was only one intention of that liberal change of policy; and though that individual purpose might be no longer in view, it did not follow that the general purpose should not be pursued. Since the new laws had been found so productive both to commerce and naval power, in the three last years of the war, there was sufficient reason for continuing them during the peace; especially a peace which was evidently but a deceitful truce. Therefore I can see no reason for his lordship's very strong objections to the renewal of the act. Although its first occasion might have been the property of the Dutch emigrants, its general principle and reason was the tendency to advance these great objects of the navigation system—our trade and navy.

In addition to those grand and public objects is to be considered, a private interest, founded on a public principle. Whoever engages in an article of commerce, on the faith of established laws and practice, has a right to expect that the laws and practice will not be so easily changed, as to compel him to withdraw his capital, with disadvantage, from that commerce. Since, year after year, acts had been passed allowing ships from foreign countries to import goods to Britain from places to which they did not belong, would it have been equitable suddenly to have stopped this permission, and to have sent back these ships with their cargoes? It must be acknowledged that the acts in question fixed periods when they were respectively to terminate. Nevertheless, they had been renewed from time to time; and the ground of their renewal was understood to be a conviction of their expediency; and therefore it was fairly and reasonably presumed they would be continued. Both British and foreign merchants acted on this presumption and made their commercial arrangements accordingly, for bringing or sending foreign commodities to Britain without a strict adherence to the navigation laws. They might reasonably have presumed, that Britain would continue, not only to allow, but to encourage such a beneficial traffic, even if the peace had been likely to be permanent; and sailors not to be wanted for the defence of the country. But the probability was, that the peace would not continue; therefore, it was still more to be expected, that the acts for encouraging British commerce by foreign carriers would be renewed.

(*To be continued.*)

SPECULATIONS ON THE *PERCEPTIVE POWER* OF VEGETABLES.

BY THOMAS PERCIVAL, M. D. F. R. S.

From the Memoirs of the Literary and Philosophical Society at Manchester.

——These are not idle, philosophic dreams;
Full nature teems with life——
*Thomson's Spring Sec. ed. line 156.**

IN all our enquiries into truth, whether natural or moral, it is necessary to take into previous consideration, the kind of evidence which the subject admits of; and the degree of it, which is sufficient to afford satisfaction to the mind. Demonstrative evidence is absolute, and without gradation; but probable evidence ascends, by regular steps, from the lowest presumption to the highest moral certainty. A single presumption is, indeed, of little weight, but a series of such imperfect proofs may produce the fullest conviction. The strength of belief, however, may often be greater, than is proportionate to the force and number of these proofs, either individually or collectively considered. For, as uncertainty is always painful to the understanding, very slight evidence, if the subject be capable of no other, sometimes amounts to credibility. This every philosopher experiences in his researches into nature; and the observation may serve as an apology for the following *jeu d'esprit*; in which I shall attempt to shew, by the several analogies of organization, life, instinct, spontaniety, and self-motion, that plants, like animals, are endued with the powers both of perception and enjoyment.

I. Vegetables bear so near a similitude to animals in their structure, that botanists have derived from anatomy and physiology, almost all the terms employed in the description of them. A tree or shrub, they inform us consists of a cuticle, cutis, and cellular membrane; of vessels variously disposed, and adapted to the transmission of different fluids; and of a ligneous, or bony substance, covering and defending a pith or marrow. Such organization evidently belongs not to inanimate matter; and when we observe, in vegetables, that it is connected with, or instrumental to the powers of growth, of self-preservation, of motion, and of seminal-increase, we cannot hesitate to ascribe to them a living principle. And by admitting this attribute, we advance a step higher in the analogy we are pursuing. For, the idea of life naturally implies some degree of perceptivity: And wherever perception resides, a greater or less capacity for enjoyment seems to be its necessary adjunct. Indefinite and low, therefore, as this capacity may be, in each single herb or tree, yet, when we consider the amazing extent of the vegetable kingdom "from the cedar of Lebanon to the hyssop upon the wall," the aggregate of happiness, produced by it, will be found to exceed our most enlarged conceptions. It is prejudice only, which restrains or suppresses the delightful emotions, resulting from the belief of such a diffusion of good. And because the framers of systems have invented arrangements and divisions of the works of God, to aid the mind in the pursuits of science, we implicitly admit as reality, what is merely artificial; and adopt distinctions without proof of any essential difference.— *Lapides crescunt; vegetabilia crescunt et vivunt; animalia crescunt, vivunt et sentiunt.* This climax, of Linnæus, is conformable to the doctrines of Aristotle, Pliny, Jungius, and others; but none of these great men have adduced sufficient evidence to support the negative characteristics, if I may so express myself, on which the three kingdoms of nature are here established. That a gradation subsists, in the scale of beings, is clearly manifest; but the higher advances we make in physical knowledge, the nearer will the degrees be seen to approach each other. And it is no very extravagant conjecture to suppose, that, in some future period, perceptivity may be discovered to extend, even beyond the limits now assigned to vegetable life.— Corallines, madrepores, millepores, and spunges, were formerly considered as fossil bodies; but the experiments of Count Marsigli evinced, that they are endued with life, and led him to class them with the marine plants. And the observations of Ellis, Jussieu, and Peysonel, have since raised them to the rank of animals.* The detection of error, in long established opinions concerning one branch of natural knowledge, justifies the suspicion of its existence in others, which are nearly allied to it; and it will appear, from the prosecution of our enquiry into the instincts, spontaneity, and self moving power of vegetables, that the suspicion is not without foundation.

II. Instinct is propensity, or movement to seek, without deliberation, what is agreeable to the particular nature, actuated by it; and to avoid what is incongruous or hurtful. It is a practical power, which requires no previous knowledge or experience; and which pursues a present or future good, without any definite ideas or foresight; and often, with very faint degrees of consciousness. The calf, when it first comes into the world, applies to the teats of the cow, utterly ignorant of the taste, or nutritious quality of the milk, and consequently, with no views, either to sensual gratification or support; and the duckling, which has been hatched under a hen, at a distance from water, discovers a constant restlessness and impatience; and is observed to practise all the motions of swimming, though a stranger to its future designation, and to the element, for which its oily feathers, and web-like feet, are formed. Instincts analogous to these, operate with equal energy on the vegetable tribe. A seed contains a *germ*, or plant in miniature, and a *radicle*, or little root, intended by nature to supply it with nourishment. If the seed be sown in an inverted position, still each part pursues its proper direction. The *plumula* turns upwards, and the *radicle* strikes downward into the ground. A hop plant, turning round a pole, follows the course of the sun, from south to west, and soon dies, when forced into an opposite line of motion; but remove the obstacle, and the plant will quickly return to its ordinary position. The branches of a honey suckle shoot out longitudinally, till they become unable to bear their own weight; and then strengthen themselves, by changing their form into a spiral; when they meet with other living branches, of the same kind, they coalesce, for mutual support, and one spiral turns to the right, and the other to the left: thus seeking, by an instinctive impulse, some body on which to climb, and increasing the probability of finding one, by the diversity of their course; for if the auxiliary branch be dead, the other uniformly winds itself round, from the right to the left.†

These examples, of the instinctive economy of vegetables, have been purposely taken from subjects, familiar to our daily observation. But the plants of warmer climates, were we sufficiently acquainted with them, would probably furnish better illustrations of this acknowledged power of animality; and I shall briefly recite the history of a very curious exotic, which has been delivered to us from good authority; and confirmed by the observations of several European botanists.

The Dionæa Muscipula is a native of North Carolina. Its leaves are numerous, inclining to bend downwards, and placed in a circular order; they are jointed, and succulent; the upper joint consists of two lobes, each of which is semioval in its form, with a margin furnished with stiff hairs, which embraces each other, when they close from any irritation. The surfaces of these lobes are covered with small red glands, which probably secrete some sweet liquor, tempting to the taste, but fatal to the lives of insects; for, the moment the poor animal alights upon these parts, the two lobes rise up, grasp it forcibly, lock the rows of spines together, and squeeze it to death; and, lest the struggles for life should disengage the insect, thus entangled, three small spines are fixed amongst the glands, near the middle of each lobe, which effectually put an end to all its efforts: nor do the lobes open again, while the dead animal continues there. The dissolution of its substance, therefore, is supposed, by naturalists, to constitute part of the nourishment of the plant. But as the discriminative power of instinct is always limited, and proceeds with a blind uniformity when put into exertion, the plant closes its leaves as forcibly, if stimulated by a straw or a pin, as by the body of an insect; nor does it expand them again, till the extraneous substance is withdrawn.‡

III. If the facts and observations, which have been adduced, furnish any presumptive proof of the instinctive power of vegetables, it will necessarily follow, that they must be endued with some degree of spontaneity. For the impulse to discriminate and to prefer, is an actual exertion of that principle, however obscure the consciousness or the feeling may be, with which it is accompanied; and such volition pre-supposes an innate perception, both of what is consonant, and of what is injurious to the constitution of the individual, or species directed by it. But it is the design of this little essay, rather to investigate nature, than to appeal to metaphysical considerations: I shall proceed, therefore, to point out a few of those pheonomena, in the vegetable kingdom, which indicate spontaneity.

Several years ago, whilst engaged in a course of experiments to ascertain the influence of fixed air on vegetation, the following fact repeatedly occurred to me. A sprig of mint, suspended by the root, with the head downwards, in the middle glass vessel of Dr. Nooth's machine, continued to thrive vigorously, without any other pabulum, than what was supplied by the stream of mephitic gas, to which it was exposed. In twenty-four hours the stem formed into a curve, the head became erect, and gradually ascended towards the mouth of the vessel;—

* *These lines are omitted in the subsequent editions of Thompson's Seasons.*

* *Consult Philos. Transact. Amenitat. academic. and Bishop Watson on the subjects of Chemistry.*

† *Lord Kaims's Gentleman Farmer.*