this government, an officer found guilty, on an impeachment, could not be punished capitally. The sentence could only remove him from office and disqualify him, for ever after, from holding one under the United States. If in a country where the accused may be brought to the block, free, unfettered inquiry is warranted against any rank however exalted—would it be denied here where the punishment was comparatively light? Should they hold the other departments of the government more inviolable than they were considered even in England. Would they afford to a criminal executive, or judiciary, a shelter denied by the laws of that government? He hoped they would not. He trusted that they would give an example of their readiness to bring every offender to justice however great might be his station.

(To be continued.)

To the Editor of the National Intelligencer.

Although your paper is much taken up with the proceedings and debates of Congress and other important matters, I have, by way of variety, sent you an essay, which may perhaps afford some amusement to your readers. It was published in the year 1791, in a Virginia newspaper and appears to have been consigned to oblivion with the fugitive productions of the day—from this fate it may be rescued for a time by finding a place in your paper.

I shall not undertake to determine, whether the author was in earnest in his opinions, or whether a strain of serious irony was intended. I had, indeed, adopted the latter opinion, but I have since been informed that gentlemen eminent for their medical and scientific attainments have seriously advocated the system, and have anticipated from it consequences more surprising than any which are treated upon in this publication.

The political remarks which it contains cannot of course be supposed to have any reference to our present situation.

A CORRESPONDENT.

January 1804.

On reading in a late paper the miraculous effects which had been produced by a transfusion of blood, I was led into a train of reflections on the subject; and, suffering my imagination to take the lead, I was ruminating on the consequences which such a plan, if practicable, might produce, and considering how far the discovery would be useful to society, and deserving of encouragement.

I believe it may be considered as a fact that the operation of transfusion has been performed, and that it has produced such physical consequences as might have been expected and as might easily be accounted for. Thus we are told that the animals appear nearly deprived of life when the quantity of blood to be transfused is drawn off, and that by its restoration, they are in a short time revived and able to perform their ordinary functions.

The blood is, in scripture, emphatically styled the soul of the animal, and it is certain that our existence, as it depends on its circulation must in some measure depend on its quality and consistence. The circulation of the blood it seems was but imperfectly understood by the ancients, and even at this time there are many points that must rest on conjecture—It is carried on in a circle to which we can find no beginning, and it is therefore probable that in treating of it the cause and effect may be frequently confounded—Hence, we observe that, by some, not only the motion, but the consistence, the cohesion and the globular figure of the blood are attributed to the force and action of the vessels, while by others, the vessels themselves are supposed to derive their spring and force from the blood circulating through them; and a number of different theories have been adopted on those different principles. We know that one great component part of the blood is the chyle, separated from the food and conveyed by the *vena cava* to the heart, from whence it again issues, and, in its passage through the lungs is acted on by the air, which is thought to occasion its colour, and the globular form of its particles; but there are many other facts which must have a considerable share in determining its nature and properties. Among these the animal spirits or the operation of the nervous system are perhaps, the least understood; and until our knowledge on that head is encreased, we shall be unable to account for the immediate impulse that is communicated to the mechanical part of our system, by the ideas of the mind formed into what we denominate the will, and for many others of the most curious operations of nature. That the circulation is variously affected by these causes, no man can doubt. The act of blushing and many others in which it is increased convince us that the effect is produced as quick as thought—whether by the action of the spirits as a liquid or by the nerves acting mechanically as cherds has been long the subject of controversy. It will suit me best at present to adopt the former hypothesis, and to conclude, that the quality of the blood must have a a considerable effect on the solids and therefore on the whole constition, and that the quality and nature of the blood are determined by the supplies from the animal spirits, from which it will appear, that a good head piece is of more extensive utility than it has hitherto been thought to be, as contributing to the health of the possessor, as well as benefiting him in respect of mental acquisitions. We find that Sterne, who certainly understood human nature, undertook to judge of a lady's temper and disposition by only feeling her pulse.—If, says he, "it is the same blood, which comes from the heart, which descends to the extremes, you must have one of the best pulses in the world—and on being permitted to feel it, he observed that it beats with all the benignity which he expected." When we consider blood in this important light, we shall be able to account for the value that has been set on it by those families who could boast of a *noble* stream running pure and uncorrupted through the veins of their ancestors for many centuries, and for their aversion to its being mixed (unless upon urgent occasions) with the vulgar and plebeian kind. We shall no longer wonder at the kings of Scotland and the princes and other great men among the Germans, preferring this to all other advantages and guarding it with such a jealous attention. And altho' of late years, family pride has been getting out of fashion, it has been well observed, by those who possessed it, that we ought to take at least as much care of our own breed as of that of horses, dogs and other animals. We observe in them that the greatest care and attention is paid to their pedigree amongst us, horses are emphatically called *blooded*, who have preserved that noble fluid uncontaminated by any crossing of the strain; Which (as it is sometimes unavoidable, and sometimes done thro' choice) is pointed out by describing the animal as possessed of seven eighths, fifteen sixteenths, or whatever the quantity may be of the right sort. Our game cocks, hounds, pointers, &c. are considered in the same manner, and may, by proper connections, be meliorated or depreciated in their breed at the pleasure of the owner.—There is no doubt that a diversity of character is produced in the human race by those means, or (to speak more to my present purpose) by a mixture of blood, and it is proper that it should be so, as it tends to put mankind more on a level. These mixtures, or rather their consequences must be *curious* to a contemplative mind, and are described in a lively manner by lady Montague in one of her letters—speaking of the collection of strangers from all parts of the universe settled in the suburbs of Pera, Jophana and Galita, she observes, "They have so often intermarried that they form several races of people the oddest imaginable. There is not one single family of natives that can value itself on being united. You frequently see a person whose father was born a Grecian, the mother an Italian, the grandfather a Frenchman, the grandmother an American, and their ancestors English, Dutch, &c. This mixture produces creatures more extraordinary than you can imagine, nor could I ever doubt but that there were several species of men, since, the whites, the woolly and the long haired blacks, the small eyed Tartars, the beardless Brazilians, and (to say no more) the oily skinned Nova-Zemblians have as specific differences under the same general kind, as greyhounds, mastiffs, spaniels, bull-dogs, or the whole race of my little diana, if no body is offended at the comparison.—Now as the various intermixing of these latter animals causes mungrels, so, mankind have their mungrels too, divided and subdivided into endless sorts. We have daily proofs of it here, as I told you before. In the same animal is often remarked the Greek perfidiousness, the Italian diffidence, the Spanish arrogance, the French loquacity, and all of a sudden he is seized with a fit of English thoughtfulness, bordering a little upon dulness, which many of us have inherited from the stupidity of our Saxon progenitors."

There mixtures are the more necessary, if we credit a position, which is generally admitted to be true—that it is the tendency of every species to degenerate if confined in these respects; and the Jews are given as an instance. It may be true as to them, but we are to suppose that the reverse obtains as to *noble blood*, which, though it can hardly be made better, cannot grow worse without some alloy of a baser kind. If then there is this difference in blood, and good blood is so much better than bad, with what propriety can we condemn the cautious pride of our ancestors, or how can we approve the levelling principle of the Americans and their abettor Mr. Paine, who are for destroying the noble crasis of our blood, and by reducing it to an undistinguishable heap, would leave no choice but in quantity.

It has formerly been matter of great apprehension to our blooded heroes when going to battle, that their blood might be mixed with that of the common rabble—what then must be their feelings when they see it during their lives confounded and mixed, if not in fact, at least in opinion so as to leave both of equal estimation with the world. But though I cannot approve these new fangled doctrines, it would give me pain to condemn my countrymen, and I shall therefore endeavour in some way to account for their conduct.

The Americans, who are certainly encreasing very rapidly in knowledge, must have concluded from the late discoveries in Europe that *transfusion* would soon be brought to perfection and into general practice, and foreseeing the superiority of that mode, and the facility with which the objects might be attained, they have begun to turn their minds and affections from the other previous to its total abolition. For my own part I should exult in the success of my countrymen, if they should be able to excell the Europeans by improving on their inventions; and although a few years may possibly elapse before the thing is compleated and the situation of our finances prevents our great men from holding forth these lucrative incentives to enquiry which are so abundant in Europe, for the prosecution of voyages and discoveries in the different branches of science, yet I feel so strong a presentiment of the practicability and usefulness of *transfusion* that I must beg permission to anticipate some of the happy effects that must inevitably flow from it—and if these flattering expectations should never be realised, they will at least stand as monuments of my good wishes for the present and future generations.

I ask but a few data to go upon.

First, that the disposition, talents, &c. as well as the bodily health and vigour of the man or animal, depend on the quantity, quality and nature of the blood which (if the *reader* reflects on the great part which the nerves proceeding thro' the brain, have in making it) must be readily granted.

Secondly, that the make, disposition, talents, &c. of the offspring must depend on the nature of the blood of the parents. And

Thirdly, that the blood being the efficient cause of all these happy effects, if we have it in our bodies, it is no matter how it gets there (as many prudent people think about money in their pockets.)

With the aid of a physician I could establish my third point beyond a controversy.

If we consider the effects of inneculation—the changes which are made in our constitutions by insensible perspiration, and the many different disorders and remedies that are inhaled with the air, we must be convinced that they act equally on the blood, without any material distinction arising from the manner of their getting in.

I shall have no difficulty in demonstrating that it will be most eligible in every respect for a man to obtain by *transfusion* such a quantity of blood as he may want—to get it of such a quality as will suit his particular purposes, whether bodily or mental, and to traffic away and dispose of such parts of his own as may be inconvenient or superfluous. To illustrate it by a mercantile figure—This mode will have every advantage over the present, of a ready market where every commodity can be procured, of a good quality, in a sufficient quantity, at a reasonable price, with an immediate delivery, and in a situation to be applied to present use, instead of one where the quantity is small or uncertain, the price exorbitant, the passage and delivery precarious, and the goods at last unfit for use and yielding no profit.

To be more particular.

An industrious man can acquire a large fortune and (as it frequently happens in Europe) wants nothing but a dash of noble blood in his veins.—What is to be done? The usual mode has been to make an alliance with, or (in other words) to *sell* his daughter to some man of noble blood, with the purport, not of bettering himself (for there was then no method of doing that,) but of giving his posterity a chance for better blood than he could otherwise transmit them. But how great were the inconveniencies and how tedious the process. Admitting the value of the acquisition, the price might be too high, his daughter might be subject to contempt, to disease, beggary, whilst the advantages would be remote and uncertain—and if we reflect on the chemical and galenical process of nature in the transmutation, we shall find the end of his hopes and wishes distant indeed. Whereas, by getting a sufficient quantity of good blood in his own vessels he may transmit it to his posterity at once, and need not cringe to the WELL BORN for the honor of an alliance.

It would be tedious to enumerate the different situations in which noble blood has been sought after, and the flow and round about methods which have been adopted for obtaining it.—My intention is, to demonstrate the preference that ought to be given to *transfusion*, and the various purposes of utility, convenience, and pleasure to which it may be applied.

This traffic will open a new door to adventurers, and as every man will trade upon his own bottom, and carry his merchandize about him; there will be no danger of monopolies or exclusive associations. It will be founded on the true and original principles of commerce: being a barter or exchange to the benefit of both parties, without the necessity of an intervening *medium*. It will be a commerce, like Shakespeare's description of mercy—blessing him that gives and him that takes—and the immediate perception and enjoyment of the profits arising from the exchange must be a source of the greatest happiness.

A man who, from looking back to his ancestors or the country from whence he came, is desirous of parting with the blood which he has brought with him, will have an opportunity to accommodate himself according to his wishes, either by barter or sale—(for money will find its way here as in all other commercial dealings.) Noble blood will then get to its standard value—as much as it will bring—and the owner may find it an intrinsic good instead of an ideal one.

I foresee that there may be some difficulty in ascertaining the quantity on hand, before the market is opened—in order to prevent counterfeits and impositions (because a man cannot part with his good blood and keep it too) the quantities must remain as they are. Tho' indeed there is one way to make it all good—It is by drawing off from those whose blood is of the *lowest* kind as far as they can bear it, and stall-feeding the nobility in order to encrease the supply of the *highest*;—but as there is some appearance of cruelty in this mode, and as it would put a stop to the trade, I forbear to recommend it. All men should not be equally gifted or supplied, and it is by our mutual wants that the bond of society is kept up. But with regard to the impositions which I have mentioned, as this may probably become a public concern, there is no doubt that proper offices will be established in the different states to attend to it, and there will be no want of persons to fill them. An odium indeed may be cast upon them at first by saying that they live upon the *blood* of the people; but they may get over this charge by observing that what they do literally, has been figuratively done, and will continue to be so by most officers of government.

The advantages that I have hitherto mentioned are small, in comparison with what are to follow. As I have premised that the blood affects the disposition, talents, &c. it will readily occur that very extensive dealings will take place on that score. If any man is so candid as to be dissatisfied with his temper or his mental faculties, he may curb the one and amend the other with the greatest readiness and facility. The old methods of subduing bad tempers by correction and beating in knowledge in a direction the very reverse from the right one will then be exploded.

I have read of *short roads to knowledge* held out as the title of books that only treated of particular sciences, but how much shorter must this road be, by which the mind is at once qualified to grasp at the most unbounded attainments, and by which every man in tolerable circumstances may acquire that portion of abilities which will best suit his purpose.

I feel myself in some measure lost here by reflecting on the train of consequences that may ensue—there is a kind of circle. To begin with knowledge The man who has any, will know that he wants more—This will lead him to get money wherewith to buy it. When he gets more, he will (especially if it is professional) make more money from it, and may go on so till he gets his skin full of knowledge, and his chests full of money, and have more of both than he can make use of. But we shall soon get out of this difficulty—I shall not be at the pains to tell how he may get rid of his money; and as to his knowledge, or at least his faculty of acquiring it, it may go out the same way that it got in,—and if he is of a benevolent turn of mind, he will take pleasure in dispensing what will be more valuable than riches.

This mode of contributing to the education of young persons will be far less irksome than the present one; and we may therefore hope to see the profession of a teacher considered in a more respectable point of view than it now is. But to return.

If men will, after this invention is perfected, content themselves with the acquisition of a reasonable quantity of blood of the kind that will be best adapted to their wants, what great advantages may be derived to themselves and to the public. To instance—a blockhead of a fellow, who has the impudence to push himself into the legislature and management enough to persuade the unthinking populace to vote for him, may, by a proper transfusion of blood, get upon his feet when the public business is going on, and make as much noise (and more to the purpose) as he does at the time of his election—nay it is possible that even members of Congress may find their faculties brightened by this invention, and may lay out a part of their allowance to advantage in transfusion. They may then give some aid, themselves, to the prayers which (with a singular degree of political accuracy) are, since the revision of the prayer book, offered up for persons vested with authority *legislative, executive and judicial.*

A man who is about to engage in a nel, may very properly prepare himself with blood, suitable to the occasion and finish the business in a decent manner, while another who finds himself quarrelsome, may barter a small quantity with one of a timid disposition, or strike up a bargain with a quaker, and become a peaceable member of society.

In case of an invasion, the militia may be supplied (at the charge of the public) with a sufficient quantity of fighting blood; and if it cannot be otherwise had, a few dops (all that they have left,) may be procured from the old soldiers, tho' it is probable they will deal for ready money, having been cheated out of the price of it by the public already—A miserly fellow, who is obliged to give something like a feast, may purchase an ounce or two of liberal blood to carry him properly through it—A moral man who wishes to push his fortune in the world, may, (for a proper fee) procure some blood from a lawyer, and forget how to blush—Some young females may find their advantage in the transfusion from a sober matron, or the more correct blood of a Methodist Preacher—The coward may at a small expence make himself brave—The spendthrift by buying a farthingsworth of the blood of a miser, may save the remnant of his fortune—And a fool may learn to purchase wisdom by this happy invention—In short, I might fill a volume in describing the varrious wants that might be supplied, and the great advantages that would accrue to the public in all its departments, and to individuals in private life, by a commerce and transfusion of this kind.

The peace and happiness of domestic life will owe much to this invention—A father, who trembles with apprehension for the conduct of giddy and unthinking girl—and a husband, who feels the tormenting pangs of jealousy, will never think of having recourse to the ordinary methods of watching, confinement or admonition—They will know that the fault lies in the *blood*, and instead of making the mind the vehicle of information, they will by transfusing some *blood* of a cool and moderate kind, reduce the whole system to order and regularity—There is, perhaps, no other case in which the remedy can apply so immediately to the causes and seat of the disorder: Some young ladies have objected to going into Convents, alledging that they had no Nun's flesh about them, (meaning, that their *blood* was not of that kind,) and the poet must have meant *blood* instead of *stars* in these lines—

> "For when weak women go astray,
> "Their blood is more in fault than they."

An old man, who, trusting to some flattering emotions, is about to change his condition, or who, regardless of the consequence, has already committed matrimony, will no doubt avail himself of the blessed effects of transfusion.—Methinks I see him enjoying his resuscitation and hear him singing with Don Diego in the Padlock—

> "I feel my blood mounting,
> "Like streams in a fountain,
> "That merrily sparkle and play"

I will not deny but that some objections may be raised here and doubts entertained of the efficacy of the operation. The caution in Scripture with respect to putting new wine into old bottles, will apply rather too forcibly in this case; but it will be better than nothing—and may do for a spirit.

I now come to another great branch of this commerce—I mean the effects it will have on the health of the people, and the short road that it will discover to the cure of diseases. I am well aware, that among the numerous cavillers and framers of objections to any thing new, I shall have to encounter the whole tribe of physicians who may feel some alarm lest the business should be taken out of their hands. But while I am striving to promote the public good, I shall pay no regard to objections founded on party spirit or private interest. It is certain that this operation will make a considerable change in the *Materia Medica*, and several of the most repectable *recipies* will be consigned to oblivion. It is agreed by the Faculty that many disorders are occasioned by the state of the blood, either from its redundancy, from the want of a sufficient quantity, or the morbid state of what is in circulation—of course, a number of remedies have been devised to act upon the *blood*. Though many of them are directed in a course so circuitous as to afford a very uncertain prospect of success.

Among the disbanded troops of gally pots and phials we may reckon the whole tribe of Sweeteners, Purifiers, correctives, Traumatic balsams, alteratives, diluters, refrigerants, antisceptics, decoctions of the woods and restoratives; and the army of *Tonics*, with the Peruvian bark at their head, may perhaps share the same fate. For to what purpose should we mend the blood, if it can be had new with less