

Medical, philosophical, and vulgar errors, of various kinds, considered and refuted / by John Jones, M.B.

Contributors

Jones, John, 1726?-?
Bland, R. 1730-1816

Publication/Creation

London : Printed for T. Cadell Jun. and W. Davies (successors to Mr. Cadell) in the Strand, 1797.

Persistent URL

<https://wellcomecollection.org/works/hfj8dyeb>

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MEDICAL, &c.
VULGAR ERRORS
CONSIDERED AND REFUTED.

VULGAR ERRORS
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CONSIDERED AND REPORTED

1.

MEDICAL,
PHILOSOPHICAL,
AND
VULGAR ERRORS,
OF VARIOUS KINDS,
CONSIDERED AND REFUTED.

By JOHN JONES, M. B.

MORBUS NOBIS HÆC OTIA DEDIT.

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(SUCCESSORS TO MR. CADELL) IN THE STRAND.

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M E D I C A L
V U L G A R E R R O R S

R E F U T E D.

IF it be asked, Which state of life is most
irksome, an active employment which
wholly takes up all one's thoughts and at-
tention, or an absolute indolence, and hav-
ing little or nothing to do? perhaps few
people are more competent to answer it than
myself. For, after an extensive practice of
above fifty years, with an uncommon share
of uninterrupted health nearly all the time,
which afforded me an ample specimen of
one side of the question, a late unwelcome
visit from a deep seated sciatica, which con-
fined me for many months, let me into the
knowledge of the other side.

While thus at my moorings, in so long a vacation from business, to beguile in some degree the *tædium vitæ*, I thought I could not employ my sedentary hours better than in an attempt to break a spear against such deep rooted medical errors as have been permitted to travel down to us from time out of mind, as matters of unquestionable veracity, hitherto uncontradicted by any author to my knowledge; not without hopes, while endeavouring to convince my readers of what is wrong, of happily advancing a step farther, and shewing them what is right. The readers I address myself to, are not those of our profession, not having the presumption to teach my brethren; who, it is to be hoped, have all been sufficiently instructed already in these matters.

It is to the difficulty people find in getting rid of long rivetted prejudices, and the opinion, that the noble art of healing is involved in such impenetrable mystery as scarcely to be understood, that we must attribute a well known fact, viz. That, in general,
gentlemen,

gentlemen, even of the best education and learning, however they may shine in other sciences, are most grossly ignorant in this; and though they endeavour to acquire such a competent knowledge of law as to guard themselves from the knavery of the unprincipled in the profession, and of the sword and pistol to defend themselves from that of the honourable fraternity of gamblers; they often submit their lives to the most ignorant quacks, let their mode of treating them run ever so plump, in every respect, against common sense. It is for the encouragement of such, that I shall endeavour to remove some of the rubbish that obstructs their way in their prosecuting this, by far the most useful and agreeable branch of natural philosophy.

When the immortal Harvey demonstrated the circulation of the blood, great expectations were formed of the advantages likely to accrue to the practice of physic from so capital a discovery. But to confess the truth, by comparing the writers before with those since that time, it appears that very

little benefit has hitherto followed it ; science being of such slow growth, that it needs many a fostering hand to nourish it, and a length of time to divest it of its old prejudices. To evince the length of time taken up in this country, before common sense has been able to overthrow one of the filliest and most ridiculous opinions in the world, we have only to recollect, that though England had been ruled for many centuries by kings, lords, and commons, and sapient judges, (rest be to their old bones,) it was not till within a few years, that these sages, God wot, ever thought it wrong to consent to the hanging of a poor woman, suspected of being a witch, provided she were but old enough, and had sore eyes, and kept a black cat.

It is no inconsiderable step in favour of science, to bring ourselves to doubt of the reality of some facts advanced for truth, not only by the ancients, as from their own knowledge, but by some moderns also, in spite of the celebrity of their names. And, perhaps, Mr. Baker's scheme for the improvement of learning, to burn 50,000 books yearly,
till

till two or three only, and those the best in each science, were left, was by no means so whimsical.

One notable attempt, indeed, at improvement, entertained the world for some time, and raised the expectations of the public to a great pitch; that the most inveterate distempers might be cured in an hour, by nothing more than decanting the impure blood of the deceased out of one of his arms, and receiving into the other a like quantity of pure blood from a healthy person. Our philosophical transactions soon swarmed with well attested cases of the success of this transfusion in different parts of the world, in various distempers, and in different animals. And by the acrimony of the disputes between the English and the French virtuosi, concerning the priority of their right to the invention, one would have imagined all was thus happily attained that could be desired; and that the art of physic had arrived to its acme of perfection, without calling in the further aid of pills, boluses, or juleps. But whether it was, that the

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learned,

learned, jealous of each other's claim to the glory, took pet and gave over prosecuting it with the ardour they had begun with, or whatever was the cause, the project unfortunately died away, and we have heard of no more cures performed by it from that time to the present. Had it succeeded, as the temper of no man is so perfect as to admit of no possible melioration, great things might have been expected from a little dash of blood of another disposition, in various cases; for example, who knows but that a pound or two of the blood of an English mastiff transfused into the veins of a fribble officer might remove the paleness from his face, keep his knees from trembling, and enable him to face in battle the fiercest Sans culotte?

The moderns have assuredly but little right to condemn the ancients for their ridiculous farrago of medicines, while album græcum, peacocks dung, sheeps cuttles, and stonehorse dung, continue to be celebrated medicines in our times. Is it not a most disgusting thing to cram a sick stomach with
a load

a load of the filthiest things in nature, while chemistry affords us medicines of similar but superior virtues in doses of a few grains only? A few grains of sal ammoniac in solution being to the same intentions a more efficacious and a cleaner medicine than a quart of the infusion of stonehorse dung, though sufficient care had been taken that the dung was dropped in the cleanest napkin.

Of late, many wheel-barrows full of herbs, roots, barks, weeds, &c. &c. have been thrown out; yet many more are still retained in practice that ought to have accompanied them. And it bears hard upon the sagacity of the ancients, that the boasted effects of their *Conf. Fracastoril*, and their other farrago of *Philonium Romanum* in diarrhæas, are now supposed to be chiefly owing to one of their ingredients only, the opium. In a complicated formula, such as that sweeping of the shops called *Mithridate*, and the like, it would puzzle a physician to discover how much each ingredient contributes to the cure, and an accomptant, how much of each there is in a given dose. Im-

provements, indeed, have of late been made in the classing and discriminating different plants, &c. but if we stop here, without investigating the certain peculiar virtue of each, we do the art of healing no more service than the virtuosi do, who class spiders, butterflies, and shells.

This task has, indeed, some years ago been undertaken by a foreigner, who, having a genius for chemistry, fancied that fire and different menstruums in chemical processes would analyse and discover their virtues. But unhappily in those experiments, as in the torture of the human subjects by the Inquisition, it is well known that several of them were forced to confess some things, of which they were never guilty. A young Scotch physician is said to have lost his life in tampering with his own constitution, by swallowing different medicines, to observe their effects upon him in their largest doses. This was undoubtedly a more accurate mode of discovering the effects of many subjects upon the human constitution than the foregoing; though against this it may be justly observed,

observed, that medicines may have a very different effect on a diseased from what they may have on a healthy stomach; and that a physician may in many distempers, even when he has happened to be successful, find it a very arduous task to discover how much an approved medicine, and how much the *vis medicatrix* itself, may have contributed to the cure; which consideration may in some measure help us to account how some medicines have been dethroned in one century, which had overruled every objection in a former, and the probability of their recovering their reputation again in a subsequent one. Far be it from me to doubt the integrity of that Spanish physician in boasting of his success, upon the first importation of potatoes into his country, from his having ventured to give six grains of it three times a day in a dangerous fever, which he cautiously at length raised to ten grains. All his error lay possibly in his claiming to himself and his medicine the whole merit of the cure; though, if ~~Hypocrites~~ Hypocrites had been the judge, he would have allotted, in all probability,

probability, the greatest share of it, if not the whole, to the *vis medicatrix*, change of weather, or many other unheeded causes; not that I would derogate from any good qualities of the potatoe; for after this drug came to be better known in Ireland, it was found to be a specific for that grievous disorder of the stomach, which the poor of that kingdom are so subject to, called hunger; when exhibited in the dose of a pipkin-full roasted; and that too after the *vis medicatrix* had failed.

Even supposing the virtue of a drug well known, and a true indication of cure formed; much still must depend upon an exact knowledge of the dose necessary to answer the wished-for design. Were a man, when his house is on fire, to keep throwing water on it by cup fulls, though he be right in his indication, and applies the appropriated remedy, yet being under-dosed, little good can be expected from it. Many have suffered their constitutions to be ruined, though they had for months in intermitents taken bark in ineffectual doses, who might have been
saved

saved by taking an ounce or more daily. In short, it is a knowledge of the animal œconomy, from a knowledge of the anatomy of the several parts of the body, with their several functions, and dependance upon each other; together with a watchful and constant observation, and due consideration of all the symptoms of the sick, assisted with accurate well drawn histories of diseases and their cures, drawn up by physicians of judgment and probity, and no boasters of their own skill, the sin that is said so easily to beset us all, that must lay the only sure foundation for a physician's knowledge *what* to do, and *how* to do it.

The sudden cures in various cases I saw performed, some years ago behind the Royal Exchange, by the much celebrated doctor of those days, on numbers of poor people, who, as they said, came up from the remotest parts of the country, whose ailments were pronounced incurable in several hospitals, stupified me with utter astonishment, till I fortunately fell in company with a surgeon, who had been employed by him
in

in the chirurgical cafes at Pimlico; who assured me, that those wretches I had seen, were by way of decoy ducks, hired alternately to attend there and near the horse-guards twice a week, at half-a-crown a piece, to pretend to be cured of such diseases as they were instructed to personify; and that the better dressed people that came in coaches, and were shewn occasionally as private patients up stairs, were hired at a crown each, exclusive of the coach.

A well written book, of a variety of well attested cafes of cures by Dr. Graham, by his Magnetical Electrical Celestial apparatus only, had a similar effect upon me, till, by his becoming religious, he very honestly confessed that it was all an imposition.

These instances, as I had naturally a narrow swallow, and being no Roman Catholic, have not been in the habit of crediting marvels, have given me an utter disrelish for marvellous cures performed, even by men of eminence, though attested also by men in high stations; infomuch that I
find

find great difficulty in giving implicit credit to Sir Kenelm Digby's wonderful success from his sympathetic powder, though attested by his friend the great Lord Herbert of Cherbury; which, by being only simply rubbed on the sword, which gave the wound, cured the dueller whose body it had run through, without the painful probings and dressings of a surgeon, or the least confinement. I have also a great backwardness in giving credit to Greatorex's cures, and the French impostures of animal magnetism. As for that beautiful experiment, in proof I suppose of his doctrine, that blood has life in itself, which John Hunter contrived, equal to any of Talicotius's, of transferring a cock's spur from his leg to his head, and making it grow there; I am sure I have no reason to object to it, as I won a wager that it was not true, which a gentleman paid me freely, upon its having been omitted in a subsequent edition of the quarto Treatise on Teeth. Though the transplantation of a cock's spur, when successful, appears not to be attended with sufficient advantage

vantage to encourage the practice; that most ingenious experiment, recorded in the Berlin Medical Memoirs for the year 1778, of hatching chickens in forty-eight hours by electricity, not only saves the poor hen nineteen days painful attention, but might turn out a most beneficial article in trade, and reduce the price of poultry, which is at present enormous, if it succeeded here.

Notwithstanding the above strictures, as I myself have a propensity to a little whimsicality, I am ill-disposed to sneer at any medical *jeux d'esprit*; though they may happen not always strictly to answer the ardent wishes of their projectors; from a conviction that the laugh of the unlearned at a first project may at times have proved detrimental to science, by so cramping a man of genius in his ardour for improvements, as to intimidate him from making a second attempt, who with a little encouragement might have succeeded better in subsequent trials.

Under this predicament, as simple a scheme as any was that of the celebrated
Leuenhoek,

Leuenhoek, planned for the preservation of his own health, who had such remarkably good eyes, and was so much accustomed to make microscopical observations, that he discovered the small vessels or pores through which insensible perspiration is carried on, which open sideways under the *cuticle*, of such minuteness that 100,000 of them might be covered, he assures us, by a single grain of sand; yet his apparatus did not cost him a penny, being a single microscope made by holding a small glass wire in the flame of a candle, till it melted into a little round globe, which he afterwards placed in a hole made to fit it by a pin in a thin bit of stick. With this he was enabled to make greater discoveries than any subsequent philosophers with their very costly microscopes, which, though they magnified, darkened the object at the same time.

He pricked the back of his hand with a pin, when in perfect health, for a drop of blood, which he carefully inspected through his microscope; the exact consistence of which he noted down, to serve for a

standard in a scale to measure any future aberrations from, upon the access of any future illness. Thus prepared, when for example, he found it necessary upon the approach of some disorder, to inspect the state of his blood, he pricked his hand as before for a drop, which he carefully compared with the note of his former standard, from which he formed his indication of cure. If he found that the *crassamentum* exceeded in its proportion, he lived pretty much upon weak fops, tea, weak coffee, lemonade, imperial, and the like; and, on the contrary, when he observed an excess in the serum, he thickened it by drinking a decoction of Peruvian bark, and a glass of Port now and then. And I make no doubt, had the virtues of Priestley's airs been discovered in his time, but that Mynheer, towards the completion of his scheme, by a careful and judicious observation of the blood's colour also, and its variation in different disorders, would have added to his Pharmacopœia, the three articles of Azotic, Hydrogene, and Oxygene airs, to remedy all its aberrations
in

in that respect also ; for example, if (as it is natural to suppose in a torpid Dutch habit) the blood should happen to exhibit too much of a dark scorbutic red, he would only have had to snuff up a few nostrils-full, now and then, of Oxygene air, to quicken the circulation, and give it a beautiful pink. If, on the other hand, it appeared too pinkey and florid, he would only have had to lower it with *quant. suff.* of Azotic or Hydrogene, till it should be reduced to its natural healthy standard, crimson.

Notwithstanding truths have been said to depend upon each other by a continued chain ; regularity and connexion cannot be expected to flow from error and confusion ; nonsense being, as it were, an independent principle, standing upon its own bottom ; that of each person being his own *planta sui generis*, unlike any other man's ; no regularity seems to be required in my tumbling out a catalogue of those Vulgar Medical Errors, just as they present themselves to my memory.

As I may, as I proceed, have occasion to make use of the term *Non-naturals*, so frequently made use of by medical writers, it may not here be improper to begin with it, by observing, that it is a most palpable catachresis, and made to convey an idea directly the reverse of its natural import.

Another absurdity I shall take notice of is, that wherever a physician happens to dine in a family, he is generally asked by the company, whether this or that dish be wholesome ; or, it may be, which of some two is wholesomest : for example, perhaps strawberries and cream, or mock turtle dressed in high gout, with its full accompaniment of acrid poignant force-meat, combustible and well be-deviled with pepper, ginger, cayenne, salt, mustard, horse-radish, and sundry pickles, aromatics, and Indian provocatives.

To answer this question, without his perusing the case of the eater accurately drawn up, is beyond the skill of any physician. Quite as rational a question to a wide dealing merchant, who has a variety of ships at
sea,

sea, would be, which wind he reckons best; without specifying to what particular ship, and its voyage. This last question reminds me of the egregious absurdity of some of our former adulating poets, who (because the Romans, for the purpose of its cooling their scorched air, were in the constant habit of invoking their favourite Favonius) were wont to pray for gentle zephyrs to waft over our Georges from Hanover; not foreseeing, were their prayers heard, that it would prove a wind in their teeth.

It may not here be amiss to observe, that in our diet one kind of food is supposed to be diuretic, another cathartic, or the like;—so far from this, our aliment in general is, or ought to be, so bland, mild, and inert, (if one particular sort be not persevered in for a considerable time,) as to cause no remarkable alteration whatever; for were it to do so, it would quite, by becoming a medicine, subvert its use and design as aliment, and prove extremely destructive.

That a physician just called to a patient ought, as soon as he comes down stairs, to inform the family of the name of the disorder.

This, in which the credit of the apothecary is greatly involved, who from his earlier attendance, may possibly have been rash enough to give it some name, may not unfrequently happen to be a very difficult question; till the doctor has had sufficient time to discover it by a most sedulous attention to its various, and possibly complicated appearances. And it may not unfrequently happen, even after the determination of the disorder, that he may never be able to bring all its variations to answer exactly to any species the very fancifully inventive class-maker may have established. How much, for example, would one be to be pitied, whose reputation, when desired to look at a sore eye, were to be estimated, and depend upon his being able to specify identically which of old Chevalier Taylor's 134 disorders of the eye, as delivered in his Lectures, the present was; many of them, probably,

as difficult to discriminate as any of Captain Cook's newly discovered rocks and headlands. Moreover, if the distemper be a fever, how often are fevers, which in their access are inflammatory, found to become in their progress nervous; or putrid intermittents to become remittent or continual: and *vice versa*? so that like the man's account of the wind at *Maker's Tower*, the physician's account may daily shift and vary. And indeed, after all is over, precisely to distinguish between the peculiar symptoms of the disorder, and those probably owing to the medicines made use of, is no very easy matter; for the putrid water, for example, and corrupted juices discharged by stool in any illness where scammony has been much used, is by no means a proof of the previous existence of those humours; for scammony given to the healthiest person will dissolve the blood into a putrid water, and waste the whole body by its repeated use; the healthy juices being first corrupted by the virulency of the medicine, and then discharged.

Lecture-reading class-makers often find great trouble (so there is in splitting a hair) in those distinctions without a difference they make in their minute divisions and subdivisions of fevers; with the view, probably, of appearing sapient to their pupils, rather than any real use they can possibly tend to. Probably the truth may lie between these, and a late writer, who, with an ingenuous unassuming diffidence, ventures to prove, that of fevers there exists but one sort only; attributing all the variations in their symptoms to the different Idiosyncrasies of patients, seasons, treatment, &c. &c. And what strengthens this gentleman's opinion not a little is the known fact, that two people never had exactly the same symptoms in any fever. Mere speculation, indeed, seldom does any good in physic, or even in philosophy or divinity; had a learned Prelate, whose business only it was to prove to us the reality of the demoniac miracle, saved himself the needless pains he took to puzzle himself and his readers, in calculating to a scrupulous nicety the number of devils and half-

half-devils allotted to each pig ; our belief, taking the whole in the lump, as the inspired Apostle relates it, would have been equally strong, and the Bishop would have escaped much derision.

There are very few visitors of the sick who do not kindly press the infirm person, though attended perhaps by a physician or two of great skill, to make a trial, in preference to his present medicines, of some very innocent thing ; which, from their own knowledge, they assert has been of the greatest benefit in just such a similar case.

The first mistake of the busy interfering lady or gentleman may be, (and a very dangerous one it is,) in the *similarity* of the case. A second may be, that this innocent thing, except it be purely an article of food, can be of any use at all ; none of our choicest medicines being innocent things when improperly applied. To a person of a tender face who must be shaved, can it be any recommendation of a razor, that it is as innocent as a lath, which can never be too keen in the hands of persons well skilled in its

management? And if by an innocent thing be meant a medicine slow and weak in its operation; is it certain that the disorder may not gain a march upon it, by this trifling procrastination, and great loss of time; and this innocent nostrum be thus actually converted into a poisonous one, for in many cases *non progredi est regredi*? Another error may possibly be, that the art of physic is either universally innate in mankind; or, at least, is so very easily attainable, that scarcely any body is ignorant of it, except physicians themselves. If so, what incorrigibly egregious dunces must the regularly educated physicians be, who, after the best classic education, study physic in each of its numerous branches with every advantage for many years at Oxford or Cambridge, completing the whole with a year's attendance upon the most reputable professors and hospitals in London; if after all they are not supposed to be even upon a par with the generality of other people, who pretend not to have profited by any of those advantages.

To

To confess the truth, our brethren the Urine Prophets, and Animal Magnetisers, shew abundantly more good sense than any of us ; as, without the least expence, they create themselves Doctors by inspiration ; without pretending the least assistance from learning, or its equal substitute a Scotch *diploma*. And as long as the fools in this credulous nation continue so greatly to outnumber the wise, they will never fail of getting into very lucrative practice, and rapidly making their fortunes.

As government at present perfectly acquiesces with any persons practising physic, who can find people weak enough, and willing, to be practised upon ; Oxford seems to have no great desire to concern herself much in the matter, Divinity and the Civil Law being her staple commodities. The thing which affects her interest most is her young sister Cambridge opening a private bridle road, to the left of the old turnpike one, to let in country curates, and undersell to them Bachelor in Divinity degrees ; without keeping terms, and without any
previous

previous examination into, or knowledge of, their learning. Had Oxford been politic enough to have elected Mr. Pitt for one of its representatives, he might probably, in return for that honour, have befriended her by inserting a clause in his act against smuggling, against so clandestine a practice, so injurious to the fair trader, the elder *Alma Mater*. As matters now stand, I know not what my much respected old nurse can do better than to open a similar postern wicket, and, like play-houses, after the third act, let in country customers at half-price.

That every man is the best judge of his own constitution.

This is no farther true than that he knows what agrees with him best in health ; as to every thing else, when illness comes on, the physician is the most competent judge.

That in the constitution of Britons most disorders proceed from a scorbutic taint in the blood.

This notion may possibly have had its rise originally from the itch ; and the frequent

frequent appearances of leprous, serpiginous, tetterous foulnesses of the skin, and various other eruptions, so frequent among us; on which the ingenuity of our class-makers have not hitherto been able to bestow sufficiently discriminating names. The scurvy being a distemper chiefly confined to sailors, or persons shut up in garrisons, of inactive life; under the want also of subacid, cooling vegetables, and wholesome air; which, after discovering itself first in ulcerated gums, is of such notoriety as not to be mistaken.

That the itch is a disorder of the blood, which requires for its perfect cure a proper regimen, bleeding, purging, and a long course of sweetners of the blood, as some particular medicines are very fancifully called; and that in Scotland, invidiously said to be its native country, it was begotten by the oatmeal diet on which the poor lived.

Whatever ignorant or designing practitioners may say, or make of it, it is no more a disorder of the blood, than moles are a disorder

order of a meadow, which they grub up ; but is occasioned, as may most evidently appear by ocular demonstration, by little animals of the *acori* species, which dig, bite, and burrow into the skin, and therein deposit their *ovula* in pustules, for the propagation of their species ; which form ulcers and scabs, of horrid appearance when of many years standing. Agreeable to this account, all applications whatever, which have been known to destroy all other small vermin or insects, are found to answer here also. This filthy *defædator* of the skin begins of late to be held in proper detestation, even amongst the poor ; whereas in former times, as it was not a painful disorder, old women never thought of curing it in children, esteeming it a sign of health ; as, according to their doctrine, it threw out, and cleansed the blood of its gross scorbutic humours.

This old standard of the blood, the scurvy, has of late been universally superseded by another, though often indeed with as little foundation as itself, viz. *a bilious habit* ; the most fashionable disorder at present, and

which supplies Bath with the greatest number of its invalids ; the chief proof of its existence, and a very slender one it is, is derived from bile's having been accidentally thrown up upon ridding one's stomach of something disagreeable to it ; or after a smart emetic, which must necessarily happen. As if bile, as useful and necessary a fluid as any in the whole animal œconomy, were a preternatural destructive recrement, from whose existence a numerous train of bowel complaints, fevers, &c. are fancied to originate. I have reason to believe that, in general, most of those cases denominated bilious fevers from vomitings of bile, and a yellowish suffusion of the eyes and countenance, do not arise from a superabundant secretion of the bile, and its activity upon the constitution, after its having been reabsorbed into the circulation, but that these symptoms should oftentimes be attributed rather to the texture of the blood being broken down from a putrescency in the fluids ; for it is a well known fact that the bile may be returned into the blood, as in a jaundice,

jaundice, without producing any febrile symptoms whatever. Sydenham thinks those pains in the *scrobiculus cordis*, and those violent vomitings by which herbaceous coloured matter is thrown up, to be symptoms of the hysteric colic; caused, he thinks, by a violent impulse of the spirits crowded together in those parts, causing pain, a convulsion, and a total subversion of all the faculties; and says that we should not immediately conclude that the disease resides in the humours upon account of their green colour, or is owing to the acrimony of some humours which require to be rooted out by emetics and purgatives; for sea-sickness, from the agitation of the animal spirits alone, in a boisterous sea, causes porraceous vomitings in persons in perfect health; and it is notorious, that whenever this green matter appears it is always increased, instead of being cured, by the frequent use of cathartics and emetics; because by both the confusion of the spirits is augmented.

Boerhaave supposed that a jaundice proceeds only from obstructions in the *vena portarum*,

portarum, and the liver ; in which case the blood, mixing with the rest of the blood in the heart, without secreting out of it any bile, causes a jaundice.

So far from this being the only cause of the jaundice, I believe it hardly ever is ; for the liver has frequently been found inflamed, obstructed, and even schirrous, and almost entirely destroyed, without any jaundice. The true cause of a jaundice seems to originate in an obstruction of the biliary ducts, or in the *ductus communis choledochus* ; from any cause forcing the bile, already secreted, to regurgitate, and to be refunded again into the blood. A tumour of the liver may indeed, by its compressing together these ducts, cause a jaundice ; as we also often observe to happen to children a day or two old, from the *meconium*'s stopping up this duct.

That Abracadabra written on a piece of paper, and worn on the stomach, will in a few days effectually cure a jaundice.

When the jaundice has been caused by grumous concretions of bile stopping up its passage

passage from the gall bladder ; the bile, by filling the bladder, may, after a little time, by its distension, force out the stone that stopped it, and thus give *Abracadabra* the credit of the cure.

That icterical persons see every thing yellow.

Though it be a common poetical allusion to see things with a jaundiced eye ; and though this circumstance enters into the great Sydenham's definition of this distemper ; I have seen numerous patients icterical to the greatest degree, yet never knew one who did not see objects in their natural colour.

That the air surrounding a house infected with the plague has been, in some cases, so contaminated, that birds, in their flight over it, have dropped down dead.

This is not true ; it being of late a well ascertained fact, that no infection can be communicated from even an infected person without touching him, or something which

which he has touched. Farther knowledge than this, either as to its nature or a successful mode of treating it, has not, I believe, been acquired much more in this, than in the last century; the only chance we had of acquiring any has been lost by the ever to be lamented death of the most benevolent Mr. Howard, and the consequent unaccountable theft of his papers. What puzzles our inquiries very much is a fact, well attested by modern travellers of reputation, that the plague at Grand Cairo, after its most dreadful ravages, has been constantly known to cease totally upon one and the same particular day annually; after which no person ill of it dies, nor is any one after that day infected by it.

Many hypotheses have been offered by authors to account for the cause of the plague. One fancies that it proceeds from very minute *animalculæ* floating in the air. Another, in an ingenious treatise on unheeded causes, supposes it to proceed from deleterious effluvia arising from orpiment, or perhaps some unknown minerals; assuring

us that it never appears in a country of Cinnabar Veins, though every where around it. And that it cannot be owing to the heat of the climate, and animal putrescency; as it has never, even after vast heaps of unburied carcases after battles, been known in the East Indies, China, Japan, Batavia, in the land of Negroes, or in the West Indies. And that in countries which have been visited by it, it has been known to come on upon a cold north wind: to this hypothesis Dr. Dover's great success in profuse bleeding in it, is not a little favourable; which militates against the notion of its being a putrid fever.

That horse exercise must be improper for invalids, from a condemning observation of Hypocrates, that it brought on swollen legs.

In his time and country, before stirrups were invented, their legs might have been subject to swell, from their unsupported dependent posture; and invalids were deterred from the use of it, by the difficulty they

10 experienced

experienced in getting on horseback, which it is believed was by vaulting.

That digestion is performed in the stomach.

I think the stomach is principally designed for a repository for our food, that we might not be always under a constant necessity of eating ; and that the small intestines contribute the most towards digestion ; because being smaller than the stomach, and narrower, they can act upon smaller quantities of food at a time, and have moreover the assistance of the bile, pancreatic juice, &c.

That vomiting is caused by the contraction and action of the muscular coat of the stomach.

Upon a dog's being opened while in the act of vomiting, it appeared that the stomach itself was quiescent, and only compressed by the action of the diaphragm upon it, together with the muscles of the abdomen, and its contents.

That purging medicines act only on the primæ viæ by their irritation.

The contrary of this seems to be proved by children's being purged by the milk of their nurfes, who have taken phyfic; from hellebore bringing on a purging when only applied externally in an iffue; and from a poultice of tobacco laid to the region of the ftomach, caufing a vomiting. It is alfo well known, that purgatives, even of the moft powerful kind, by being exhibited in fuitable fmall dofes, in conjunction with mild apperients, may be introduced into the habit fo as to become notable deobftruents, diuretics, and diaphoretics, without acting fenfibly by ftool.

That the colon is the feat of colics.

I rather think that the *duodenum* moft generally is, from its being laxer, wider, thinner, and weaker, for want of the *peritoneum*; and becaufe its curvature and depending pofition afford the food a greater *remora*; fo that any morbid change in the *ingefta*, upon their mixture here with the bile,

bile, must have the greater effect upon it, before it comes to be taken up by the *lacteals* in the *colon*.

That an infusion of carduus, chamomile, mustard, or horse-radish, is necessary to work off an emetic draught.

This is a curious contrivance to render an operation, of itself sufficiently disagreeable, ten times more so. If intended to assist the emetic virtue of the draught, of itself too weak, why was it not prescribed of strength sufficient; or, after Tissot's manner, gradually augmented, so as to require no other assistance than a little hot water, with some honey added to it occasionally, purely with the design only to ease the stomach in the act? Surely those infusions cannot be expected to act as stomachics, when they are not meant to lie on the stomach for half a minute. In working off a vomit it is very dangerous to drink very large quantities of warm weak liquors, for by over filling the stomach, the orifice of the *cardia* may be so pressed close together as, instead of open-

ing it, to rupture it, which caused the death of Baron Waffener. Indeed, in many cases, dry vitriolic vomits, which, with much propriety, may be called *throat vomits*, are found of greater service ; after which no liquids at all must be drunk, lest they carry them down, and convert them into purgatives, which in some cases would counteract the intention.

That emetics must be hurtful to persons of weak and delicate constitutions.

So much otherwise, that sea voyages have been recommended to such with great success ; principally upon the account of the constant vomitings generally attendant on sea-sickness ; in the administration of whose emetics our brother Neptune has in general seldom been accused of over tenderness towards his patients. Yet it is a well known fact, that many of the veriest invalids, after daily vomitings at sea for a month or six weeks together, have been restored to a degree of health, alacrity, and spirits, unfelt for years before. It is also well known,
that

that *Hypocrates* had emetics in such good esteem that he recommended their frequent use to persons in full health.

That when five or six grains of Emetic Tartar, or three or four scruples of Ipecac. fail to turn the stomach, it is a proof that it is strong and healthy.

It rather argues an insensible over relaxed state of it, which threatens the approach of some paralytic affection. Not but that children indeed, whose stomachs are defended from irritation by an abundant, thick, tenacious, glutinous phlegm, require a dose much smarter than, calculating from their age only, could be expected.

That it is necessary to drink plentifully of water-gruel, or some warm diluting liquor, to assist the operation of a purging draught.

The palpable error here is using that as a mean for promoting its operation, which has a tendency on the contrary to weaken it. When in dropsies a very quick smart

purge is intended, care should be taken to forbid the patient drinking any thing which may dilute away its strength. What, in my opinion, may have given the first rise to this practice, must have been an attempt, by a great rush of some mild warm liquor, to dissolve and dislodge such hard aloetic pills, or substances of an acrid, insoluble, adhæfive quality; which, by sticking fast to some part of an intestine, like shoe-maker's wax, may have caused violent painful gripings by their inflaming, fretting, and penetrating the part. This mode of relieving the patient not having been clearly understood, as to its operation, has continued to be fashionable, gripe or not gripe; even when the cause requiring it did not exist; as in Glauber's salt, or any other so soluble and miscible with the *gastric*, and *enteric* liquors it had to meet with in the *primæ viæ*.

I will risk my reputation in being the first person that ever set his face against a very great absurdity, which has hitherto never been suspected of being such, viz. an absolute necessity of a very strict regimen,
and

and making a wonderful fuss about confinement to one's warm room, and clothing one's self much warmer than usual, on the day a purge is taken. Whereas (mercurials alone excepted, whose nature it is to be determined by cold weather with violence upon the glands of the throat) I affirm, that a person living, and clothed as usual only, is much less liable to take cold, and to suffer from it, than upon any other days.

I have twenty times swam in the Isis, and so have many others, on the afternoons of those days, on the forenoons of which we had taken an ounce or two of Glauber's salt in *Holy-well* water. And in a course of sea-bathing, I have often directed many, after purging in a morning with sea-water, to bathe in it on the evening of the same day. The reason why no harm can possibly happen from this practice I conceive to be this; that Nature never at the same time works by directly contrary ways; never plays fast and loose; never opens the perspiratory and sudatory vessels, and closes them also at the same time.

As

As the purge, by its action upon the intestinal glands, and those of the stomach, and upon all the neighbouring vessels, (as also upon that universally pervading Lymph, the existence of which Le Cat says he has discovered,) brings a flux of humours into the intestinal canal; cold, by its constringing all the vessels of the external surface of the body, would most evidently tend rather to promote the flux, and operation of the purge, than check and impede it. And, perfectly agreeable to my doctrine, we find that warm diaphoretics, which, by a copious sweat, determine and throw out the acrid humours from the intestines in violent dysenteries upon the external parts, become the most efficacious medicines of any; *per contra* also, in the most dangerous constipations, when no art or medicine has been able to loosen the bowels and procure a motion, setting the patient to stand naked upon a cold marble hearth, and dashing cold water by pail-fulls against his *abdomen*, has often most happily succeeded; and to the admiration of his friends

friends snatched him as it were from the very jaws of death.

That delicate persons of inactive sedentary lives ought to take some laxative medicine every other night at farthest, to prevent costiveness.

In nineteen out of twenty cases, of persons who are in the constant habit of taking opening medicines, the patients, like Don Quixote, first create the giant, and then combat him; the costiveness being probably ideal only; for as the intestines, if drawn out of their folds, are about forty feet long in adults, and the peristaltic motion in sedentary and studious persons extremely languid, time sufficient is not allowed the small quantity of *ingesta* their weak stomachs take in to be properly digested, and afterwards for its recrement to travel down in its natural pace to the *rectum*, and by its weight and bulk therein to provoke its ejection; before their unreasonable impatience puts them upon quickening its progress by another purge; and this goes on for months and
years

years probably, till by constantly hurrying down their half digested food, constitutions, naturally good, are thus imprudently destroyed.

The single chance such persons have of recovering the healthy state nature intended them, would be their arrival at length to that happy state of despair and resignation, so as to leave off all medicines entirely ; from a supposed experimental conviction, that it is beyond the power of medicine to save them. If people will by no means rest from constantly tampering with laxatives instead of using exercise ; the habit to which the French ladies are accustomed of using their *lavement* every evening cannot be so destructive, as it irritates twelve inches only of intestine ; and spares raking down the other thirty-nine feet.

*That the weather may be too hot, or too cold,
or the time of the moon not convenient for
cutting hair, or corns, or paring nails,
and for putting hens to lay ; and that,
agreeable to the cautions given in the
Almanacs,*

Almanacs, particular days in particular months only are proper for the operations of bleeding and taking physic.

These have all been so firmly established in the popular belief and opinion, that I should only loose my labour in endeavouring to undermine them.

That bleeding is of the greatest service in the access of fevers, as well as of most other disorders; and particularly every spring and fall, by way of prevention.

Nothing is more palpably erroneous than this doctrine, even in fevers; whatever it might have been in Dr. Mead's time, I have observed it to be a very dangerous practice ever since. To confess the truth, indiscriminate blood letting is the most dangerous and most common error in the present practice in general; and were the question put, whether mankind has, within these last fifty years, received more hurt or benefit from the lancet? I am most clearly and decidedly of the former opinion; unless it was done out of whim on persons in robust health, who
are

are less subject to suffer from any injury ; upon which account some of our Infirmaries have, by a writer of some humour, not improperly been called *Aceldamas*, fields of blood.

Blood letting in general has undoubtedly been instituted ninety times out of one hundred unnecessarily ; and always to a proportionate reduction of the patient's strength ; (to say nothing of the very frequent instances which happen of cutting an artery, or pricking a tendon ;) though there are very few indeed of our present disorders but admit of much safer cures by other means, and without its ill consequences. Do we not daily see instances of persons getting blooded, before a physician is called in, and their doom thereby fixed, in such low putrid fevers as it would exceed the ability of the whole College afterwards to raise and save them. In a part of the country at some distance from me, of several hundreds, who were a few years ago afflicted with such a fever, not one recovered who had been blooded. And a physician in great practice

tice for many years, assured me that he could not recollect his having ever been called to a palsey, an apoplexy, or even to a dropfy of the brain, where the patient had not been previously blooded. So great has been, and universally is, the rage for the lancet, that, in case of death from either of these mentioned cases after any different treatment, it would have been given out that the poor patient had been lamentably neglected, for that he had not been even blooded; the very first *supposed* requisite step towards a cure.

Are there not, even amongst practitioners, instances of some, who, when puzzled what to do in various cases, rather than wait till nature clearly points out the necessity of it, take off a cup or two under the very wise pretence of examining the blood; conceitedly giving themselves an air, as if, forsooth, they were competent judges after they had seen it; and as if there certainly existed a connexion between certain diseases, and the appearance of the blood in them?

For

For my own part, I confess my inability to assign the true cause of the *buff* on the blood in all cases, though it be generally thought a manifest proof of inflammation; it nevertheless has been thought a very bad sign, when no such crust has been observed, in some of the most violent inflammatory diseases. It is well known, that the proportion of the blood's grosser and thinner parts differs naturally in different persons; the red particles being more abundant and compact in firm, strong, laborious people; and the reverse in those who are lax and delicate; and differently so in different ages; and that it changes its colour and consistence also during the continuance of the same disease. *Buff* seeming to be nothing else than the pure light *gluten* of the blood, which takes a longer time to coagulate, by which means the red particles have an opportunity of sinking to the bottom. It therefore indicates no lentor, density, or tenacity of the blood, as has heretofore been imagined, but rather its thinness. We very well know, however, that those appearances are never to be relied on, as
certain

certain and sure indications of the nature of the disease; for the blood is often apparently found in very violent and dangerous diseases; and the appearance of this proteus called *coagulable lymph* in the first cup, is no conclusive proof of an inflamed state of it, nor a reason for taking away two or three cups more; it being so fallacious that various other causes, very different from inflammation, are well known to affect it; as may at any time be observed during the same blood letting, by making it flow in a full stream into a deep cup, or a shallow plate, or to trickle down along the arm. From all these, and various other considerations, the very prudent physician is ever most cautiously sparing of human blood, for once let out it cannot be returned into the constitution again. And is a fault not to be remedied. For after thus relaxing and weakening the tone of the chylopoietic instruments, fresh aliment will not be converted into such good blood as it has possibly lost, till the constitution has had time to recover itself.

Against the doctrine I would at present inculcate, I know it may be very naturally urged, that if you read over the works of eminent men of former times, and the success they met with, where the lancet had been recommended *ad deliquium animi*; it will seem to be ill founded. In answer to this I must observe, that since our enormous luxury, for above half a century, has so universally prevailed, in soft down beds, carpeted warm chambers, in warm houses, sophas, spring carriages, conversion of day into night; rich high-seasoned diet, with stimulating sauces, pickles, &c. &c.; the free use of a great variety of wines, and spirituous liquors amongst the rich, and the habitual use amongst the poor of tea and tobacco, who, from the increased price of provisions beyond that of labour, cannot afford to live as they formerly did: a total revolution has of late happened in the constitutions of Britons, both rich and poor, inso-much that for one instance which now occurs of an inflammatory fever, pleurisy, quinsy, or the like, with such a firm, tense, full,

full, elastic, strong pulse, and such really inflamed blood as clearly to demand the lancet, we now see a hundred cases of low, slow, nervous putrid fevers, and gangrenous, putrid fore-throats, and the very numerous and complicated tribe of the cold, hysterical, spasmodic, nervous, hydropical, and paralytic disorders, &c. &c. in which bleeding would prove egregiously detrimental, and if persisted in, most assuredly in the end fatal. If we ask, why some persons get blooded who have no apparent malady? we shall be told, that they are obliged to it, at stated times, for a plethora, not knowing that frequent blood-letting increases the fulness of blood; whereas the proper remedy would be abstinence and exercise.

A late author tells us, that if a finger be laid on the pulse of the opposite wrist to that a person is bled in, and the pulse be observed to rise during the blood's running, that it is an indication to persist in drawing blood; but if it should flag, to desist.

I think this a very vague, inconclusive proof, because, this may more naturally de-

pend upon the preceding terror of the patient, or other circumstances.

That some fevers originate from a too great thickness of blood.

Though this is a very common notion, I believe it very rarely happens, if ever; for by the *vis medicatrix naturæ*, or mechanism of the animal œconomy, as soon as the blood attains its due degree of thickness, and has a tendency to proceed in the least degree beyond it, the exertions become either diminished or suppressed, the body attracts more moisture from the air, and the person grows thirsty, and drinks as much as is necessary for diluting it; and, on the other hand, if water be wanting, and the thirst cannot be satisfied, the blood, in such a case, is so far from being thickened, that by reason of a putrescency begun or augmented, it is much dissolved, becomes acrid, and is with difficulty contained in the vessels.

That

That volatile salts promote putrefaction in fevers.

So far otherwise, Sir John Pringle's Experiments prove them to be very strong antiseptics; and fixed alcalies are well known to preserve animal substances for years.

That a violent stitch, as it is called, or pain in the side, absolutely requires the lancet, as it must originate in an obstruction and inflammation of the part.

When it happens from a little cold taken, or some error in diet, to thin weakly persons, without a fever, it is more likely to proceed from wind or spasms.

That bleeding weakly, sickly, low-spirited, breeding women, apprehensive of a miscarriage, is the safest mode of preventing it.

Hypocrates's opinion, that bleeding such women is dangerous, I cannot subscribe to, though it might have been always so in his warm climate; but that it is here always

prejudicial, and a very ready mean of bringing on a miscarriage, instead of preventing it, I am very certain, from careful observation in innumerable instances.

Blood letting, in this case, seems to be the result of a very ill founded opinion, that a pregnant woman becomes, from pregnancy alone, gradually so much fuller of blood, as absolutely to require it. Whereas, provided she is an early riser, and uses all the exercise she had before been accustomed to, without ever indulging herself in any respect whatever ; her emaciated arms, meagre sunken visage, and sharp nose, will soon most evidently demonstrate the contrary to any person who only makes use of his senses, and whose understanding has not been perverted by any ill founded hypothesis. Uneasiness, indeed, and new sensations, must naturally come on, in proportion to the distension of the *uterus*, and its gently gradual pressure upon the bowels ; which, on a first pregnancy particularly, are apt to alarm the timid and low-spirited ; but these symptoms, if they at any time become

become a little troublesome, will be very easily and pleasantly removed by a very gentle laxative, or when requisite a gentle opiate.

That parturition, or child-birth, is a dangerous distemper.

By no means; not one in five hundred having occasion to call in obstetric assistance; and when necessary, it was in old times when the world was peopled as well as it is at present, by female midwives only. Though it be a part of a woman's curse, that *in sorrow she shall bring forth children*, God surely never intended that a woman should naturally incur a dangerous illness by every pregnancy; else how were mankind to increase and multiply? or intended that a woman should discontinue her usual employment and labour, and become an useless burthen to herself and family for nine months; rather than that should be its natural inevitable consequence, a merciful God would most certainly have shortened the period of gestation to so many weeks, or days only. The very pernicious ten-

dency of such a notion gaining credit, will most evidently appear by drawing up a case, and supposing the liveliest, healthiest, modest, young, newly married country lady of fortune to have reason to believe herself in a state of pregnancy; the moment this comes to the knowledge of the wise good people, both male and female, of her own and husband's family, they find it immediately necessary to join in conclave, as they all understand physic, to draw up instructions for her: what she is to eat, what not to eat; what she is to do, and what she is not to do; this is improper weather for her to leave her chamber, that to continue in it; binding up the whole with their united most earnest request by all means to take every possible care of herself and the babe, upon whom hang the hopes of both the families; so that by the long catalogue of statutes now enacted, and her dread of disobliging her kind friends by transgressing any one of them, by commission or omission, she becomes a miserable close state prisoner to all intents and purposes.

Her

Her appetite, for the first month or two, may not, peradventure, be yet much impaired; and her strict conformity to these new regulations, and a disuse of all her former excursions, diversions, exercises, and employments, may now begin to beget in her a *plethora*, in spite of the natural tendency of her pregnancy to the contrary; and cause her to grow torpid, listless, and indolent, and gradually to loose her former refreshing night's sleep, which she endeavours to make up for by an indulgence of six hours in the morning; and to be troubled with costiveness, flatulency, and a general hypochondriacal uneasiness she never felt before. By way of security from a miscarriage, blood letting is now agreed upon by the whole board to have become absolutely necessary, without a single dissentient voice but her own; to conform, however, to an endearing fond husband's most pressing solicitations, she at length with infinite fears, apprehensions, and reluctance, having probably never been bled before, submits.

Terrified

Terrified at the apparatus, it is likely that her pulse sinks, and possibly till a second, and it may be a third incision is made, not a drop of blood comes, and when it comes, she perhaps, falls into a fit; for which, stimulating volatile drops are poured down to burn her throat and revive her. In a month's time the *plethora*, evidently increased by the former bleeding, which probably for greater security was made a copious one, assisted by a perseverance in the foregoing regimen, gradually improved in its degree of strictness, as the danger is now supposed more urgent, now demands a repetition of the lancet; and so on, *toties quoties*, at short intervals, till she becomes sickly, pale, bloated, languid, and, in her latter months, so unwieldy that the very least exercise, in ever so gentle a degree, becomes more overcoming, than, with her now broken spirits she is able to undertake.

In the fifth or last act, a general council is once more held, at the breaking up of which it is finally concluded upon, as, notwithstanding all the possible care taken of her,
she

the most unaccountably happens to be so sickly a breeder, though the neighbouring old midwife had been regularly instructed in the Lying-in Hospital, and had successfully received many scores of children, that in so bad a case no expence should be spared, and that she should be conveyed to London in a litter, to be delivered by a Mr. Somebody, said to have made an improvement upon Smellie's *forceps*; the very mention of which, injudiciously urged, though meant as an inducement, and as it were an anchor of hope in her worst extremity, to prevail upon her to put herself under his care, together with the circumstance so very shocking to a woman of modesty and delicacy, of suffering any *male* whatever to interfere with her in the proper and peculiar province of the *bona Dea*; must incessantly prey upon her thoughts and spirits during her whole journey, and with additional force in proportion to her nearer approach to town; so that it would be much to be wondered at if she were not frightened, in a dream of the *forceps* at midnight, into an unexpected sudden

sudden labour at some inn near town, and the child received by the first chambermaid that attended to her bell; while her own maid, rendered nearly as sickly as herself, by her constant watchings and unremitting attendance on her, suddenly frightened into an hystheric fit, lies on the floor, unable at the critical minute of affording her the least assistance till all is over.

Having described the young lady's case, let us now consider how it may be with a poor man's wife: She truly has so much constant employment upon her hands, and her usual hard work within doors and without to maintain her family, that she cannot afford herself leisure to be sick and lie by for an hour at a time; and often the pangs come on so suddenly, that her next neighbour's wife can hardly be called in in time to receive the child; and having neither hot-spiced wine, nor a close hot chamber to injure herself by, it will not be many days before she is seen at the spout washing her bed-clothes, and following her former occupation, as if nothing had happened.

How

How happens it also, that not one woman in a hundred (though, for fear of a discovery, she may possibly deliver herself alone out behind a hay-rick, on a snowing night in January) seldom, if ever, dies of the birth of a bastard?

Can any thing be more evidently apparent than that the mind of the young lady, fed with imaginary terrors, co-operating with a most pernicious regimen and mode of treatment, converts her pregnancy into a distemper; which simple unperverted nature seems to have exempted the two other sorts of women from?

While I, however, believe pregnancy to be a process of nature, wherein is provided every requisite necessary towards its perfection and completion; I am, on the other hand, far from expecting that it should exempt women then from such other disorders as may otherwise befall them; when such come, let them be prescribed for. Even emetics, the coarsest of our medicines, are found by no means hurtful when required, and judiciously suited to the patient's strength.

strength. And while I am an advocate for a pregnant woman's living as she was before used to, and following her usual occupation, laborious or otherwise, I would be strict in the prohibition of high narrow-heeled shoes upon carpeted stairs, riding unmanageable and stumbling horses, or seeing terrifying fights; as a tumble from the former, or seeing some person rode over at a horse-race, may be attended with more than ordinary bad consequences. And while I recommend exercise, of which walking is certainly the best and safest, it would be absurd to advise ladies, with the view of strengthening themselves, to undertake long journies either in carriages or on foot, whose former travels, perhaps, reached no farther than from the toilet to the church and the card-table. I am never for discarding prudence in any; it is that counterfeit wisdom which apes it, that I have so great an aversion to.

*That a gradual swelling of the abdomen,
together with the appearance of milk in
the*

the breasts, is a proof of a woman's being with child.

Not always ; for in women who were not married till they were in years, these appearances have been found to be caused by wind only ; which has come on gradually, and as gradually gone off.

That the umbilical rope often brings on a hernia umbilicalis.

Never when cut close to the body, as it always ought to be.

That a prolapsus uteri is owing to the relaxation of the vagina.

Not always ; but sometimes to that of the *ligamenta lata*, which suffer the *uterus* to be displaced.

That the separation of the epidermis in a fœtus, is a proof of its death.

Ruyfch had seen some instances to the contrary.

That

That the menses are owing to an universal plethora.

It seems more rational to suppose it to be owing rather to a *plethora* of the *uterus* alone ; for it has been affirmed, that ten pounds of blood have been taken away without protracting the interval of the *menses*.

Some have thought the menses influenced by the moon.

Experience proves the contrary ; as they happen indiscriminately at various times, besides full and new moons.

That some women have been delivered of molas.

Ruyfch, who from his very numerous dissections, and his connections and intercourse with the most ingenious anatomists, had the best means of clearing up this point, absolutely denies the existence of *molas* ; people having been imposed upon by different appearances of clotted blood, *sarcomas*, or pieces of indurated *placentas*, which they took to be *molas*.

*We hear of abortions of male and female
fœtus's in the third and fourth month.*

Ruyſch informs us, that from the great ſimilarity of the parts of each ſex at ſo early a period, no diſcrimination can poſſibly be made.

*That men only are ſubject to hernias in the
groin.*

Women have often had them fallen down to the *labia pudendi*.

*That when the mother firſt perceives the
child to move, is the very time when its
life commences.*

Nothing ſurely could render this abſurdeſt of all abſurdities more truly ridiculous, than the practice of former judges (the preſent, it is to be hoped, will reconfider this buſineſs), in ordering an inqueſt of old women to inveſtigate this matter, and to diſcover whether a woman, allowed to be pregnant, be *quick* with child; a fact which they are as ignorant of, as of the doctrine of generation; the law, in its tenderneſs, having no ſcruple

in consigning a woman to death, if her *fœtus* has been healthy enough to have hitherto remained quiescent. Hawkins's words are, that a woman can have no advantage from being found with child, unless she be found *quick* with child. The question here put to these sagacious old women would puzzle half the Royal Society, as it involves in it another question, In what does life consist? Is not an embrio of the size of a bee, whose blood circulates through its heart, as much a living animal, as when, by its enlarged size and restlessness, it becomes troublesome to its mother? Is not the *punctum saliens*, which is perceptible in an egg the second day of incubation, as clear a proof of the chick's life *then*, as nineteen days after; when, by its piping, it gives the hen a signal to break the shell and free it from its captivity?

That it must shew great want of affection in a mother in the West Indies, herself and child being white, to let it be suckled by a black, if a white nurse cannot be procured; because, from the offensive smell

smell of the negroes, their milk must in consequence have a rancid disagreeable taste.

Not at all ; for it is said, that, on the contrary, the child is found to prefer the milk of a negro upon account of its coolness ; the bodies of negroes, as appears by the thermometer, being not so sensibly affected by the heat of the climate as those of whites, upon account of the profusion of oil secreted by their subcutaneous glands, wisely adapted to the climate they were intended for ; which, by protecting in a great degree their skins from the heat of the sun, thereby keeps their juices cooler.

However, as they are more careless and less affectionate than the whites, care ought always to be taken to oblige them to make use of an *arcutio* (a little machine made of a board covered with pieces of hoop, like a tilt-waggon) to place the child in bed in, to guard it from being overlaid. It is a most excellent institution in Florence, to compel every nurse to the use of this, under pain of excommunication.

That infants ought to be weaned when their mother's-milk is found to curdle in their stomachs, as will appear by their throwing it up, and by their green stools.

This fault, attributed to women's milk, has so little foundation in truth, that, on the contrary, it never curdles at all naturally ; nor will it, we are assured, curdle if rennet were mixed with it. It is its cream only, which infants, over-fed with it, are seen so frequently to throw up ; their green stools must therefore proceed from some other cause.

That the green stools of infants proceed from the admixture of a prevailing acid with the bile, which brings on tumours and obstructions of the mesenteric glands ; it being well-known that painters compose a green colour from bile and an acid.

From the observation, that infants, when most subject to green stools, are known to look yellower than ordinary ; may not this colour some how or other proceed from obstructions of the bile, brought on by a gluey viscid *mucus*, generated by their viscid food ;

for want of which bile to excite the peristaltic motion these tumours may arise? Bile, we are told, turns green only by an admixture of mineral acids; but never from sour milk or vegetable acids.

That nursing children on the breast is much more natural and preferable to the spoon.

I grant it, provided it be on its mother's milk, and the mother confine herself to a proper diet and regimen; but should the mother die, or her natural affection for her babe die, by her unfortunately becoming too fine a lady to suckle it herself; (to cover which to the world, the pretence that she is of too weakly a constitution is generally made use of, though, if that should be the case, perhaps no better means could be used for the recovery of it;) many considerations, however, induce me to prefer the spoon, or the ingeniously contrived instrument to imitate the breast, before the milk of the lower sort of women; as those in

towns, and in the country also, since the encampments of the militia, are liable to disorders from idle husbands ; or, by becoming with child, to give the infant what is called salt-milk ; and as at their own houses they live mostly on tea, which requires dram-drinking, their milk must be far from healthy ; and, indeed, if a poor woman be taken into a gentleman's family, the change from her former poor to a rich diet, never fails filling the infant with humours, not to be eradicated without the cooler milk of a fresh nurse ; and the return of all the former difficulty in the choice of one. The first thing the lower sort of women in London generally do by a child, newly born, is to chuck down its throat a dram of warm gin ; the reason one of them gave me for it was, *to comfort the little heart of it upon coming into this wicked world.* Surely, if gin be an antidote to the wickedness of the world, the constant drinkers of this specific must be the most orderly people in it.

That

That Earths and Boles are of the greatest use in correcting acidities in the stomachs of infants.

I think them very dangerous ; for if there should be no acid juices in their stomachs, these are apt to concrete with the mucous matter lodged there into hard indissoluble masses, so as to line the stomach with a crust capable of obstructing the gastric liquor's passage into it ; and also of closing the orifices of the *laeteals*, so as to obstruct the passage of the chyle through them into the blood.

Some have endeavoured to controvert this opinion by this exception : After a solution of these earths well triturated, in water (wherein was no acid), had been made, and passed through filtering paper, a portion of a whitish earthy matter has been found, capable enough of passing through the *laeteals* into the blood. The inconclusiveness of this proof will appear by the consideration, that this *residuum* was supplied solely from earth naturally contained in the water used, and not at all from the

earth made use of in the experiment; for if pure water distilled had been made use of, though ever so long triturated and digested with the earth, it would have left no *residuum* at all.

That care should be taken to lay a thick compress upon those sutures on infants heads, called fontanells; and to bind their heads tight with a strong fillet to close them together and strengthen them.

Nature has contrived two remarkable uses of these *sutures*; the first, that by closing they may lessen the size of the head, and thereby facilitate its passage at the time of its birth; and the second, to enable them again to open gradually, and conform to the enlargement of the brain, in proportion to the child's growth. Hence it must evidently appear, that incurable head-achs must be the natural consequence from the compression the brain must suffer from such a perversion of Nature's design, by the *cranium* having been disabled from yielding to its growth.

That

That care be taken to bind down infants heads by a chin-stay to their breasts.

The reason I have heard assigned by nurses is, that they might not throw off their heads from their shoulders.

Though it sufficiently guards against this most terrible disaster, it may nevertheless be attended with some inconveniencies, namely, by thus pressing the child's chin so tightly against its breast, the *æsophagus* becomes so compressed as to render its swallowing any thing almost impossible, and to cause it incessantly to spit its meat out of its mouth ; while it also lays the foundation for distending and swelling the glands of the neck.

That it is very hurtful to put infants very young to stand upon their legs, as it will make them crooked and bandy-legged.

By no means ; dandling them well, but gently, is very necessary towards their health ; and using them to their feet strengthens their legs very much ; one great cause of rickets and bandy-legs being the
keeping

keeping children too much in the cradle, and their want of due exercise and friction.

That leading-strings are an useful invention to bring on children to walk, and prevent falls.

They are exceedingly hurtful by pressing in the *sternum*, which in infants is very weak, and thereby laying the foundation of asthmas and consumptions, by thus narrowing their chests. Suffering them to take their falls on carpets or grass-plats will soonest bring them to walk cautiously.

That idiots were born idiots.

I will hazard my conjecture to the contrary. May not idiotism in general proceed from a St. Vitus's dance, or some nervous disorder, coming on an infant at too early an age to be discovered ; which, thus disregarded, may terminate in imbecility and idiotism ? May it not be frequently brought on by the very common cursed practice of nurses giving babes gin for fancied gripes, or opiates to quiet their coughs, that they themselves

themselves may not be disturbed in their night's rest? Does not the very remarkable case of the Norfolk idiot, who, being thirsty, drank near a pint of white-lead paint instead of small-beer, corroborate my opinion? He had been an idiot seventeen years; but this medicine discharged such an enormous quantity of worms, so that he acquired his perfect senses for the latter part of his life.

That when a youth, remarkable for his growth, happens to die prematurely, whatever may have been his disorder, his death is generally attributed to his having out-grown his strength.

If this doctrine hold good, the King of Prussia's tall grenadiers must have been the most feeble corps in his whole army.

That what is called cracking of the voice, in growing-up boys, is caused by their over straining it at a particular time, in loud singing or bawling, or by a great cold.

I believe this change in the voice proceeds from no accident whatsoever, but is naturally
brought

brought on by the growth and enlargement of the *trachæa*, and its *aritenoid cartilages*; large reeds and pipes being deeper toned, and not so shrill as smaller ones. The same thing may be perceptibly observed in the gradual alteration of voice in the crowing of young cocks, which become deeper toned as their throats become larger in their growing up.

That wind instruments of music are exceedingly prejudicial to young persons, and naturally tend to induce consumptions of the lungs.

I think otherwise, provided the use of them commence while the lungs are in a perfectly sound state, as by exercise they must be rather strengthened than weakened; wind instrument performers being remarked for longevity.

That young persons of fair, rosy, florid complexions are the most healthy.

Such, though to the ignorant they would seem farthest from them, are in reality the
most

most liable and apt to fall into consumptions of the lungs; for the pellucidity of the coats of their vessels, is a proof of their thinness and tenderness; and when they attain to nearly their full growth, their blood, promoted by their passions, &c. runs high; so that the least excess in the non-naturals will bring on a rupture of them, and an ulceration of the lungs.

That frequent bleedings at the nose are by no means unhealthy, as they are only proofs of a plethoric fullness of the blood-vessels.

I admit it to be generally so in young and growing persons; but in habitual fots and dram-drinkers, the arteries are so relaxed, and their orifices so wide and open mouthed, as to allow their impoverished blood, now become acrid also, to run out at the nose and lungs, so thin and watery as scarcely to tinge a white cambric handkerchief. So it happens in putrid fevers and scurvy.

That

That the best relief in a hectic is to get out of bed, or lessen the number of bed-clothes.

As it is known to come on in an evening, and probably from the cold then checking perspiration, it has been suggested, that going to bed with one's clothes on would be the best mean of avoiding it.

That a miliary fever is an original and dangerous distemper.

I believe that it is always created by ill management, warm regimen, and heating medicines. The sweating sickness (which first appeared in Henry the Seventh's army, upon his landing at Milford Harbour in 1483, which proved so dreadfully fatal in Great Britain, and on the Continent, that one half of the inhabitants, in several towns, perished in three hours time) having been cured in fifteen hours, by only promoting excessive sweats by art, may have given rise, probably, to the opinion which has since prevailed so universally, that in all eruptive

eruptive diseases, which seem to discharge themselves on the skin, cold is extremely hurtful; and that therefore the body should be so closely covered up as to increase its heat. Experience has, however, since that time, convinced us, that it is wrong to draw general conclusions from particular cases; and that increasing the heat of the body in fevers is very pernicious; and that several eruptions not only admit, but require, the application of cold air; and that increasing, both by external and internal means, the sweats, in miliary fevers, has often proved fatal.

That after being out in severe cold weather, or rain, the best cure is a warm room, warm spirituous liquors, a warm bed with additional clothes, and the use of Mudge's Inhaler.

This is all wrong, and the direct way to bring on a *catarrh* and all the ill consequences of taking cold; which may be avoided by keeping quiet and cool, in cool rooms; and by all means avoiding a quick tran-

transition into a warm temperature. It is well known, that frozen limbs have mortified by being brought near a fire, or put into warm water, that would not at all have suffered if they had only been rubbed with snow.

I have a hundred times, in very severe winters, escaped colds, after having not a dry thread about me (as the saying is) for several hours, by stripping myself when I got home; putting on a dry shirt; going to bed for half an hour, or just as long as the weather-side of me would take up in acquiring a degree of warmth equal with the other, to avoid a rheumatism of the part; immediately then getting up, putting on dry clothes, and going out of doors about my business, without suffering the least injury.

That colds proceed from obstructed perspirations.

Dr. Keil's Experiments seem to contradict this; for he did not find the perspiration of his body to be diminished upon his
taking

taking cold. The reason of this may possibly be, that the external perspiratory vessels of the body, affected by the cold, may be constricted and obstructed, and cause a rheumatism of those parts; yet, by this constriction, the blood and perspirable matter may be propelled more forcibly (as is evident from the fever attending it) into more internal vessels; so that out of the whole body, an equal quantity of perspirable matter may still be possibly evacuated, but not by its ordinary course.

That the influenza is a very dangerous distemper, and a new one; never known in this country till a few years ago; at which time the College, by their circular letters, cried out for help from all quarters; were themselves greatly alarmed; and spread a general terror.

It is neither a new nor a dangerous distemper; every person going out of a warm room, and riding, by night, against a sharp easterly fog, who had not prudently guarded his nose and mouth from it by a thin

soft handkerchief, must have caught it ; and so may any one in such circumstances catch it ; whether under the new name of influenza, or the old common one of catarrh.

The present, styled the age of dissipation, may, in my opinion, have pride and pendency very properly added to the bill. Ask the dirtiest, most ragged child you see playing upon a dunghill, whose child he is ; you are answered, Mr. Such-a-one's *Master*, formerly a title of eminence, is now worn and assumed by the very lowest of mankind ; there are no *women* to be had at present ; even those at a two-penny puppet-show of a country village, forsooth, are all called *the Ladies*. Though at present we cannot pretend to be advanced in stature above former times ; yet we distance them far in our affectation of dignity, pomp, and consequence. Such is our improvement in philology also, that since a travelled fine gentleman has been pleased to dub a common cold, which seized him in his return from a warm climate over Mount Cenis, with a foreign name of influenza ; all our
catarrh-

catarrhus colds, amongst our gentry, have assumed the same name and importance; except amongst serious aged people; who hardly thinking it worth while to new-model their language, when they catch it, snivel and drivel it off under its former name. In the commutation of terms, sufficient care is at present taken not to exchange for the worse; formerly *vomits* and *purges* were in use, they are now superseded by *emetics* and *opening medicines*; *boils*, which a servant maid was formerly used to poultice and open with a pin, are now a *tumour* matured by *cataplasms*, and to be lanced as an *abscess*. There are now no *apothecaries*; they are all *surgeons*; and these all *physicians*. There are now no *ensigns* and *lieutenants*; they are all *noble captains*. Let a ball, in very sultry weather, be ever so much thronged, nobody now *sweats*, though large drops continually trickle down their faces, and require the constant application of handkerchiefs; the company only *perspire* freely, though every one knows perspiration to be insensible, and not to be

seen. No lazy, greasy, foetid, over-fed gentlewoman, is at present *fat*, though of the full weight and admeasurement of Dolly Crampton, cook at the George; the lady is only *jolly*.

No street-walkers, though half rotten, confess themselves *infected*; they are only *injured*. No fribble officer, pale, and trembling through fear upon being ordered into battle, has now the courage of Sir John S—ck—ing bravely in the face of his country to call it *cowardice*; no, he only complains of having naturally *bad nerves*.

These may be allowed to be trifling instances of pedantic folly; but that it should infect a great assembly, whom we were in the habit formerly of looking up to as patterns for style and every ornament of speech, is really lamentable; as we now can have no pleasure in reading the speeches, because we do not understand them. We know what a man, bred a scholar, meant when he said *he would not commit a fault*; but never when he said he would not *commit himself*.

We knew what a man meant when he said

he

he was *bound to declare* the truth ; but when he said he was *free to declare it*, we lost him again, unless the gibberish of *bound* and *free* meant the same thing, which we well know to be contradictory terms.

That it is difficult to conceive how a catarrh is brought on.

When a cold affects the face, &c. the arteries of the face, nose, and fauces are suddenly constricted, and their serum retained, causing a running at the nose and down the trachera to the lungs, whose vessels, thus distended, cause a difficulty of breathing, &c. Possibly the ingress of cold air into the nose may also condense the warm vapour exhaled from the lungs, as in an alembic, so as to make it trickle down in greater abundance than what it could be supposed to have done on the principle of a stoppage of perspiration only.

That cold does not contract all substances ; for it is known to dilate water into ice.

This happens from elastic air being included in it; for ice in thaws is heavier than water.

That a cough is often a primary distemper of itself.

Strictly speaking, I believe it is not more so, absolutely, than sneezing, both being symptoms of an irritating cause; yet a cough is often a most dangerous and incurable symptom of many disorders. Perhaps indeed fevers themselves, though classed in general amongst original distempers, each *sui generis*, may in reality, did we know more of them than at present we do, possibly be discovered to be mostly symptoms of other distempers.

That the lungs are not subject to pain.

This is not true; but the reason why they do not give so much pain as a tense membrane, is owing to their more lax and yielding texture; all pain proceeding from a distraction or overstretching of the fibres; and

and a progress in them towards a *solutio continui*.

That flannel worn next the skin must be too warm in hot climates.

Just the contrary ; for it is the warm wet bath of a person's own sweat, confined by a linen shirt, which renders the heat of a warm climate so insupportably troublesome. Flannel, by promoting perspiration, favours its evaporation ; and it is a well-established fact that evaporation always produces positive cold.

That casting of teeth is a dangerous distemper in children.

Cutting them is painful, and often dangerous in gross children ; but the shedding them is by no means so. The teeth originally are like gelly, in a cartilaginous state, included in little bladders, of which there are two in each *alveolus*, one lying upon the other, which by degrees harden into bone ; at which time the lower, by their growth, by degrees, thrust out the upper ones ; that

as the jaws grow there may be no vacancy between the teeth, and that they, by being larger, might quite fill up the hiatus's.

That burnt alum is an excellent dentifrice.

In direct contradiction to this, acids of every kind are the most pernicious applications of any to the teeth, as they soon corrode even their enamel. Hence it is, that persons in apple and cyder counties have rotten teeth. Every nostrum that has any thing sharp in it, ought to be carefully avoided. The best dentifrice is finely levigated charcoal, foot, or in some cases finely powdered Peruvian bark.

That squinting comes naturally to some children, and is incurable.

I believe it is most generally brought on by using children to caps or bonnets that come too forward, which they turn their eyes to look at; covering the strong eye with a plaster, to compel the constant use of the weaker one, seems a reasonable mode of cure, and the wearing the instrument

strument called goggles for a length of time, is said to have been very successful.

That spectacles greatly preserve and strengthen the eyes.

By no means ; though there may come a time when their use may become absolutely necessary for all persons, as their eyes by age decay ; yet the using them before that time, strains the eyes greatly, and accelerates the real necessity for using them.

That snuff clears the head, and revives the spirits ; and that the snuff-box is a pleasant companion to solitary people.

Snuff of a particular sort, in particular cases, and used no longer than those cases require it, that it might not degenerate into a habit, has often been of eminent service. Though the *dura mater* invests the internal surface of the skull so completely, that the whole *encephalon* is included in it, and protected from any external communication whatever ; it is, however, known, notwithstanding

standing that those passages of ears and nose, by what means soever it happens, are a drain from the brain, by which very extraordinary humours have been discharged to the removal of very obstinate disorders; and by which, in like manner, some volatile medicines, snuffed up the nose, have been found to affect the brain. Common snuff in habitual snuff-takers has been found to penetrate into the *sinuses* communicating with the nose, and into the *antrum highmorianum*, wherein it has formed horrid abscesses. It never fails also by being carried down to the stomach, to tinge the blood, and consequently the skin of a brown colour; as is very perceptible in the sickly fallow complexion of such ladies as have made themselves slaves to it.

That there is something in tobacco inimical to the human constitution is evident, from the fact already mentioned of a poultice of it proving emetic, and also from an experiment that a thread dipped in its oil, and drawn through a wound made by a
needle

needle in any animal, will kill it in seven minutes.

That a pipe of tobacco in a morning is very conducive to health, particularly as it pumps up a great deal of cold phlegm from the stomach.

That it can as well pump up any thing out of the smoaker's shoes as out of his stomach, I can easily believe; for nothing can come out of the stomach but by vomiting. What is hawked up and spit out of the throat, is the mucous fluid secreted by the tonsils to lubricate and defend the *œsophagus*; together with the saliva secreted by the sublingual, parotid, and submaxillary glands, which is so absolutely requisite towards promoting the necessary process of digestion: the wanton waste of which liquors is the greatest evil attendant upon smoking or chewing tobacco. The nasty filthy habit which some slovens have contracted of hawking and spitting without any reason or provocation whatsoever, is nearly as bad.

That

That the heat we find on the earth is solely to be ascribed to the effects of the sun.

Not absolutely so; for in the cave of the Observatory at Paris, only 90 feet underground, the heat keeps the thermometer at 53, without any assistance from the sun; it being never sensibly increased by the most scorching seasons beyond what it naturally is in the severest winters. And it is well known, that in the deepest mines the earth and water are always found to be the hottest, which fact encouraged the ingenious Dr. Randolph to attribute the heat of Bath water to a similar cause—an exhalation from the central heat within the earth.

That frost is owing to nitrous particles in the air.

By no means, for spirit of nitre dissolves ice.

It is difficult to account how water quenches fire.

It is not from its coldness, because hot water quenches it as well as cold. Not from
its

its moisture, because spirits of wine will not quench it. It is effected by its keeping off the free access of air from it; for coals on fire, included in a vessel where no fresh air is admitted, though blown upon by a bellows included in the same vessel, will go out.

Pit coal has of late been said to owe its origin to extensive woody tracts buried in the earth by the deluge, as appears by chemical analysis.

The travels of such philosophers seem not to have extended far from their laboratories. Coal being well known to be a fossil like other minerals, with regular veins, strata, &c. and to have acquired none of its qualities from wood, turf, or any vegetables, any more than petroleum, Barbadoes tar, &c.

That amber is of vegetable origin, the exsudation of certain trees.

It has been found at Kensington and in many gravel-pits.

Amber.

Ambergris has also been affirmed, by Cronsted, to be from the exsudation of certain trees.

Since the establishment of the South-Sea fishery, ambergris is very well known to have been taken out of the body of the spermaceti whale.

That a dram of brandy is of service in warm weather, as it is cooling; in cold weather, as it warms; in setting out on a journey; in coming home off a journey; at rising in the morning, and going to bed at night; after goose, because it is hard of digestion; and after fish, because it digests too fast; and upon a variety of other occasions.

This, like tobacco, gains upon us by habit, and seems at length to be come almost necessary, though both at first wantonly introduced by young people without any reason for either.

That nobody can dispute the absolute necessity of a dram of gin for a colic.

This

This proceeds upon the notion that all colics arise from flatulency. Common sense ought to convince us that in colics attended with inflammation, this panacæa must be of a fatal tendency.

That breaking up wind (belching) is a certain proof of indigestion and of a disordered stomach.

Not always, I believe; it being most frequently a filthy habit only; which valetudinarians, and indeed some whole families, while in perfect health, indulge themselves in, from an opinion of its healthfulness, not knowing that the stomach always contains air, and that this operation may at all times be performed *ad libitum*, by persons fond of exhibiting such wind music.

That the carminative seeds are the best medicines for expelling and destroying wind in the bowels, and spasms in the abdomen.

It is difficult to conceive how these should destroy wind, when, as it appears by the
air-

air-pump, they are found to yield more air than any other substances whatsoever. These are probably best cured by dry cupping on the part; which, by irritating the nerves, will cause a revulsion, like the acupuncture, the moxa, and the practice in Asia of burning the soles of the feet with hot iron, for colics and dysenteries.

That filings of steel, unless soon purged off, must injure the intestines, by sticking to them.

Sydenham never saw any ill effects from them, and says that they are carried off, involved in the mucus, better without purges.

That snuffling proceeds from speaking through the nose.

It, on the contrary, proceeds from not being able to speak through the nose; by reason of some obstruction in it, or some defect in the adjoining palate. The use of the nose is not solely for smelling and for modulating the voice; but also to enable a

child, while sucking, to draw its breath; it being usual for nurses, when they chuse to make it leave off sucking, to compress the child's nose between a finger and thumb.

That not intermittents only, but all fevers, have certain exacerbations, called critical days; which at those times require particular attention.

This was the opinion of Hippocrates, who, the better to observe the progress of fevers, &c. left them in a great measure to Nature, with little or no assistance from medicines, to disturb them; which gave his enemies a handle to accuse him of attending his patients with the view rather of observing in what manner they died, than how to cure them. It is possible enough that something like *critical days* appeared in his part of the world, in persons of great simplicity of diet and way of life, (of which class all his patients were,) in fevers undisturbed; yet in our time we are compelled to own that the success which the *pulvis antimonialis* is often

attended with at any stage of a fever, has very much shaken the foundation of this doctrine.

That at the crisis of intermittents, the urine will shew a separation and deposition.

In hot climates it will not ; which may perhaps be owing to a less quantity of mucilage, and a greater quantity of alkali in the urine, on account of a more putrescent state of the fluids there than in cold climates ; for upon adding a little vinegar to the urine in the forementioned case, it became turbid, we are told, like the urine of fevers in Europe.

That the greatest care be taken not to give the bark in intermittents, except in the absence of the fit.

Though this caution might possibly be prudent in cold climates, yet so far from it being so in hot climates, were we to wait for the absence of a paroxysm, the greatest number of patients would, we are assured, be lost.

No

No time should therefore be lost, as soon as an intermission is discovered, to throw in the bark.

That after the cure of an intermittent, a purge will renew it.

Most practitioners deny this.

That bark, though it may cure agues, does infinite mischief, by getting into the bones.

Peruvian bark, so far from being dangerous, has often been of great service in some disorders of the bones.

That in the choice of bark, the small quilled sort is the best.

The quilled being that of the smallest young branches, must be of inferior virtue to that of the large trunk of the tree, if there be any analogy between Peruvian and oak bark; the tanners, who are the best judges, prefer that of the oldest oak. The reason why we see more of the quilled sort than that of the body of the tree is, not that the large sort is thrown away, and the small

preferred for its virtue; but that, from the scarcity of the trees to answer the yearly increasing great demand, and their observation that if a tree is barked it will die, they therefore spare the body, and only bark off some of its small branches.

That vinegar possesses a coagulating power, was the opinion of Dr. Friend.

This mistake may have arisen from his supposing, as they are both acids, that vinegar and the acid of vitriol are of equal virtue; whereas vinegar, blood warm, mixed with fresh drawn blood before it coagulates, resolves it, and prevents its coagulation.

That the diabetes is a disorder of the kidneys.

Though discoverable by the state of the urine, dissections prove it to be a disorder of the liver.

That to hide the taste of pills, they ought to be covered with leaf gold.

Wafer

Wafer paper is much better ; for if *Dutch gold*, which is copper, should for cheapness be fraudulently substituted in the stead of it, it might have a bad effect.

That vinegar improves the virtue of mustard cataplasms.

It certainly injures them ; as its acid neutralizes their volatile salt, and also blunts their essential oil. Strong wine would be a better substitute.

That chickens from cock pheasants and common hens, growing up stronger, and being more prolific than their progenitors, prove the falsity of the received opinion that mules will not breed.

This case proves no more than that pheasants and dunghill fowls are of the same species, like the fox and the dog.

That the animalcules seen in semine masculino are young homunculi, intended to be deposited in the female uterus for nourishment and growth.

Many objections are made to this hypothesis; the waste of so many thousands of those embryos for a few that succeed: that such animalcules are seen in other of the animal fluids; and above all, Haller's observation, if true, of his having seen young pullets completely formed in unfecundated eggs.

That the jelly-like matter called star-fall, has been dropped from some meteor, or some birds.

This has been proved to proceed from the oviducts of frogs, and to be the albuminous part of their ova, designed to protect and feed the embryos.

That toads are poisonous.

Mr. Daines Barrington has proved them to be inoffensive, harmless animals; and Mr. Twiss assures us that, upon account of their coldness, Spanish ladies make pets of them, and wear them in their bosoms.

That the floating of dead bodies in water is owing to their putrefaction.

Nor

Not always; though the cause is not easily assignable, it is a known truth, that after a battle, some corpses have been seen to float that have been thrown overboard, when others sunk. It is a truth within my own knowledge, that an old man, of rather a corpulent make, having fallen into the tide, floated upon his belly, as soon as he was drowned, along with the tide.

That dead bodies weigh more than living ones.

This is rather so in appearance than in reality; people in a swoon, or drunk, appear so also.

That pleurifies are all on the left side, and the heart also.

As a pleurify is an inflammation of the *pleura*, a membrane that affords a common coat to all the parts contained in the chest, it may, and often does affect any part of it. And as to the heart, though its apex points a little to the left, its basis is situated in the middle.

The cæcum was by the ancients counted among the large intestines.

Their mistake must have happened from their having taken their description from that in dogs ; whereas in the human subject it is by much the smallest of any.

That the urethra is subject to caruncles.

It is very much doubted by some whether what are deemed in general to be caruncles, are not rather strictures of the urethra, from ulcers cicatrized therein.

That urine not following a catheter, is a proof that the bladder contains none.

This may happen from coagulated blood, or very thick urine. Filling the holes of a catheter with butter, should be tried ; which being dissolved by the heat of the parts, may possibly bring the urine to follow.

That obesity proceeds from a natural disposition, hereditary in some families, so as not to be avoided ; and that high-boned, ill-

*ill-formed people, or ill-shaped bullocks,
are not so subject to it.*

Though well-shaped persons are most susceptible of fat; I believe, without one exception in an hundred, that it is the natural effect and production of overfeeding in solids or liquids, or both, nourished by an indolent, lazy, lying-a-bed habit, as evidently as ever the hawking up of thick phlegm in a morning, thin lips with a black dry list, a ruby nose, and rich face, are, of hob-nobbing, and dram drinking. And as to its running through a family where the mode of living is the same, what else can be expected? Fat in the cellular membranes, by covering and surrounding all the muscles, and filling up their interstices, interrupts and impedes their activity, so as to induce an indolence; which indolence again contributes to beget fat. This is most evidently proved by its having been cured by its contraries, abstemiousness, low living, and early rising. A gentleman communicated to me a very remarkable

able instance of this in a neighbouring clergyman in Cornwall, who after having grown so enormously fat that he was obliged to rest, and make three stages, from his parsonage house in the church-yard to the reading-desk, laid so strict an embargo on his gullet, that in a year's time he walked twenty miles to a visitation in perfect health; feeling no other inconvenience from the massive load he had got rid of, but that the skin of his arms never recovered itself, but continued loose like the sleeve of a morning gown. Exercise, in case of obesity, were it used, in as much as it would improve the appetite, may be more likely to contribute to it than lessen it. The above are the only effectual means; but they must be rigidly persisted in, not fasting a little now and then, by fits and starts, like Roman catholics on Wednesdays and Fridays, without lessening the weekly bill.

That the bones are of a white colour.

They are only so after having been exposed for a time to the air, and dried; but
in

in their natural state they are of a blueish colour, owing to the blood in their vessels; and children's are much more so than those of adults, because they have more blood vessels.

That the substance contained in the vertebræ, is spinal marrow.

It is not marrow at all, being falsely so called, but a simple continuation of the medullary substance of the brain.

That the valvula tulpii is of such strength as to resist the farther ascent of glysters.

Instances to the contrary have been known. A quart of linseed oil, having been, by means of a strong ox's bladder, and a great force, driven up, so as to be thrown up by the stomach. The success Hippocrates met with in forcing up air by means of a strong bellows, evinces the same thing.

That boiling water is always of the same heat.

It differs a little, according to the different density of the atmosphere; but when compressed

pressed in Papin's digester, it becomes enormous.

That medicines of one only quality, are called simple medicines.

What are termed simple drugs, or medicines, are never strictly so; for example, gentian and aloes, though classed as bitters, have other medicinal virtues besides; and what are called even chemical principles, are not really so, but are compounded; spirits, being compounded of oil, water, and salt; and oils and salts, are again compounded of earth, &c. &c. &c.

That metals, stones, and minerals, do not grow, but were so from the creation.

Mr. Homberg thinks he has proved the contrary; for after having, by means of Tchirnhausen's burning glass, forced the sulphur of a piece of iron to rise in fumes, and the earth and salt remaining to vitrify by degrees, he contrived, by adding the sulphur of charcoal to the glass, to restore it to iron as before.

That

That matter is divisible in infinitum.

Though we cannot conceive the very minutest particle to be so small as not to be divisible into two, and so on; yet some philosophers would think it unreasonable, (though arithmetic does,) that nature can admit of that infinite divisibility; for, in reality, must there not be a vacuum to admit the smallest particle A. to move to the smallest particle B; or else there would be no motion whatever?

That on a trial for the murder of a child, the sinking of its lungs in water, is a proof of its never having breathed through them; and their floating, of the contrary.

This experiment is not conclusive, even supposing it were fairly made, and no portion of flesh left to adhere to them; for uninflated lungs will float, and become specifically lighter than water, as soon as any degree of putrefaction begins to take place in them; which, after death, takes no long time to commence.

That

That bronchotomy is a safe operation ; and that, in the opinion of a great anatomist, if the recurrent nerve should happen to be cut in the operation, the voice will not be affected, provided the superior branch still supplies the larynx.

In opposition to this, Martin, upon his cutting the recurrent nerve of a pig, found that it lost its voice, and in a little time its appetite, and at length pined away and died. In my opinion, the best mode of performing the operation would be, by a trochàr all at once, and leaving in the canula, in preference to the tedious trouble of several incisions, &c.

That death, from hanging, proceeds from a luxation of the vertebræ.

I believe this is never the case, except from being turned off from a great height ; else persons who had been hanged would never recover, of which there are many instances. Death here seems to proceed from the interruption of the air going into the lungs.

That

That a stone in the bladder is always attended with a tenesmus.

Not in women, except it be very large, by reason of the interposition of the uterus between the bladder and the *rectum*.

That a quantity of red sand in the chamber pot, is a proof of a gravelly complaint.

Not at all ; for this is only the salt in the urine, concreted like tartar from wine ; for upon the patient's making fresh urine upon it, the warmth of it dissolves it so that, till it cools again, it will totally disappear.

That to confine ourselves solely to a vegetable diet, would be most conducive to health.

The structure of our organs, compared with those of carnivorous and graminivorous animals, sufficiently demonstrates, that we are intended for a mixture of vegetable and animal food.

That all our food is formed into chyle by the chylopoietic organs, and carried by the lacteals into the subclavian vein.

The sudden refreshment from a glass of wine held in the mouth of a person unable to swallow it, and the amazingly quick passage of asparagus into the bladder of urine, has induced some people to fancy such instances to proceed from a direct absorption into the blood, and not along the highway of the *receptaculum chyli*.

That castor is generated in the testes of the beaver.

This a great mistake; for it is found in two glandular substances, situated in the posterior part of the female, as well as the male.

The ancients, from observing a hen to hold up her head in drinking, conceived that our food passed into our stomachs by its weight only.

The contrary to this would have appeared, had they remarked how horses and long-necked animals drink, or seen rope-dancers drinking a glass of liquor while hanging by their toes, with their heads downwards, which

which would have convinced them that this was effected by the action of the muscles of deglutition.

That it is a very salutary mean to assist digestion, provoke an appetite, and preserve health, for healthy people to drink a glass of good bitters every morning.

People of fortune in general, from the variety of their food, and the luxury of their tables, and from the pleasure they find in it, eat much more than they ought to do; or, than nature requires. And instead of bitters, pickles, and cruet drugs, which hurry down their half-digested food through the *primæ viæ*, and thus create a craving for more than the stomach can digest; they ought rather, if cram and gormandize at any rate they must, to invent and use dampers, to prevent crapulas and crudities in the stomach, such as the coarsest bread with much bran in it, or the raspings of some insipid tree, such as the poor in Norway make use of for bread.

That hydatid tumours are seated in the follicles of the glands.

They are seated in arteries dilated with water, being found in the spleen, ovaria, placenta, lungs, &c. in parts not glandular, as well as glandular.

That the most proper diet for persons weakened and relaxed after a fever, or long illnesses, would be calves-feet, calves-feet jellies, eggs, chickens, veal, lamb, fish, puddings, and pastry.

Not at all; for these gelatinous substances, by their oiliness and viscosity, are apt to lie heavy on the stomach already relaxed, and blunt the little appetite they have. Ham, Dutch beef, or roasted tongue, between slices of bread and butter, good old Cheshire cheese, and the like tasty things, in small quantities, frequently repeated, with good small beer, or genuine London porter, are infinitely better, and will sooner restore them to health.

That

That hot water dishes and plates, and chafing-dishes, are excellent contrivances to keep our dinners hot and good.

They may certainly serve to keep them hot, but not good ; for by so doing they very much relax and hurt the stomach. Persons of weak relaxed stomachs ought to eat their meat cold, or at least very nearly so ; be it solid or fluid ; every warm thing being naturally disagreeable to the stomach ; hence it is that children always call for cold small beer after supping hot broth ; and it is a well known fact, that nothing affords such instant relief to a stomach loaded with smoking warm food, as a glass of cold water.

That to cure a fractured patella it is absolutely necessary to bring the fractured ends together, and firmly to secure them in that posture with pasteboards and firm bandages, and a long confinement in bed.

I remember a case brought before the ingenious Mr. Samuel Sharp at Guy's Hospital, of a woman carrying on her head a heavy
1 2 pail,

pail, who by a fall broke both the patellas. This afforded him an opportunity of declaring to his pupils, that he would not set one of them, from the numerous bad consequences he had often seen to attend such practice in others, such as a stiff knee, if not an anchylosis for life, and its very great aptitude again to break; whereas he affirmed that no ill consequence of any kind can happen from leaving it entirely to nature. He therefore earnestly exhorted his pupils to set such a value on their characters in private practice, as to put it out of the power of ill-wishers to accuse them of gross ignorance, or, what is worse, condemning their patients to a tedious and a painful confinement for the sole lucrative purpose of charging them for an operation and long attendance, while they must in conscience be perfectly convinced that all they do is not unnecessary only, but generally mischievous to a great degree.

That the vena medinensis is a species of plant whose seed entering under the toenails

nails of Indians in the water, grows up amongst the muscles of their legs.

Late observations have discovered this to be a species of insects, called *gordius* or *hair worm*, infesting people's legs in hot climates, which, after appearing in a tumour that breaks, like a fourth fiddle-string, must be coiled up by gradually and very gently drawing it at each dressing, round a bit of stick, lest it break and cause a troublesome ulcer.

That the best way to prevent colds is to increase the number of one's clothes.

It is going out of warm air suddenly into cold air that gives us colds; for persons out continually in cold air never take cold. Were we accustomed to as many coats as an onion, in such a case they could not protect us; I believe a Dutchman, notwithstanding his half-a-dozen pairs of breeches, would suffer in going out of a close warm room into a very cold air, very little less than a Scotch *sans culotte* highlander.

That a blister not rising on a patient, not bereaved of his sense of feeling, forebodes his death.

This proves nothing more than that the flies were added with too sparing a hand in its composition, or were spoiled and become effete and damaged by long keeping; or that the plaster was of too stiff a consistence to allow them to act.

That it is a great improvement, and an applauded happy invention, to interpose a bag of fine gauze with powdered camphire, between a blister-plaster and the skin, or to rub its surface well over with dissolved camphire, to prevent a strangury.

I by no means approve of this ingenuity, even if it should answer this purpose; it being my firm opinion, that a blister, in fevers particularly, (in which case the greatest benefit is expected from them,) if it do not produce or excite some degree of strangury by entering into the circulation, (which

may afterwards be sufficiently kept under by mucilaginous emulsions, and the camphire julep, or at worst by removing the plaster,) never sufficiently answers all the good purposes expected from it; for if nothing more be desired than its procuring a copious discharge of water from the part, scalding hot water inclosed in a bladder, and applied to any part, will, in a quarter of a minute, bring on a bladder, and a greater flow of water from it than any blister, without any strangury, or pain in dressing it afterwards; as is the case from flies the first time of dressing, which often fall on the raw part from the removed plaster.

That when the intention is to soften and relax the solids, and obtund acrimonious humours, tickling coughs, heat of urine, and inflammations; expressed oils of unctuous vegetables would seem better adapted than emulsions of them with water, as being of more powerful virtue and smaller in bulk.

Far otherwife; for these emulfions, notwithstanding their being less emollient than oils themselves, or animal fats, have this great advantage over them, that they may be given in acute or inflammatory disorders, without the ill consequences which may possibly attend the others; for spermaceti fats, and oils, kept in a degree of heat greater than that of the stomach, soon grow rancid and acrimonious, while emulfions tend rather to grow sour.

That some ointments, or dressings, exceed others in their sanative virtues.

It is certain that some ointments irritate more and do more harm than others, especially when ill prepared; (as the *Cerate, e lapide calaminari* when the calamy has not been finely levigated;) but it is very much to be doubted whether any ointments deserve the appellation of *sanative*; that is, have the power to make an ulcer heal, and grow up, any more than an application of any thing can make a branch of a tree to grow. Probably, the whole that can be
expected

expected from any kind of applications or dressings, is a negative kind of virtue only, viz. that they do no harm themselves, nor suffer any harm to happen to sores from the ill effects of the air ; or from being injured by the clothes fretting them. Hence it is that an eminent surgeon honestly declares one ointment only to be necessary in most cases, and that to be composed of different proportions of bee's-wax and sweet oil only. In many cases the habit must undoubtedly be amended by internal medicines, before any good can be expected from any external applications. When this is once effected, a sore can hardly be prevented from healing of itself, as is well known from the constant trouble and difficulty which many persons find in keeping their issues open.

That a fungus, or proud flesh, shooting up in an ulcer, is a certain proof of its great virulence and malignity.

Not always ; for it frequently proceeds from the ignorance or neglect of the dresser, in his not having continued an equal pressure
upon

upon the bottom part of the ulcer, by which means it is suffered to grow up more luxuriantly than its edges. The brain after this manner rises as a fungus after the trepan, for want of an equal pressure on it; so also hernias are formed, when the muscles of the abdomen are divided by a wound, without injuring the peritoneum; so also in aneurisms.

That a corroborating plaster, worn for some time on the backs of sickly women, has a considerable virtue in strengthening them.

I have often found it of service; but apprehend that this was effected not by any strengthening quality it possessed; but by its adhesion, heat, and great irritation, whereby it causes a considerable eruption, rash, or sharp humour, to break out under it.

That for a burnt part, the first care ought to be, to use proper means to take the fire out of it.

It

It is very reasonable to expect, that a burnt part, where the vessels are reduced to a dead horny eschar, should take a much longer time to suppurate and heal, than a common sore, or a cut from a sharp instrument; for, in the former, there will be a slough to be removed; whereas the parts in the latter case may only have suffered a bare separation, or *solutio continui*; which, upon their being brought together again by a juxta position, may soon heal. It is the effects of the fire, and not its continuance in the part, that is to be attended to, and to be removed; the effects of the cutting instrument, and not the instrument itself.

It is said to be a good method to open burns and scalds, to turn out the waters out of their bladders.

This is a most injurious practice, as it promotes the corruption of the extravasated humours, and removes the defence afforded by the cuticle to the tender nervous pulp which lies underneath it, and is so extremely painful when uncovered, and becomes thus
ready

ready to be injured by the air, and any applied remedies. But in a part burnt by actual fire, hot oil or the like, the eschar requires to be separated from the living parts by scarification, and to be treated with emollient ointments, cataplasms, and fomentations. All desiccatives and astringents are here bad; particularly spirits of wine, for they all harden the eschar, and augment all the bad symptoms.

That opium is a tonic medicine, which gives strength and spirits, as is evident from the use the Turks make of it in going into battle.

The Turks, who are accustomed to it, may possibly take it then as our soldiers do tobacco, from habit only. When taken however in a full dose, it much resembles spirituous liquors, occasioning a temporary madness generally, soon ending in weakness, tremors, and the utmost dejection of spirits; not but that strong coffee, which the Turks are much accustomed to the use of, is found to be a great corrector of it.

Opium

Opium is said to act upon the sensorium of the brain, by being carried thither in the course of the circulation.

Some cases would almost induce us to doubt this; for by opium remaining in contact with the internal surface of the stomach, it produces such a change on the nerves thereon distributed, as to blunt the sensitive faculty in the brain; for a grain or two of opium in a pill, will continue a long while, by reason of its tenacity and resinous texture, undissolved in the stomach, and yet quiet the sense of pain for at least eight hours; and what is surprising, the pill has been vomited up next morning, in several instances, undissolved. Some poisons, as the *cicuta aquatica*, seem to act on the stomach only, for as soon as brought up by a smart emetic, all their horrid symptoms abate; whereas, had they proceeded farther than the stomach, they would continue still longer to disturb the body. Too large a dose of opium, however, has been known to corrupt the fluids with the force of a poison.

That

That strong opiates are specifics in the cure of a locked jaw.

They are certainly of use in all such as are brought on by an affection of the nerves ; but those caused by a concretion, and growing together of the ligaments, &c. from neglecting to cleanse the mouth in salivations, resist all medicines.

That in violent fluxes, &c. astringents and opiates are the best medicines.

They are never safe till the morbid matter is first sufficiently expelled ; for if by the use of these the acrimonious matter in dysenteries be confined in the intestines, it will inflame and corrode them to such a degree, as frequently to bring on a gangrene.

That in uterine hæmorrhages, the vis vitæ ought to be kept up with hot wine and volatile alkaline spirits.

In my opinion, it is a much safer practice to attempt a coagulation of the blood in the extremities of the open vessels, and to abstain from all heating and stimulating things ;
for

for bark, steel, white vitriol, &c. prove styptics more from their invigorating the system, than from their application as topics. In cases of bloody urine in the small-pox and hæmorrhages, instead of styptics and astringents, the fossil acids, as oil of sulphur, &c. are the best medicines. The greatest care, however, ought to be taken to distinguish well between bloody urine, and the menses.

That scarifying mortified parts, and dressing them with warm applications, are always the most proper treatment.

Mr. Pott has proved them extremely improper in mortifications of the toes and feet of old people, and that in such, the liberal use of opiates, together with the external application of sedatives, and relaxants have performed great cures, where scarifications, &c. by the great pain they give, would have proved hurtful.

That the best way to exfoliate a bone, in order to its separation from a sound part, is by scraping it.

By

By no means, for the scraped parts must exfoliate again, and so on; cauterising with a hot iron, must also be a very bad method; as this cannot be done without injuring the subjacent sound part, which sound part, now adust, must be again exfoliated before the cure can be expected. The best method certainly is to perforate it gently by many small adjacent little foramina down to the diploe.

That when sponge is necessary to dilate a wound, it must be melted in wax or plaster.

A better way may be to dip it in water, wring it out, and then wind it about with packthread as tight as possible, the sponge then to be cut off as it is wanted, letting the thread remain on the rest of it.

Hypocrates's advice to prevent infection from the plague by great fires, has been condemned by some authors, from an opinion that heat is more likely to increase every kind of putrefaction than to correct it.

However,

However, late well-conducted experiments have perfectly justified him ; fire and smoak having been found to be certain infallible correctors, or rather destroyers of infection in all cases, whether arising from noxious effluvia of stagnant marshes, or the contagion of diseased bodies ; it having, for example, never been known that a ship which had been carefully smoaked, though before ever so infectious, had not immediately become healthy. And from parity of reason, the like good effects of it may be expected in the plague.

That in fevers, after a due concoction of the febrile matter, nature generally discharges it by the kidneys.

It sometimes does ; but there are numberless instances of critical discharges having been made by the skin from blisters which had dried for days before, also by sweats, by apthæ, and by stool.

A French physician has given it as his opinion, that the swellings and sickness,
K
which

which attend the eating of mushrooms, are caused by the eggs which spiders deposit in them.

The practice of old women's giving spiders to be swallowed as a cure for agues, is inimical to this opinion. This sickness is probably owing to the richness of the mushrooms; the same thing is known to have happened to some persons after eating muscles or rich salmon.

That the swelling, after eating muscles, proceeds from the poisonous quality of the pisum, or little crab inhabiting them.

This has no better foundation than the opinion of the ancients, that muscles, as they themselves are not able to move, take these little crabs into their service to go out to cater for them, and also to run in at the approach of an enemy, to give them a signal to shut their shells, of which *Oppian* has versified a curious fable.

That nature, the vis medicatrix, always aims aright in the removal of all disorders,

orders, and that a physician has little more to do than attentively to study her motions, and follow the way which she points out.

Though nature is possessed in the animal œconomy of most wonderful resources for relieving herself, yet, in many cases where she even aims aright, the skill of the physician is of the utmost consequence, to distinguish *when* she ought to be assisted, and in *what cases* to be absolutely restrained, or her efforts to be diverted into another channel; for example, it would be very dangerous with forcing medicines to urge her on when she has already raised a fever by her endeavours to force a stone from the kidney into an ureter, whose diameter is much too narrow to receive it.

That it argues want of skill in the physician, who, with the co-operating aid also of this vis medicatrix, cannot cure every distemper not in its nature incurable.

Many causes may happen to thwart his attempts, and best-laid schemes to regulate

nature's sails and helm; for if a sudden hurricane comes on, and the particular state of the ship be such as not to permit it to answer the helm, it would be very hard to blame the pilot if she went upon the rocks, while the same care and conduct would have saved a ship of a better make.

*That quacks boast of infallible nostrums,
with which physicians are unacquainted.*

It was the sensible remark of an ingenious author, that though the Ignorant boast of infallible remedies for every disorder, a man of real skill cannot venture a positive assurance that he can cure a cut finger.

*That quacks have the sagacity to find out a
patient's disorder by the inspection of his
urine only.*

The most learned physicians know this to be a flagrant imposture, because it is impossible to draw any certain prognostic from urine alone, without the concurrent aid of many other symptoms; as, in some persons in health, the urine, even when fresh made, manifests

manifests an alkaline, and in some, an acid tendency; and it alters, and assumes the smell and hue of the medicines or food last taken in, as is evident after asparagus, terebinthinate medicines, or the like; and from the numerous laughable tricks played upon those pretenders, it is very evident they do not know urine from many other liquors.

That when a man's time is come he must die.

If particular, absolute, unconditional predestination be true, and a man's fate has been irreversibly fixed before the foundation of the world, God has created medicines and the physician in vain. And, according to this doctrine, a rope need not be thrown to a sailor fallen overboard in a storm in the middle of the vast atlantic, for he will swim a few thousand miles to shore, agreeable to the decree, if, as the proverb has it, he was born to be hanged.

That it is wrong, and a great pity, to disturb a patient, supposed to be dying, with any more medicines or applications.

Of all vulgar errors, this is certainly the most pernicious. Without taking into consideration the very great uncertainty of our forming a true prognostic of death, if the patient be so low as to be incapable of any sensation whatever; were there but one chance in ten thousand of saving him, by some uncommon means or medicines, a trial most undoubtedly ought to be made; particularly as no harm whatever can happen from its failing. Should we not rather redouble our exertions at the pump, in proportion to the increasing urgent danger of the ship's sinking? Have not many drowned persons, in whom the pulse and all the vital actions had long ceased, been by active means and proper applications restored to life! Is there not a well authenticated anecdote of a great person in Devonshire,[†] who, after having lain *in state* for a considerable time, was brought to life by his insolent butler, who before locking up at night, having carried up a bottle of brandy to give the women who watched the corpse a glass a piece, took off the napkin covering his master's

[†] Sir Hugh Ackland, who left a legacy to this Butler by way of reward, after his real death.

ter's face, and with this taunting speech,
 " Come, old gentleman, I will not pass *you*
 " bye, you shall have one glass now you
 " are dead, of what you loved dearly all
 " your lifetime;" so saying, he opened his
 master's mouth, and poured a glassful down
 his throat, which instantly set him a cough-
 ing, and brought him to life, after which
 he lived several years? And have no in-
 stances been known of corpses having been
 restored to life, who had undergone a too
 hasty sepulture by the unfeeling inhumanity
 of their relatives?

*That were the medicinal virtues of all the
 many thousands of herbs, plants, trees,
 and their roots, barks, seeds, &c. care-
 fully examined, specifics might be dis-
 covered for most distempers.*

Great discoveries may possibly be made
 by ingenious persons, as to the virtues of
 some; but it is a most erroneous notion to
 suppose all these to have been designed for
 medicines, and not for a thousand various
 other purposes. But as to specifics, if their

idea be explicable by supposing an admiral sent down channel, across the Bay of Biscay, and up the Mediterranean, with express orders to attack the Maltese, but with the strictest charge not to molest any other state whatever ; I cannot conceive any medicine such a specific as to conform most punctually with such orders, to act vigorously against one particular gland or humour of the body, without in the least affecting or disturbing any other, or, like a sheriff's officer, serve his writ upon the individual person it was intended for, and on no other person, in a mistake.

That were medicines all correctly classed according to their several virtues, peculiar properties, and certain modes of operation, the practice of physic might be brought to great certainty.

Nothing can be urged against this but its impossibility, for the very same drug or medicine acts very differently on different constitutions ; for example, there is no such medicine existing as a certain universal deobstruent ;

obstruent; for in weak, flabby solids, with poor pituitous inert blood, the deobstruents must be all of the class of stimulators; and on the other hand, in firm, tense, elastic fibres, and an inflammatory state of the blood, the deobstruents must be of the tribe of coolers, emollients, and laxatives; and it is very well understood that diaphoretics and sudorifics, as to their action, differ only in degree. The percussive also of an elastic ball must have a different effect upon different bodies, and vary as those are more or less elastic: so the sun hardens clay, while it melts wax; hence the adage, *quicquid recipitur, recipitur ad modum recipientis*.

That the virtues of drugs are drawn out more effectually by a long than by a short decoction.

This does not hold good without exceptions; for instance, a small quantity of *senna* boiled only for a few minutes, retains more of its purgative quality, than four times as much boiled in the like quantity of water for an hour or two; besides, the longer the decoction,

decoction, the more the *spiritus rector* of any plant is dissipated. And it is very remarkable, that an infusion of *senna* four ounces, in water three ounces, will not purge as briskly as one scruple, in six ounces of water; the reason of this seems to be, that the water can take up but a determined quantity of it only.

That the virtue of galls, tormentil roots, and such like astringents, may to a greater degree be extracted by decoction than simple cold infusion in water.

Quite the contrary; for a decoction of these, kept on to the consistence of an extract, totally destroys their astringency, if kept for any time. Tanners, who have the greatest experience in these matters, prefer a cold infusion of their oak bark only, to an infusion in boiling water, or even a decoction. And chemists find that a cold water infusion of Peruvian bark is stronger than its decoction.

That

That joining together a number of various ingredients in a prescription, may add to its efficacy; as some may hit the case, if the rest fail.

This was a foible in the great Sydenham; and, in my opinion, would be a likely means of spoiling the whole. One drug, and that the principal in its class, with its necessary cookery, well suited to its intention, must assuredly be far preferable; for example, if a *sweet* be indicated, would it not be absurd to think of improving the taste and virtue of sugar-candy, by beating up Spanish liquorice with it? If the ingredients are of different qualities, may they not be apt to destroy each other? Besides, if the compound should disagree with the patient, it will be more difficult to discover the delinquent ingredient amongst a hodge-podge of many others, so as to be able to omit it in a subsequent prescription. Possibly, indeed, the discovery of the true nature and seat of a distemper, and the true indication of cure, may, in most cases, be much greater than

than in finding out proper medicines afterwards to execute it with. Though, to supply his various customers with whatever medicines they may call for, an apothecary is obliged to store his shop with a vast variety of drugs; yet, from 15 to 20 of the best would, I believe, be as many as the most able physician would think necessary to take with him for his residence during life, at Otaheite or Bolabola.

That it would be of the greatest public utility that physicians, retiring after many years practice, should leave behind them treatises upon all the disorders we are liable to, for the improvement of future practitioners, instead of our being cloyed with those of young ones, who have had little or no experience, and can be expected to teach us, like shew-boards, little more than where they live.

This, *prima facie*, seems good sense, particularly as it is confined to physicians who have been in long practice, and can have no sinister views; however, I would object
even

even against their composing complete treatises upon all disorders, from my fears that the greatest part might be nothing more than compilations from other authors, whose errors, from not having had the opportunity, or courage, sufficient to scrutinize them with the necessary freedom, they would, by this means, propagate, as it would seem, by their concurrent testimony. Instead of such, were each to leave to the public a *post obit* legacy, consisting only of those improvements and discoveries in any branches of his profession he may have been fortunate enough to discover, and that in ever so small a pamphlet, it would carry with it sufficient merit.

That the insupportable stench brought on after the skin of a sheep instantly killed for the purpose, split sucking pigs, whelps, pigeons, or the like, applied reeking hot to patients in some disorders, is a sure proof of their amazing good effects, by their thus imbibing and drawing out of their bodies, the noxious miasmata, bruises, &c.

This

This fætor is caused entirely by the putrefaction brought upon the sheepskin by the heat and moisture of the patient's body, and would therefore be more likely to add to, rather than take away, any febrile miasma. The same thing would happen upon the application of these to persons equally warm, who are in perfect health.

That mercurials induce a putrescency of the humours, as is very evident from the fætor of the breath in a salivation.

This cannot be the cause of it; salivation being always attended with inflammation, and a strong texture of the blood; the action of mercury being stimulant in general, and in particular a salivary one.

That pains remaining in the tibia, and other bones, after a complete salivation has been undergone, prove that a portion of the venereal virus is still lurking there.

That this may not always be the cause, has appeared from an accumulation and a greater degree of these pains having been the consequence

quence of a second salivation, instituted and undergone for the more certain and effectual removal of them. The true cause, not unfrequently, of such complaints, may have been, the mercurial ointment having been made of mercury which had been adulterated with tin foil of looking glasses, or an amalgamation with lead, and recovered from its admixture; the finer mercurial particles of such amalgamation passing freely themselves through the very minute vessels of the bones, and there separating from the more gross particles of the lead, which are too large to pass with them; the particles of lead thus disunited or decomposed, are deposited and remain in them. In proof of this doctrine, an ointment composed of mercury, which had been well purified, has been found to be the only certain means of removing the former obstructions, and carrying off the dregs, which the adulterated had deposited there. As lead is much cheaper than mercury, it is a very common fraud to adulterate the quicksilver with it, which will evade a discovery both by the

usual test of passing it through shamoy leather, and even by distillation, if that be not performed in an appropriated retort, whose neck is considerably longer than the height which lead can rise to, along with the quicksilver.

Mr. Boyle affirms, that the slow poison which the Indians make use of, as a great secret, is nothing but hair cut short, and conveyed into the person's meat.

I can give no credit to this; as it is well known that the old women's receipt to kill worms in children, is their own hair cut short; cowhage seems to act on worms upon the same principle.

That the hyp, or hypochondriacal disorder, is all imaginary.

By no means; I believe that many, even maniacal cases, originate in obstructions of the mesenteric glands. And were we to allow that some hyppish persons, as they are called, have but little cause of complaining at the commencement of this malady,
the

the workings of their imaginations will however, most assuredly, in a little time bring on those evils which existed at first in some degree in imagination and idea only, unless the greatest care be taken that the mind's attention be properly diverted. As such persons are generally in the habit of feeling their own pulses, it ought to be strenuously inculcated to them, that there is great uncertainty in deducing any prognostic from the pulse, even by the most sagacious physicians; it being quicker in women generally, than in men; slower in the morning, than at night; slower after fasting, than after a meal; and when at rest, than when in motion; asleep, than when awake; in cold, than in hot weather; not to enumerate its remarkable variations from the different passions; so that it would behove such persons to consult their feelings only, and not their pulses.

*That when the pulse, after a long illness,
gives three, four, or five strokes, and*

L

then

then a jar or tremor, it presages approaching death.

I have sometimes, though but rarely, observed such a pulse in some persons in a state of nervous debility, when not in reality very ill.

That in a severe iliac passion, crude quicksilver in large quantities is the best medicine.

Perhaps a pint of cold drawn linseed oil, drank for a dose, may be a much better.

That soft down beds are most agreeable, and healthy, for invalids.

Quite otherwise; for by their sinking under them, they warm and relax the kidneys so much, as to lay the foundation of gravelly complaints, which are best prevented by lying on beds hard stuffed, but even, like pincushions, upon broad-bottomed bedsteads, which will not sink like sack-ing, placed on an inclined plane, like guard-house platforms, with a cross board at the feet, to secure the bed cloaths from falling down.

That

That kings formerly cured the king's evil.

From a form of solemn service at the altar in our old prayer books upon such occasions, it must be allowed to have obtained undoubted credit in those days. Mr. Morley's vervain root seems to fall under the same predicament with Queen Anne's piece of gold, suspended in like manner from the patient's neck. As Mr. Morley, by his pamphlet, is said to be a gentleman of fortune, and by this means to have cured hundreds *gratis*, it would be hard not to allow him some degree of credit. I can vouch for considerable benefits, having, more than once, attended an application of my own in incipient strumous schirrhuses, quite as simple. What I built the rationale of my attempt upon was, a most incontrovertible fact, that when the mind is in a continual alarm and apprehension of the approach of danger to a part affected; it constantly determines an erethisma, congestion, or influx of humours upon it, be the disease ever so

flight, and thereby keeps up a certain constant degree of heat and inflammation in it, which, by the continual action of the same cause, grows worse and worse. On the contrary, a firm reliance upon the skill of the physician, and a strong faith and expectation of a cure, from the continued use of some one thing he prescribes, and requires to be rigidly persisted in for a considerable time, without the least alteration, will actually remove, from incipient schirrhuses and tumours of the strumous kind, this most injurious erethism, and will thus become of infinite service. The patient, now resting the cure solely upon the reputation of the specific, be it what perfectly inactive thing it may (for perfectly inactive it is necessary it should be,) religiously abstains from tampering with any applications or medicines whatsoever, which, by drawing the mind's attention to them, would most certainly irritate, and soon induce a pain in a part before absolutely indolent.

That

That the invention of a medicine which would cure the gout, and prevent its return, would be a great desideratum.

I think there is reason to doubt Dr. Cheyney's opinion, that a patient, after a regular fit, is as free from it, excepting a disposition to acquire it *de novo*, as if he had never had it; because I have known a gentleman through every joint of whose body the gout had made a most painfully severe scrutiny for six weeks duration, who, after all his pain and feverishness had left him, happening to have a slight fall from his horse the first day of his airing, had a return of it with greater violence than before; whence I conclude, that the gout, like an attentive waiter in an adjoining closet, seems to be always within call. And perhaps none are more to be pitied than such as have not in their constitution matter sufficient to bring on a fit, and yet sufficient to tease and prevent them from enjoying any ease, or quiet. It is probably matter from over-feeding upon luxurious high-seasoned viands,

with rich strong wines and spirituous liquors, in a lazy, indolent habit, unaffimilated and unconcocted in a relaxed stomach, taken into the circulation by the relaxed open orifices of the lacteals, of too gross a nature to be therein properly circulated and carried off by perspiration, which causes obstructions in the minute vessels of the ligaments and cartilages of the joints which are remotest from the action of the heart, that brings on that fever, which is Nature's means for expelling it, called a paroxysm, or fit of the gout.

Hence appears the wonderful absurdity of those persons, who, instead of pursuing a temperate regimen, prefer still *keeping it up*, (as the *bon-vivants* call it,) and indulging in the free use of strong wines and spirituous liquors, under a pretence of guarding and fortifying the stomach against its attacks, as if what had first induced it was the best means of taking it away, or committing sin were the best means to make grace abound.

I believe the Portland powder (as it was called) would go a great way towards answering

ing the desideratum ; but that unfortunately, if continued for the full time it is directed, the remedy would be worse than the disease, as by tanning the villous coat of the stomach, and the fine vessels of the lacteals, it will most assuredly, by a commutation act, exchange the gout for a palsy, or apoplexy, and when this happens to an old debauchee, whose constant diet has been ever high, and stimulated with the provocative assistance of mustard, garlic, horseradish, salt, pepper, cayenne, and the whole tribe of heating aromatics, rich fauces, pickles, and Indian cruet drugs, and whose constant drink has been the richest cordial, inflammatory wines, and spirituous liquors ; can any thing be more unreasonable than for such a person to expect a cure from shop medicines of far inferior virtues to those he has all his lifetime made his food ? Would not this be to send a cow to overtake a hare ? It must be clearly evident, that in such a case nothing but a total change of his mode of life, diet, &c. (like the new birth to profligate sinners,) can be of any avail.

That claret is a most improper liquor in the intervals of the gout, as being more apt than any other to bring on a fit of the gout.

This effect of it, so far from being objectionable, may rather be much in its favour; for as a single bout or two of claret drinking, (as has been observed,) which is often more than sufficient to bring it on, cannot be supposed instantly to store the blood with so much gouty matter as would be sufficient to furnish out a fit of it (Nature working by much slower degrees); such bouts can no otherwise produce a fit, than by strengthening the stomach and bowels, by the wine's subacid astringency, generous warmth, and spirit, upon the same principle exactly as the Bath water; inso-much that the constitution becomes then enabled to drive out the dormant gouty humour, which before lay dispersed through the habit. And surely, if there be any medicine or liquor that can throw out any noxious humour out of the body upon its proper seat, it ought to be esteemed a friendly act in it.

That

That the matter of the gout has been known to be translated, and to fly from one foot or joint to another.

This may possibly, for ought we know, happen from a new deposition of gouty matter on those parts, after the first have been so filled as to admit of no more of it.

That oil-case coverings are excellent applications to the knees, or other joints, of gouty people.

So far otherwise, they have been known to bring on a rigidity of the articulation.

That as health depends upon exercise, the strongest and most active kinds are best, such as fox hunting, cricket, tennis, &c. &c.

When exercise is medically recommended, no other sorts are meant but such recreations as require only gentle bodily, or horse exercise. Walking, if the invalid be able, is by much the best of any, as more of the muscles of the body come into action,
than

than in any other mode of it. The best carriages by much are open chairs, phaetons, or landaus, where the air has every free access to the body; coaches and chaises are generally too hot, like little chambers, and if a glass or two be let down, the cold air let in upon an invalid, who may probably by long illness and confinement to a warm bedchamber have been rendered a hot-bed plant, will most undoubtedly give him a cold. Violent exercise excites violent sweats, which exhaust the constitution more than other evacuations, being nothing less than the pure serum of the blood, the very matter of nutriment to the whole body.

Young lusty men, indeed, who indulge in overmuch eating and drinking, do not immediately suffer so much from violent exercise, as they by this means carry off their plethora.- It is, however, well worth the consideration of those, that such is the natural structure and mechanism of the body, that in proportion to the degree of strength they exert, and the more vigorous their circulation, they sooner wear out, and
bring

bring on the *mors senilis*, when the arteries grow rigid, and lose their elastic power, upon which the circulation and life both depend.

That in prescribing a regimen for Valetudinarians, care should be taken to prohibit them the use of malt liquors.

This, though as ridiculous, as it is at present a general practice, must arise solely from the usual routine, whereby one prescriber follows another without a well-weighed consideration, and a sufficient knowledge of the virtues and nature in general of what they thus in the lump condemn. It is most certainly the duty of the physician who prescribes wine in preference to it, to inform his patients where this wine is to be procured genuine, or at least to supply them with a vial of those drops which discover whether its pleasant flavour be owing to the poisonous sugar of lead added to it, or to the natural flavour of the juice of the grape. It is well known that all the white wines of Portugal have not in themselves a body sufficient, without a considerable addition of brandy,

brandy, to keep them in that very hot climate from a fret, even while they are carrying down to their own ports, and we by experience find that all the cookery of our coopers after their arrival in this much colder climate, by the addition of perry and brandy, is not able to prevent their giving us the heartburn, if taken on an empty stomach. Port, indeed, having naturally a better body, does not require so much brandy, unless when it is to be passed upon hard drinking people for extreme good sound genuine old port. Elixir of vitriol, the common ingredient in the port of public houses, is a cheat so easily discoverable by the taste, that it may be avoided. As to any kind of spirits, from infernal hogwash gin, through all the gradations of whisky, arrack, rum, and brandy, up to spirits of wine, any farther than the little service they afford us in making tinctures of certain drugs, it would have been well if they had never been invented, for I am most firmly persuaded those enjoy the most health who never taste them in any form. I know that brandy, and
rum,

rum, and water, have been often recommended as the best common drink for low spirited women, upon the supposition that when much diluted they can do no harm. But when it is considered that by habit the strength of them becomes imperceptible, I would most particularly caution females of delicate constitutions totally to abstain from them, not solely from the consequence of thin lips with a black listing, sour breath, red nose, and a richness of countenance, with morning hawkings up of tough phlegm, imperceptibly brought on though undoubted proofs of the cause they originate from; but because they will also most assuredly lay the foundation of schirrhous livers, gravel, dropsy, palsy, and all the cold and nervous disorders in weak, sedentary, inactive persons.

Well fined porter, from a capital house in London, above sophistifying it, agrees with most people. But to deliver with justice the praise or dispraise of malt liquors in general, without first perfectly knowing the nature of the waters they are brewed with, and the length of time taken up in boiling them

them in different counties, (two articles which give Welch ale its superior excellence,) their strength, colour, age, fineness, paleness, and the goodness of the malt and hops, would be nugatory and absurd. But most certainly, when well brewed, pale, clear, and well hopped, and not too strong, or kept to become beerish, they have all the good qualities that can be reasonably wished for in any drink; and when taken in the quantity of a few glasses only, is a less inflammatory cordial than any at present in use, being nutritious also and stomachic, without inducing costiveness as red wines do, or racking the kidneys as cyder, perry, and other diuretics are known to do; insomuch that *Cyprianus*, the great Lithotomist, has declared, that out of 1500 whom he had cut for the stone, he had never cut an ale-drinker; and it is a well-known truth, that few, even hard drinkers, whose constant and only liquor has been ale, have ever suffered much from the gout. Notwithstanding this just encomium on good ale, the ale of public houses is frequently most

abominably adulterated, by an addition in its brewing of the poisonous berry called *coccullus indicus*, meant to save malt, and facilitate intoxication. It is hardly credible what quantities the druggists import, and sell under-hand for this sole purpose; as to the other use of it, sometimes to poison fish, would hardly answer its importation. The ale thus cooked up is clear and very strong, and remarkably heady, and of a deep colour; and that its taste may not betray it, artful brewers sometimes add to it grains of paradise, ground-ivy, or wormwood, to disguise it, pretending thereby to make it more healthy.

That the vital functions continue their actions with greater vigour and activity during our sleep, than while awake.

Though this was *Boerhaave's* opinion, it cannot be true; for during sleep, though respiration seems, from its rattling, to be stronger and more vigorous, it is really much weaker, only more laborious; for there is then less air taken in, and the circulation, not being assisted and forwarded by the actions

actions of the muscles of the body, and also by the senses, becomes much slower. Hence persons asleep appear much paler, which is a proof of it. It is also evident from the pulse, which is much slower, and the animal heat much less, as may be proved by the thermometer. Hence it is that a person sleeping in a chair, if not wrapped up with more cloaths than when awake, soon finds himself very cold. *Boerhaave* was probably misled by *Sanctorius's* experiments, who said,

“That we perspire more in the same space of time when asleep, than when awake.”

De Goerter, upon trying *Sanctorius's* experiments over again, discovered the mistake. It is well known that animals, the more they sleep the more plethoric and fat they grow; and *per contra*, the less they sleep, the more thin and meagre. All the fluids, as milk, urine, &c. are secreted in larger quantities by persons awake than while asleep; hence it is also that we become more hungry while awake, from the secretions becoming then more plentiful.

Great cures have been attributed to the use of a few grains of millepedes as an alterative, and to a few grains of saffron as a cordial.

I am inclined to believe such cures must have been effected by some other means, or the *vis medicatrix* alone, and are not owing to medicines of such trifling virtues in such small doses.

That it is a dangerous practice to put an inked pen in one's mouth, or to lick up a blot of ink from the paper.

Ink, though extremely harsh, is not poisonous, being only a very strong tincture of steel, which when sufficiently diluted, would be no very bad medicine of that class.

That the palate is the organ of taste, hence an epicure is said to be a person of a nice palate.

This is a figurative expression; the palate, though sensible of weight, cold, or the like, is not in the least sensible of taste; for the curious *Bellini*, upon trial, found that he

could perceive no manner of taste upon pressing sapid substances, even of some degree of acrimony on his palate, lips, gums, &c. but the tongue alone, which is furnished with conical-figured numerous nervous papillæ, covered with a fine skin and epidermis, was the true organ of taste, when sapid substances were pressed upon it by the palate.

That animal food becomes more or less nutritious, as it is more or less boiled or roasted.

Undoubtedly the contrary; the less it loses of its blood and juices in the cookery, or the more of them it retains, the more alcalescent and nutritious it is, being most so when raw; and *per contra*, the more boiling and roasting it undergoes, the more its juices are exhausted. An ox's muscle has, for experiment, been boiled in different waters so long, that nothing but the fibres or skeleton of it remained, which thus prepared will never putrify, nor will it be eaten by a dog if thrown to him. Roasted
and

and boiled flesh differ considerably, during the same time of cooking, in their qualities; the juices of the roasted are kept in and protected from the exhausting power of the fire by the crust formed round it; whereas in boiling, the water penetrates it and exhausts its juices greatly, as is very evident from its savory broth. The fatter any flesh is, the more it tends to an alkaline state, and the more it will pall the stomach.

That one hearty meal in the day is more wholesome than three or four slender ones at stated intervals.

By no means; on the contrary, the less the stomach is loaded and oppressed, the better the process of digestion is carried on.

That it is best to wait for a considerable degree of hunger before we eat our meals.

Not at all; for the painful uneasiness we call hunger, in proportion to its duration and increasing violence, must be very prejudicial to the stomach; whether we suppose it to proceed from the attrition of its

coats against each other when there is nothing interposed between them, which must inflame its most tender villous coat, or from the corrosive quality of a certain gastric liquor, of such digestive power as to prey upon itself, and even after death, according to some authors.

May it not be probably one reason, viz. to guard against this attrition, why an ostrich swallows such a vast variety of things of all kinds indiscriminately as he can pick them up, neither apparently adapted like gravel for chickens to triturate their food, nor to assist its digestion, such as cloth, grass, wood, nuts, stones, bones, glass, brass, tin, silver, copper, lead, iron, &c.? May it not also be for the like intention that Wiltshire farmers always cram their working horses with great quantities of innutritious chaff and *douft*, as they call it, mixed with their corn, fancying that they never work so well as when their bellies are kept full and tight? Hence also it is that the Indians, when provisions grow scarce upon long hunting expeditions, find much benefit from binding

a board tight against their stomachs, probably to prevent attrition.

That sick persons ought invariably to be restrained to a very strict observance of rules, as to diet, as well as medicines.

Hippocrates thought otherwise, especially if the thing recommended should happen to cross the appetite of the patient; for, as he observes, meat and drink, though somewhat worse, if pleasing, ought to be preferred before better which is displeasing, so much depending upon the particular idiosyncrasy of the patient, which it is no easy matter for another to discover.

That a collection of recipes of physicians, taken off the files of apothecaries, may very well save the expence of employing physicians.

Pretty nearly as well as a chest of his tools may save the expence of employing a watchmaker. If it were known what particular intention a *recipe* was directed for in a particular distemper; the ages of differ-

ent people and their temperaments, and the various species, combinations, and complications of their disorders would still be matter of most necessary investigation, before such, or the ready-made ones of pharmacopœias and hospital dispensaries, and their doses, could be ventured upon. *Sydenham* wished to be esteemed a physician, not a prescriber of medical forms, which two arts or provinces he thought to differ widely from each other.

That green and bohea tea are the leaves of one and the same tree; differing only from the different seasons of gathering them, and the different ages of the trees.

These trees are of late become so common in our gardens that they are well known to differ remarkably from each other. The bohea is a very tender shrub, which requires a greenhouse in winter, and is perfectly distinguishable from any other teas by its berries. But the green is a hardy shrub, and will stand the weather in our climate, and live out with our gooseberry trees.

The

The relaxing quality of the infusion of teas proceeds from our drinking it hot, if it be made weak, particularly the green; for when this is made strong and drank cold, it is a remarkable astringent, and when very strong proves emetic. The Chinese, who must be the best judges of the qualities of teas, make use of bohea only for their own drinking, of which a sufficient quantity for the whole day's beverage is made in the morning, and carried out with them to their rice ground, or other employments; which they always drink cold, and without sugar; they do not infuse it after our manner, but boil it in a tea-kettle, (using tea-pots only as strainers,) probably the better to evaporate the fine smell of their best teas, which are said to have an intoxicating quality, unless they are kept a year or two before they are used.

A more convincing proof of the deleterious quality of our fine green tea can hardly be conceived than Dr. Percival's. He confined, by a little weight of lead upon his back, a frog upon the rim of a saucer full of green tea, of the heat and strength which

our ladies are accustomed to drink it, in such a manner, that one leg should lie in the tea, which soon became paralytic; he then, in like manner, tried another leg, which suffered alike; and so on with the rest, to that degree that the animal could not make the least use of either of them.

The mode of manufacturing their teas is said to be as follows: the leaves, when gathered off the trees, have a caustic oil upon them; to take off which, they infuse them in water for some time, after which they with their hands roll the green tea leaves upon copper-plates, heated by a stove underneath. The small remains of the acid oil, still adhering to them by its corroding the copper, is thought to communicate to it the green colour which the English look upon as the test of its goodness. The bohea not bearing so good a price in Europe, though dearer in China, is rolled on a common table with less care, and afterwards dried by stirring it in heated iron pots, with as little trouble as may be; a little tinge from the iron may probably be one reason for its
greater

greater healthfulness, and the cause of its colour; and as it is so cheap, there is not the same temptation to adulterate it. The dealers in London, after buying a lot of green tea, spread it upon a long table, and employ women to pick and separate it into several different sorts, as to the colour and size of the rolls, &c. to which they afterwards give what names they think proper, as hyson, imperial, cowslip, &c. &c. However, towards cowsliping a portion of the former, to enhance its price, one or two drops of *otto* of roses is added to a canister of it, to give it the fine smell it is admired for. What tree, or contrivance, produces what is called fouchong, I have not learnt; all we know of it is, that it differs much from bohea, as it has no berries in it, and often makes people sick whom the bohea perfectly agrees with.

That the fine green colour of pickled samphire, cucumbers, &c. is a proof of their goodness.

It

It proves quite the reverse, and that they have been stained of that colour by the verdigrise from vinegar and copper: their being of a black colour would indeed be a proof of their inoffensiveness, and of their having been done, as all pickles ought to be, in iron pots.

That cochineal is a kind of grain; whence all silks and cloths dyed in it are said to be dyed in grain.

A wager first determined this matter, and the microscope has since very plainly discovered them to be little flies. And when we are told, to enhance the value of a piece of fine yellow, green, or white cloth, that it has been dyed in grain; it is a palpable imposition, as there is no red in it. It is an ingredient in many medicines, from its beautiful colour only; as even from an ounce or two of it, little more medicinal virtue could be expected, than from so much millepedes. After Dr. *Berkenhout* had discovered the secret of communicating its dye to cotton, for which he received 5000 *l.*
the

the cotton dyers, to whom it was offered *gratis*, (would any one believe it?) have refused to use it; being contented with the dull dirty red in present use; so that government has thought it better to keep it still a secret than publish it, which would enable foreigners to beat our cottons out of every market.

That bodily pain is an evil.

In a moral sense, it was certainly introduced, as well as death, by original sin; but possibly in its natural design it may never have been intended by a merciful God, who can over-rule evil for good, to make us unhappy; but rather to teach us our dependence upon him, and to guard us from misery and greater pain in death. Were it not for pain, we might, in many cases, be destroyed before we were aware of it; it being only excited when some violent injury is offered, or, as in hunger and thirst, to stimulate us to provide a proper supply of nutriment for the support of the body; as, but for this uneasy sensation, we might be so engaged
in

in our pursuit of pleasure or profit, as to neglect to supply ourselves with the necessary fresh chyle. It is pain, also, that admonishes, and even compels us, to guard against growing diseases, and to use all our endeavours towards a speedy removal of them when they afflict us. Lassitude also, the natural painful consequence of excesses and debaucheries, is an excellent monitor to convince us of the injury they bring upon us.

That it is a fortunate circumstance that the rattling noise which the rattle-snake is obliged to make in its motion, affords travellers in the woods notice of its proximity and their danger.

This is so far from being the case, that the snake, in its ordinary motion, is not heard to rattle at all ; the rattling being only excited at will by the snake, for the sole purpose of frightening hares, squirrels, and birds, out of their bushes and hiding-places, to become its prey.

That

*That liquids are the best form for medicines,
as being easiest to swallow.*

Not when there are ulcers in the throat ; in which case, more muscles are brought into action towards swallowing liquids than in swallowing pills or boluses.

That bark in substance, given in a phthisis pulmonalis, causes obstructions, and an inflammation of the lungs.

Some authors deny this. It is, however, certain, that by its fermentation in the stomach, it is apt in a variety of cases to produce flatulencies, head-aches, and difficulty of breathing ; however, a gentle emetic removes these symptoms.

That it would be of the greatest use to collect all the recipes and nostrums recommended for persons bitten by mad dogs, that the miserable patients may give them all a fair trial.

Of much greater benefit would it be to peruse Dr. Berkenhout's treatise, wherein he proves that in the hydrophobia, (the only true symptom

symptom of infection,) all the cried-up medicines, such as the *Ormskirk* medicine, (which is nothing but dirt;) meads lichen, musk, opium, mercurials, and sea-water, &c. are not of the least efficacy; and that, without loss of time, new trials ought to be made of some other means, without confiding in any thing hitherto recommended.

That the nerves (like fiddle-strings) are sometimes too much relaxed and unbraced, producing fainting fits, despondency, and palsies; and at other times screwed up to too high a pitch, causing the violent passions of anger, rage, and fury.

The above is a figurative mode of speech only, which people have made use of to express what they could form no right conceptions of; the nerves, so different from all this, being simply continuations of the brain only, the softest pulp imaginable.

That the doctrine of the nerves, as to their mode of action, and the existence of their animal spirits, is involved in so much obscurity

scurity and darknefs, that little or nothing certain is known of them.

Great difficulties there certainly are upon this subject, as well as many others in the animal œconomy. It is, however, no objection against the existence of the nervous juice, or animal spirits, that the fine vessels containing it cannot be demonstrable to the eye ; for who can demonstrate the wonderfully fine vessels that are well known to exist in our cartilages, nails, and bones, and in the smallest animals, who are universally allowed to be hydraulic machines? The animal spirits are supposed to be formed of the most diluted lymphatic parts of the blood, a fine bland liquor, like the *spiritus rector* of plants, or the vapour of water. We know that nothing which is not in the greatest degree mild, and endued with perfect lubricity, can be suitable to the nerves ; for substances of the least acrimony would soon destroy them. It can, therefore, have not the least resemblance to spirits of wine, fire, or lightning darting with incredible velocity, backwards
and

and forwards ; there being no such thing in the blood.

From the difficulty of accounting for the instantaneous communication of sensible objects by the nerves to the brain, and vice versa, some philosophers suppose the nervous fluid to be of an electrical nature.

This cannot be ; for the electrical matter could not be confined within the nerves ; as it is known to exert its force upon the flesh and fat as well as on the nerves. A ligature also on a nerve is known to take away sense and motion ; but it can by no means stop the motion of the electric matter.

The nerves of the *cerebrum* presiding over the animal functions are exceedingly simple, being a collection and continuation of the secretory tubes or medulla of the brain, and contained within a coat from the *dura mater*. They are not branches issuing from trunks, but are only simply separated ; their fibres continuing all along entirely distinct like skains of threads ; by which wise contrivance, a confusion of senses is prevented.

But

But those of the *cerebellum*, presiding over the vital functions, are larger; the *cerebellum* being more firm, dense, and solid, than the *cerebrum*, and having more *cortex* in proportion to its *medulla*; its vessels also unite together and form larger tubes, and by this means take up less room; for had they been, like the former, separate and distinct, they must have taken up a larger space; hence the motion of the animal spirits must be more equable and quick in them. But as they form frequent *ganglions* in which they are intimately blended together, they produce no distinct sensations, but are thought to be the cause of the sympathy observable between certain particular parts, though some think these sympathies not to depend upon the mere connection of these nerves, but on the impressions made upon and transmitted through the brain to the sympathizing organ.

Bellini's experiments seem evidently to prove the existence of animal spirits. After having opened the *thorax* of a dog on one side, (had he opened both sides the dog

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would

would have died,) he pinched the *diaphragmatic* nerve between his finger and thumb; upon which the *diaphragm* instantly lost its action, but upon letting it go, it instantly recovered its action again. After having lost its action, upon being pinched as above, when he stripped it downwards below the pinched part, and by that means squeezing downwards the animal spirits, its action became again restored. When he stopped it a second time in the same place, it would not recover its action; but if he stopped or pinched it a little higher up, and from thence stripped it downwards, it would then very manifestly recover its action again as before.

That it is impossible to form a right conception of the mode by which the nerves convey their sensations to the sensorium commune.

It is really so; all that is supposed is, that it is effected not only by the nerves themselves, but also, by their coats, which have the power of stopping their contained liquor. And if a vessel be full of
a fluid,

a fluid, and an impressiion be made at one end of it, we know it will be instantly conveyed to the other end of it. But were this their sole mode of action, we could be sensible only of *magis* & *minus*. However, besides this, their coats must contribute greatly afterwards towards enabling us to judge of the different qualities of objects, as may be gathered from the nature of pain, which is nothing more than a *solutio continui*, by the acrimony of the blood acting like little cutting instruments upon the part; for when a part is cut off, it becomes void of sense. Titillation seems also to proceed from a change of disposition in their coats only.

That the smell of a lime-kiln preserves people from consumptions; and that pregnancy has the same effect.

I fear neither assertion is true; because I knew a woman, of about thirty years of age, who was attended before and after pregnancy by an ingenious physician, in a consumption, who died of it some months after her delivery, though she was born, and

always lived as near as possible to eleven lime-kilns in constant work, during the season, the farthest not 200 yards from her house. An unmarried girl, her next door neighbour, died also consumptive.

That in difficult cases, where all other medical assistance has failed, electricity has performed surprising cures.

For some time it certainly was looked up to, like tar water, as a cure for almost all disorders; yet considering the great powers of electricity, as an instrument in philosophical experiments, it is not a little wonderful how very few stubborn disorders it has hitherto been actually known in reality to have cured. To evince which, Dr. Graham's confession, himself a host in this matter, is certainly proof sufficient; that, as I before hinted, notwithstanding he had an apparatus which far excelled every thing of the kind on the face of the earth, and had for ten years, ten thousand more patients than any physician in Europe ever had, and consequently greater opportunities of discovering
its

its virtue ; yet upon his conscience pricking him, and to render mankind all the reparation in his power, that of preventing them from being duped by other subsequent electricians ; he openly confessed that, with all his electrical, aerial, magnetical, and coelestial apparatus, he never had in his lifetime cured one person (though his book of well-attested cures is no small one, agreeable to the custom of puffing quacks) whom he might not have cured by the common usual means and medicines without it. As for the boasted cures of other electricians, it is natural enough to conceive that a man of a warm imagination, who having purchased a wheel and apparatus to amuse himself with, from a strong desire to convert electricity to some more real use than to exhibit *bocus-pocus* tricks, should first impose upon himself, and then upon the public, strange fancied cures of many disorders. As to the question whether electrical experiments upon the human body have, in fact, done most good or harm, much may be said on both sides. On one side, interested persons have published

lished numerous accounts of pompous cures by it. But of those perfectly healthy, who from twelve-penny shocks from itinerant electrical shewmen, undergone from mere curiosity only, who have been thereby thrown into incurable palsies; though many such have happened, few of such cases, as people are a little shy in owning their disappointments, have been published. Of late indeed, since the invention of electrometers, electrifiers know a little more of the danger attending it, and therefore will run the less risque of shocking the nerves so terribly as formerly.

All I can, from my own knowledge, say is, that after having seen a great variety of trials long persisted in, and conducted by professed electricians, in a variety of disorders, I had recommended trials to be made in such as gutta serenas, palsies, chronic rheumatisms, scrophulous eyelids, &c. I never saw one successful cure. Nevertheless, I do not presume to suppose, that for the fugacious pains of low-spirited hysterical people, of strong expectations of cure, from
crede

crede quod habes et habes, some relief may not have been given them by electricity, as it very often has happened from nothing at all, that is to say, from Mesmer's tricks. I have never known it tried in the case of the suspension of vital action in drowned persons, where, from its being so powerfully active an instrument, I am inclined to believe it may possibly be of service, but I never had an opportunity of trying it.

That sea-water, taken internally, causes great thirst, and is a great heater.

This happens only when it is not sufficiently diluted to pass through the kidneys without irritation. The best way to take off its disagreeable taste is, to take half a pint of it in one hand and half a pint of common water in the other, the latter to be swallowed instantly after the former, before it has had time to impress its taste upon the tongue. Sea-water thus washed down hastily, is not disagreeable, and being thus diluted, passes through the kidneys without causing any pain in the back,

or feverishness, and without the least sickness procures a gentle motion.

The only preparation necessary towards a course of sea-bathing in general, is to bathe in a hot sea-water bath for an evening or two first, to relax and open the pores of the skin; after this, cold sea-bathing, and drinking it, should commence, and be continued every morning. In hot weather, however, from July to the end of August, when the nights become disagreeably sultry and warm, the most prudent mode may be to drink the water in the morning, and bathe in it late in the evening of the same day, which will ensure a cool and agreeable night's rest.

Cold sea-bathing, as it is about seven times warmer in general than a cold bath of spring water, and a forty-fifth part heavier, is advised upon a very different principle from the latter, whose virtue consists solely in its chilling coldness, and the force with which the shock of it impels the blood with violence upon the heart, and its consequent

glow from the heart's elastic re-action in forcibly throwing it back again upon the external parts. On the other hand, the warmer the sea is, which I have always felt to depend upon the roughness of its waves, the better effect it has in soaking into the minute absorbent *canaliculi* of the skin, and in scouring the glands of it, by a saponaceous quality which it possesses in an eminent degree, whereby it becomes so very remarkably serviceable in their various obstructions, and the consequent defædations of the skin from checked and obstructed perspiration, in luxuriously fed and indolent hysterical people.

It is a well known observation, though the bladder may have been emptied entirely at going into the sea, that after a quarter of an hour's swimming in it, a very considerable quantity of clear limpid water will, by absorption, have found its way into it; it is likewise well known, that in that most dreadful situation of sailors cast away in a boat, being almost burnt up with raging thirst, for want of
water,

water, wetting their bodies with towels out of sea-water has afforded them remarkable relief. This being sea-water's peculiar excellency, together with its saline quality, oiliness, and ponderosity, those who expect all possible benefit from a hasty dip or two, out of a bathing machine, will assuredly meet with disappointment, as in this expeditious manner of using it, it must be greatly inferior to a cold bath.

In chronical, deep-seated, rheumatisms, hot sea-bathing and fumigations properly conducted and ^{per}consisted in for some time, will effect very great cures, provided they are perfected by a subsequent course of sea-bathing as I have experienced in cases which have resisted every contrivance in the application of the Somersetshire baths. I have also known the like success in inveterate *leprosy*, *impetigoes*, *tetters*, and various eruptions, and defædations of the skin by drinking and bathing in it.

It

It has been an old prevailing opinion, that the gushing out of blood from various parts of a body murdered, upon the touch of the person supposed to have been the murderer, was certain proof of his guilt.

When we consider how natural it is for a great number of people to flock in to view a murdered corpse, which must heat a small room, and that possibly also the corpse may have been moved, and carried from some distance off, and in warm weather ; it would in such a case be no wonder that being full of blood, upon a putrefaction coming on, some blood vessels should burst open, as they all will in time, as well on the touch of an innocent person, as on the touch of its murderer,

That a pure dry air, well ventilated, is of the utmost service to all weakly valetudinarians.

Not without exception ; for those of a dry temperament and emaciated, require the moist air of vales, &c. no air having
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an absolute, but only a relative virtue, as what is agreeable in food to one constitution, may be destructive to a different one.

That acid gargles are of the greatest service in quinsys.

I have thought them hurtful, because they contract the emunctories of the salivary and mucous glands, and thicken their humours. A decoction of figs in milk, with the addition of some spirit of sal amoniac, which will thin the saliva, and cause the glands to secrete more freely, will be a much more proper gargle.

That the use of rouge on a lady's face is perfectly inoffensive.

By clogging up the fine pores of the skin, it will by degrees bring on a scurfy eruption, by checking perspiration, and despoiling the skin of that fine oil intended by nature to lubricate and keep it smooth; the natural consequence will be in time the destruction of that beauty it is intended to improve. But every kind of white paint is danger-

dangerous in the extreme, and is sure to bring on a cadaverously stinking breath, rotten teeth, tubercles in the lungs, and consumptions, together with a train of nervous disorders.

That it is difficult to conceive how a sudden diminution of heat is produced by perspiration.

The fluid which exhales from the body consists chiefly of watery moisture, which uniting with a large portion of sensible heat, is carried off in form of steam. Hence by promoting a sudden evaporation, water may be speedily congealed into ice, even in the hottest climate; for example, let a very thin vial uncorked, containing a small quantity of water, be kept wetted on its outside with a feather, repeatedly dipped in æther; (a fluid which evaporates quicker than any other yet discovered;) the water, as soon as its temperature is reduced to the freezing point, will begin to congeal and form a cake of ice.

That

That cold is an opposite principle to heat, for it is observed to produce effects diametrically opposite to those of heat.

It is not so, but a negative quality; cold being nothing more than an absence, or diminution of sensible heat, just as darkness is of light; for the coldest bodies in nature, as snow or ice, contain a quantity of latent heat sufficient, when evolved in its sensible form, to dissolve iron or the hardest metals.

That death from suffocation, or hanging, is caused by a surcharge of blood upon the brain, causing an apoplexy.

Not at all, for no extravasation of the blood, or serum, in such cases has been found in the cavities of the brain.

And the carotid arteries of a dog have been tied for some weeks, and yet he enjoyed perfect health and vivacity. And a dog has been hung by a cord round his neck for three quarters of an hour, after an opening had been previously made in the wind-pipe

pipe below the cord, so as to admit air freely into the lungs, and he survived it; but upon shifting the cord below this opening, so as to obstruct the air from going into the lungs, and then hanging him up, he died in a few minutes. Neither is death from drowning brought on, as vulgarly imagined, by the introduction of water into the wind-pipe; for it is said to have been proved by experiment, that two ounces of water, a quantity greater than is found in the lungs of drowned animals, may be injected into the wind-pipe without proving fatal. Death in all the above cases is most assuredly caused by an obstruction of the vital air's passing into the lungs. In an old man I once dissected, I found the *foramen ovale* quite open. How long such a subject could have lived under water is a problem of very difficult solution.

That the vulgar opinion that life quits the body in an aerial form, at the instant respiration ceases, appears to be very erroneous; for, on the contrary, the principle of irritability being an innate property of the
living

living solids, maintains its residence in the vital organs a considerable time after motion and sensation have ceased. The principle of sensibility, or nervous influence, like that of electricity, often remains in a dormant state, without betraying the smallest sign of its presence, till it happens to be roused by the proper modes of excitation, as has appeared in numerous instances in the recovery of drowned persons by the Humane Society.

In sudden excessive loss of blood, floodings, &c. occasioning syncope, a glass of generous wine is necessary.

All stimulants are here very dangerous; rest alone seems most preferable, to allow the ends of the vessels to close. In such cases, transfusion of blood, if practicable, would seem indicated.

Many persons in a dysphagia have been given up and starved, for want of a contrivance

trivance to get any nourishment down into their stomachs.

Possibly in such a case an eelskin drawn over a probang, tied below and above its sponge, with a little slit made in it just above the upper ligature, might convey (after introducing it into the stomach) broth, milk, wine, or the like, out of a gum elastic bottle, with much ease, and as often as there should be occasion for it, to the great relief of the patient.

In an apoplexy, where the patient (who some time before had a severe stroke of a palsy) fell down instantly deprived of all sense and motion, and whose teeth were so fast closed, that they could not be opened to administer any kind of medicine whatever; I directed a stimulating solution of half a drachm of white vitriol in an ounce of water, by way of emetic, to be syringed through the nostrils; which, to the surprise of all present, perfectly answered as an emetic, though in an apparently incurable case.

That as soon as a limb is mortified, amputation must immediately be had recourse to, to prevent its spreading.

It is at present the prevailing opinion of the most able surgeons, that the mortification ought to be cured by proper medicines and applications, before amputation be instituted, which would otherwise only hasten the patient's death.

As various kinds of animals are known to be hatched and breed in the stomach, it seems difficult to give credit to those experiments, which prove that the gastric liquor is so strong a menstruum as to dissolve balls of ivory and bone, without dissolving those tender creatures, and moreover the stomach itself, which contains them.

The reason given for this surprising fact is, that these living animals, as long as the vital principle remains in them, are not affected by this solvent; but the moment they lose the living principle, they become subject to
its

its digestive powers; for even the stomach itself is said to be then digested by it.

That there are certain years (viz. every seventh) of a person's life, wherein there is great danger of his death, and two more particularly, called the grand climacteric, wherein the planets are most obnoxious.

All this, though handed down to us from remotest ages, has not the least foundation in truth, but is an astrological reverie.

FIFTY more vulgar errors, detected by my own observation, might, I doubt not, be added, not less ridiculous than those the Reader's patience has been already exhausted with, could I call them to mind; for, notwithstanding the adage, *ubi desinit Philosophus ibi incipit Medicus*, in general, there is not only much less of philosophy, but even of common sense, in use among pretenders to physic in all its branches, than perhaps in any art whatever, the art of farriery always most particularly excepted; as every thing

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there is involved in a chaos of Egyptian darkness: farriers being in general totally ignorant, notwithstanding their numerous publications of the very anatomy of a horse, of the nature and causes of his diseases, and also of the nature and operation of the medicines they use. And so it will continue till the *veterinarian* institution employs ingenious persons thoroughly to study that branch of learning, after cancelling all the unmeaning barbarous terms and jargon in present use, together with their farrago of drugs, so as to have a *rasa tabula*, and to begin the whole, like a child's guide, *de novo*; it being much better to erect a new building all the way from the foundation, than to attempt to patch up a rotten one.

Scarcely had our most eminent surgeons, after numerous unsuccessful trials, given up and discarded the operation of cauterising the abdominal rings of the human body, first suggested by the vain expectation that its eschar would so effectually strengthen the part as to prevent the return of a reduced hernia, when our *jockeys* took up the idea,

pretending that firing and cauterising the ligaments and tendons of the fine legs of a hunter would add to his strength and agility; and that Nature's blunder in the formation of said legs might, by thus crimping up and coalescing their fine sheaths, (wisely contrived for the free, loose, easy play of the fine tendons contained in them,) be considerably mended by the assistance of this fancied artificial stiffening.

Many a dull project may pass muster, as a whim which nobody thinks it worth while to contradict; but when an attempt is made to support it by rational argument and experiment, its absurdity becomes insufferable, as it may possibly induce credulous people to ruin many a good horse. To recommend this operation, *Bartlett* adduces the observation, "that persons used to the laborious
 " employment of filing and rasping, find
 " great benefit, and their arms much
 " strengthened, by binding them up firmly
 " with tight bandages." True, but what possible similarity can be perceived in these two cases? To have convinced us of a
 O 3 similarity,

similarity, he ought to have told us that the bandages were made out of the scorched and burnt fibres of the arms of those filers and rasps, and not from cowhide, or some other such materials.

As I am fond of a good horse, and from my soul abhor the pain and deformity of these cruel and ridiculous scarifications; if *Bartlett* will be but merciful enough to abstain from his most cruel use of his fire-irons, and only borrow the rasps' bandages for them, or laced stockings, or tight boots, if he thinks they will answer the same purpose better, I shall have no quarrel with him,

That nicking a horse, to make him carry his tail well, is of great use.

Besides the unnatural appearance his cocking up his tail like a pug-dog gives him; he, by this ingenuity in mending Nature's error, looses the natural use and design of it, in closing up his fundament, and beating off the flies at grass, as he unceasingly continues to do, to prevent their entering and crawling

crawling up into the rectum, to deposit their ova in it, to be hatched into future botts.

That if a horse should cast his shoe ever so often in a day, a smith must pare his hoof each time; or, which is a more expeditious mode, burn it with the red hot shoe, the better to fit it for nailing on.

Having never thought it worth while to examine the hoof of a dead horse, to see how amazingly thin it is, or considered upon how many horses he had brought that kind of lameness for which no cure can be expected, under a rest for many months, perhaps in a soft marsh, to allow it sufficient time to grow up again.

That it is better that a horse should break his rider's and his own neck, by sliding over a pavement, than that, agreeable to old custom, the frog placed there for no purpose by another of Nature's blunders, should not be pared away.

For the destroying of which, however, no reason has ever been attempted to be given.

That some medicines have been recommended to us as very successful in dissolving calculous concretions, and stones in a horse's gall bladder.

Our obligations to the author of this discovery would have been greater, if he had first inquired of some person, who had in skinning a dead horse seen him opened, whether horses have any gall bladder at all. If Nature has forgot in its hurry in horse-making to make him this bladder, the expence of this medicine may well be saved, though its merits may have been ever so well boasted of.

That manger-biting (cribbing) horses ought to be prevented, by covering the manger with tin, as by this means they would bring on colics, by their sucking in a great quantity of air.

No farrier will ever comprehend that this is nonsense, till he is taught that no air is ever inspired into the stomach, but into the lungs only.

That,

That, in hard riding, it is absolutely necessary that the rider should pull in his horse's jaws with all his might, to force him to keep them open, on purpose thereby to ease his breathing, and so save him from breaking his wind.

This translated into Irish would run thus; the best mode of keeping a horse's windpipe open and clear for ease of breathing in hard running, is to violently squeeze and compress its sides together closely against his jaws; or, in other words, the best way of enlarging the passage of his breath is to contract it, and make it as narrow as possible. This clearly explains the true reason, why horses, that in running pull very hard, are esteemed the best hunters; because, having more sense than their riders, they forcibly and effectually resist, and prevent their being able to pull in their jaws, and by that means enjoy a freedom in breathing, of which their riders have not sufficient strength of arms to deprive them.

That

That those are the best riders, who, by standing on the stirrups, keep continually jumping up and down upon the saddle like magpies.

As if this most violent pounding a horse's kidneys gave the horse no uneasiness, and as if standing thus on the stirrups took away all the weight of the rider.

That it is necessary to avoid wetting the feet of stable horses, and that their hoofs ought to be kept well stuffed with hot resinous ingredients.

Such applications, instead of softening the hoofs, for which they are intended, on the contrary dry and contract them. The best way to keep their hoofs soft, is to ride them twice a day into the water.

That thick, heavy, long, concave shoes are the best; and that the bars ought to be kept down, pared, and kept open.

This is the most hurtful practice that can be thought of; for the frog (even if it has
not

not been pared) is by this means raised so high above the ground, that it becomes absolutely useless, and the heels are thus deprived of that most useful substance the bar, which was most wisely provided by Nature to keep the crust extended to a proper width and distance, to prevent the contraction of the heels, and a consequent lameness from their being thus, as it were, fixed in a mould. Instead of the above kind of shoe, a short flat one, thinned on the inside, is the only proper one.

That a good horse requires a close warm stable.

Our grooms think that there is some analogy between a horse and a cricket, for that each does best in a warm place. And I have wondered that some of our noblemen of the turf, who are implicitly, and, I may say, often blindly led and guided by their jockeys, have not built stables with fire-stoves within them to keep their horses in a pine-apple heat, which would certainly
make

make their coats sleeker and finer. Many instances may shew how, with a good deal of ingenuity, we may be able, in some respects, to act contrary to Nature with a success much beyond what could rationally be expected, as in keeping fish out of water, or the like; carps in Holland having been hung up in cellars with their mouths open, and fed with bread and milk.

By a similar perversion of Nature's design, instead of keeping our horses out all the year in fields, having open hovels only where they may run in for their hay at will, and shelter themselves from sunshine and hail, the weather they dislike the most, we find that they may be made to endure close warm stables, with the inconvenience only of being rendered exceedingly tender and susceptible of colds upon the most trifling occasions. Yet, if we follow Nature, and consider that a horse was clad with hair sufficient to enable him to bear the inclemency of the weather, and that naturally he is an inhabitant of very inhospitable climates, our stables in this country can never be
top

too large and airy, though as open as tennis courts.

That when it enters into the head of a groom that it is necessary to give a horse a purge, because he is taken in from laxative rich succulent grass, or because it is the proper time of the moon, or some such equally wise reason; though nothing certainly can be more absurd than to habituate a healthy horse to purges to lay the foundation of colics which he naturally would not be subject to; the regimen is this: As soon as he has swallowed his dose, he is tied up from meat for twenty-four hours, covered with body-clothes up to the eyes, and kept in a close stable, whose every crevice, key-hole included, must be stopped up from the admission of the least particle of wholesome fresh air, and on the following day, he must be constantly supplied with hot water, and rode out for hours till he is in a lather of sweat, and so sick and faint as hardly to be able to stand. Instead of this absurd management, when it really becomes necessary to purge a horse upon account of
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some real illness; let him after having taken his medicine, if he be a grass horse, be made an out-patient, and turned to grass, where he will directly drink at the brook, eat his grass, and in due time will be purged without the least sickness at all; and if he be a stable horse, let him have his corn, hay, and cold water, as usual, and let him not be plagued with clothing, hot water, or exercise to sweat him, which would entirely counteract the operation of a purge.

That when a horse has made a false step by striking his foot against a stone, and is tripping, he ought to be instantly pulled up tightly, to hold him up, and prevent his falling down upon his nose to the ground.

An Irish taylor has been said, in this case, when he found a horse he had hired to go too much by the head, to have tied a heavy stone to his tail to trim and preserve the proper balance. Perhaps the best way of settling this matter is, to observe how, in such a case, the horse himself, who must be allowed to be as competent a judge as the most honourable or dishonourable connoisseurs

noisseurs at Newmarket, endeavours to save himself from falling ; and we shall find his mode is to stretch out his neck, not to draw it in. Mr. John Wesley assures us, that he has for forty years rode (perhaps more than most men) not less upon an average than eight hundred miles *per* month, upon various horses, and on all sorts of roads, in Great-Britain and Ireland ; and most usually also read some book upon a good trot, and always gave his horse the bridle, and his own free liberty to recover himself without ever checking him in the least, whenever he happened to make a false step ; and he believes that both he and his horses have had fewer falls than travellers in general of a contrary conduct, who have not rode a hundredth part of his journies. I have myself also rode for fifty years occasionally, and always with a slack rein, and can recollect my having had few, or no falls. I own when a horse trips, his rider naturally pulls up his bridle to save himself out of fear, by instinct, as Hudibras is said to have pulled the trigger of his pistol, and not so much to save his horse, which, in my opinion, he

has

has no power to do. The fallacy seems to lie in this, that the rider while he pulls up his horse, as he imagines that he does, never considers himself as a part of or one with his horse, as in this case he most certainly is, and that what he imagines he gains by pulling up his horse's head, he proportionally loses in pressing down his back, from which his stirrups hang, which are his fulcrum ; nor does he seem to consider that it is upon his legs, and not upon his head, he walks when liable to make a false step ; and that by hitting his toes against the ground he falls, from a weakness of the extensor muscles of the legs which at the time give way, for the legs must bend at the knees to let him down on his nose. Were the rider indeed to stand upon two pillars, with the horse detached from and unconnected with him, between his legs, and were he of sufficient strength, and had a proper apparatus with strong girths round his own shoulders, and under the horse's belly ; he might, in that situation, prevent and keep up his horse from falling : otherwise, as well might an ignorant

ignorant, ill-bred, inland clown, when a boat carries him down a stream, expect, while sitting at the stern, to stop it, by pulling a rope fastened to its bow. Both cases seem to me to be perfectly similar; before the boat can, in the least, answer to the clown's pulling, he ought to be first separated from it, and stand on firm ground, like the rider upon the pillars.

The advocates for always riding with a strongly pulled hard rein, in preference to a slack one, say, that a horse will be more sleepy, careless, and liable to stumble in the latter case; the answer to this is, that a spur always ready at his side will sufficiently keep him alert, and in mind of what he is about.

When the great utility and value of that beautiful animal a horse is duly considered, and the numberless disorders brought upon him by his being intrusted to the care and management of the most conceited, and consequently the most ignorant of our servants, who from the most unnatural

and ill-founded notion that his stable and cloathing can never be too close and warm, actually make a hot-bed plant of him, and render him so delicately tender as to become susceptible of colds and fixed rheumatisms upon every little occasion, of a change of stable, a shower of rain, hail, or snow, or the usual practice of being drawn through a cold horse-pond while reeking hot, after a hard day's chace, which, in proportion to the power of the cause, must produce a greater or less degree of stiffness in his joints, and consequent lameness; in attempting to remove which, after he has been tampered with perhaps cramped shoes, and a great number of applications and drugs ignorantly administered, he passes for incurable, and is given over as *foundered in the chest, shook in the shoulders*, or some such equally unintelligible jargon: I say, when all this is duly considered, and for how many disorders more than our farriers can spell the names of, it is possible that a cure upon rational principles might be
ob-

obtained. I have wondered much that it has never occurred to any sensible man to propose and forward so beneficial a scheme as the contriving a commodious equine bath in the city of Bath, from the refuse water turned out of the King's or hot bath. Such a one, properly and conveniently constructed, with every necessary well-contrived apparatus for fumigating, swimming, and pumping upon any part desired of invalid horses, according to what their different cases might require, might be constructed at a very moderate expence, and would, over and above the consideration of its public utility, most assuredly turn out to greater profit to any private person, who should undertake to convert the water, at present running to waste, to so good a purpose, than so small a piece of ground, thus taken up, could, by being applied to any other use, be found to answer.

As mules are as strong as horses, and will work as well, if trained young, are much longer lived, not so liable to disorders, and

maintained cheaper ; they are certainly preferable to them in some respects, particularly if what the Monmouthshire people, who rear great numbers of them, say be true, that a mule 20 years old, and nearly past its labour in England, will sell for exportation to Barbadoes, for as much as a young one, aged ones being much better adapted to bear the heat of that climate than young ones, who soon die there.

The last vulgar error I shall at present take notice of is,

*That gentlemen reviewers, who criticise
any author's work with due severity,
use him very ill.*

Speaking as to myself, I think otherwise ; and that I ought to feel myself under the greatest obligation to them, and endeavour to fraternise with them ; for what else can they do than shew me my errors, and thereby teach me to mend them, in the very same manner as I have here attempted to do by those of others ? Can any thing be more

friendly and useful to me, than proper instruction? after which kind correction, I shall be less ignorant, and consequently less opinionated, and shall be enabled, by adopting their hints, greatly to improve my book in a Second Edition.

THE END.

ERRATA.

Page 10.	line 2.	<i>after medicatrix add a comma</i>
35.	—	7. <i>for a constant necessity read the necessity</i>
40.	—	17. <i>for Glaubers read Glauber's</i>
72.	—	<i>penult. for cranium read cranium</i>
112.	—	11. <i>after This add is</i>
117.	—	7. <i>after breaks add a comma</i>
137.	—	15. <i>after the first recipitur add a comma</i>
159.	—	6. <i>for as to the read as the</i>
161.	—	6. <i>after or add by</i>
ibid.	—	8. <i>after virtues add a comma</i>
175.	—	4. <i>after as well as add on</i>
186.	—	13. <i>for confisted read persisted</i>