

A treatise on madness and suicide : with the modes of determining with precision mental affections, in a legal point of view, and containing objections to vomiting, opium, and other mal-practices, &c.; &c.; / by William Rowley.

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A
TREATISE

ON
Madness and Suicide,

WITH THE MODES OF DETERMINING WITH PRECISION

MENTAL AFFECTIONS,

IN A
LEGAL POINT OF VIEW;

AND
CONTAINING OBJECTIONS

TO
*Vomiting, Opium, and other Mal-Practices,
&c. &c.*

By WILLIAM ROWLEY, M. D.

Member of the University of Oxford, the Royal College of Physicians in London, Physician to the St. Mary-le-bone Infirmary; and Public Lecturer on the Theory and Practice of Medicine, excluding False Systems, &c. &c.

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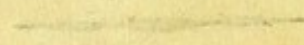
1804.



A
TREATISE
ON
STABILITIES AND COLLISIONS
WITH THE MODES OF DETERMINING WITH PRECISION
METEORAL AFFECTATIONS
IN A
LEGAL POINT OF VIEW
AND
CONTAINING QUERIES
TO
Fighting Opinions; and other Miscellaneous
Essays

BY WILLIAM ROWLEY, M.D.

Member of the University of Oxford, the Royal College of Physicians in
London, Physician to the St. Mary's Hospital, and Public
Lecturer in the History and Theory of Medicine, residing at
St. James's Place.



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CONSPECTUS

TO

VOL. II.

ON INSANITY, p. I.

MELANCHOLY or mania, general symptoms of each
species of madness, — — — 2

General notions about the causes of madness, as black
melancholic blood in the brain, spleen, &c. General
modes of treating madness, but not scientifically
considered, nor very judiciously treated. Practice in some
instances contradictory. *Vomiting* and *diluting* bad prac-
tices—why.

Many dissections of persons after death, who, when living,
were mad, shew various injuries in the brain and its mem-
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Varicous veins, polypi, congestions, water in the ventricles
of the brain, varices of the plexus choroides, pineal gland
vitiated, worms, or rather polypi, in the sinuses of the
os frontis, — — — 6

Polypose concretions in the sinuses of the dura mater, vari-
ous diseased viscera, uterus, ovaria, &c. more the effects
than causes of madness.

What I have observed in dissections of mad persons.
Inferences from these appearances, — — — 9

Passions of the mind force a great quantity of blood to
the brain, which, if often repeated or long continued,
cause dilatations of vessels, and relaxation of vascular
coats in the brain. Inability of veins destitute of valves
to reconvey the blood with a rapidity equal to any great
distention. Sinuses, their uses; but they likewise have
been over-distended.

Increased velocity of blood in the arteries, and its tardy circulation through the veins, occasion irritation in the pia mater, similar to the effects produced in the *tunica conjunctiva* of an inflamed eye.

The blood may thus become vitiated in the brain, occasion constant irritation from acrimony, as in other local diseases of membranes, and in the brain cause confused ideas,

11

Illustrated by the continuance of the *ophthalmia habitua-
lis*, ulcers, &c. Over-distention of fibres may destroy elasticity. The different species of madness accounted for from the different constitutions and state of body of different patients. Persons of quick conception and violent tempers, with floridity of face, prone to furor or mania; debilitated melancholic habits, to melancholy. When mixed, a mixture of both symptoms causing complicated madness. All human beings think differently, and act differently; the same may be observed in madness,

12

Every one mad after his own particular mode. Pain or irritations of other parts conveyed to the brain; but in madness the brain perceives not its own indisposition. Difference between *phrenitis acuta* and madness. Madness generally arising from a flow and continued determination of blood to the brain, by meditating or moving the passions to one subject.

The immediate connection of the soul with the body, or how they reciprocally act on each other, beyond the limits of human comprehension; but it is known that the nerves are the conductors of all our sensations from every part of the body. Nervous system acts, and is acted on by the mind. Irritations of the brain productive of convulsions, compressions, stupor, insensibility, and death. Human knowledge does not comprehend what the soul is, nor how it operates on the body by means of

the

the brain and nerves, nor how the body acts on the soul; yet an industrious anatomical inquiry after death manifests the real causes or effects of madness and other diseases with greater certainty, than by any other means.

Many appearances from dissections after death in which delirium or acute madness was a principal symptom, 15

The soul's power in extending mental or bodily powers by the will, not without commanding a greater quantity of blood to the brain. These exertions render even the delicate surprisingly strong and powerful.

Stronger and sublimer ideas in the mind, or an increase of *bodily strength*, effects of the soul's exertion, — 19

Poetical sublimity, clear conception, penetration, judgment, a refined imagination, all the effects of mental, as the exercises of the *palestra* are of bodily exertions. Over-exertions of either the mind or body injurious, if long continued. Mankind differ in their different attractions for horses, dogs, painting, the chase, &c.

Whatever is the particular propensity or pursuit denominated *mental attraction*. *Mental attractions* not always the effect of deliberate reason, but often of chance, caprice, example, &c. *Mental attractions* to improvements in sciences and activity recommended, and opposed to inactivity or apathy of soul. Active principles of the mind and passions productive of all that is laudable. — 20

Corporeal attractions exist in all nature as well as *mental attractions*. Proofs that the fat, lean, florid, pallid, all electively attract particles different from one another, — 22

The differences in *mental* and *corporeal elective attractions*, produce all the diversity, both *mental* and *corporeal*, amongst human beings. Misery not to be always ascertained

tained by the magnitude of the supposed evil, but by the sensibility of the party afflicted. Sympathy in woe to be compassionately proportioned more to the *feelings* of the sufferer than to the *cause* of sufferings, —

25

The evident existence of *mental* and *corporeal attractions* within the comprehension of every observer; they are productive of identity, and distinguish one man from another. The necessity of medicine taking these *attractions* into consideration, and their utility in curing diseases by different modes, applied to different subjects, though not hitherto sufficiently attended to.

Diet, soil, air, pursuits, and example, produce different attractions. The Dutch and French as dissimilar as the snail and grasshopper. Causes are *attraction* of some particles in nutrition, and *repulsion* of others, &c. air, customs, &c. —

26

The origin of these *attractions*, perhaps, in the animalcula, while in the uterus or its appendages, &c.

The *reception*, *attraction*, and *retention*, of certain particles give form of body. *Mental attractions* often dependant on the *corporeal attractions*. What constitutes just reason, and what insanity or madness. *Mental attractions* to pride, arrogance, insolence, duplicity, falsehood, envy, and malevolence, *sublimest* refinements of little, dissingenuous minds, how productive of madness.

Mental attractions to integrity, truth, strict justice and sincerity, the strongest marks of superlative wisdom, they give philosophical calmness either in prosperity or adversity.

Artifice opposed to artifice, hypocrisy to hypocrisy &c., in refined, polite ages; the books promulgating these doctrines reprehensible: they teach the vicious knavery, and render the upright suspected. England, ac-

cording

ording to its size, contains more mad persons than any other country,

29

The extended use of civil and religious liberty, in some measure, the cause. Infidelity in a wife or mistress rarely makes a Frenchman cut his throat; but has caused suicide amongst the English, &c. *Remote causes* of madness are anger, pride, and insolence mortified, malice and envy ungratified, merit crushed by the unworthy, love, fear, hope, disappointment, anxiety, grief, despondency, &c.; these produce *idiopathic madness*.

30

Suppressed evacuations and other accidents symptomatic.

Immediate causes, dissections shew to be accumulations or coagulations in the brain, of blood, serum, &c.; how these produce madness to be considered, though very difficult; for which reason a candid indulgence from the real learned is requested. The speculations and reasonings not delivered as indisputable truths, but as very probable conjectures,

31

The brain has not been proved the secreter of any fluid transmitted through the nerves under the appellations of nervous fluid, nervous juice, or animal spirits, &c.

No fluids could pass and repass with such rapidity as thought; action must be *direct* and *retrograde* at the same moment, which is improbable. *Minute arteries* pass through the tela cellulosa and pia mater of all nerves. Where *minute pellucid arteries* pass, veins are supposed, though these last cannot be demonstrated so clearly, owing to a coagulation of the contained fluids. The last *action* in *death* is to empty the arteries of blood, and *force it* into the *veins*,

32

Experiments to prove the nervous fluid existing erroneous. Impeding the course of the blood the *evident*

and

and *real* cause of the effects produced by ligatures, &c. Heat resident in arterial blood, and preserved by arterial action. The deprivation of arterial action the deprivation of human or animal heat. Life and death, how ascertained by the presence or absence of arterial action and heat. Arterial action and heat cease to be perceptible, if the arterial blood and action be intercepted by a ligature on a nerve: all the parts below the ligature, dependant on the nerve, become torpid, cold, and insensible; nor can they convey to the brain any sensations from *stimuli*. The interruption, therefore, of arterial blood one great cause of insensibility, independent of the compression of the medulla, &c., of the nerves.

No *nervous fluid* has ever been proved to exist—a mere creature of the fancy. Animal heat and arterial action may hereafter be proved to be attracted from atmospheric air,

36

The *regular* or *irregular* distribution of what physiologists and physicians have called *animal spirits*, *liquidum nervosum*, *nervous juice*, or *fluid*, with all their wonderful effects, as related by medical authors, *want proofs*, instead of mere assertions, to support the doctrines. The *appellations*, then, of *nervous fluids*, &c., so common in all medical treatises, are here excluded as *non-entities*, and the words *nervous powers*, *nervous influence*, or *nervous principle*, substituted. This, perhaps, useful to the fabricators of curious hypotheses on matter, spirit, and metaphysical subjects.

Electric fire passes in rapidity equal to the mind; but it is much doubted whether the electric fluid would be impeded in passing through a nerve by a *non-electric* ligature: experiments prove the contrary. The *nervous fluid* secreted by the brain acting as a *gland*; but perhaps particles of light attracted from the atmospheric air

by

by the lungs in respiration, &c., and conveyed by the arterial system to the brain, &c. *Vital heat* resides in the arteries and arterial blood. Mr. J. Hunter's idea of blood being alive not irrational, &c. Attractions considered,

37

To know that all voluntary and involuntary sensations and actions are conveyed by the nerves to and from the brain, is perhaps sufficient for medicine. Deprivations of the nerves and brain produce deprivation of sense. Contractions of muscles from the *vis insita*, no proof of sensations being impressed on the mind after death. As no *human being* has yet undergone the trial of ligatures round the nerves leading to the heart during life, no just conclusions can be drawn of what are the sensations from such an experiment, as dogs have been the subjects, who shew tokens of great misery, and die in a day or two. The heart certainly circulates the blood, but not to answer the purposes of life. Irritations of nerves produce convulsive action; but depression of the brain, or compression of nerves, insensibility, &c. The soul's action does not extend beyond the ligature round a large nerve in voluntary motion,

38

Putrid changes produced in the blood irritate the brain, and occasion delirium; an increased quantity of blood, stupor or insensibility. The regular powers of the soul resisted by accumulated or changed blood in the brain. All diseases whatever are changes of the blood acting on the solids and nervous powers, and these latter on the fluids.

Four conditions necessary to the causes of any disease present. 1. Change of the blood, &c.; 2. Irritation of the solids, &c.; 3. Increased or diminished action; 4. Perceptibility of an universal or partial disease in the mind. Without impressions of the mind, no disease would be felt or described by the patient, nor compre-

hended

hended by the physician. The soul not separable from the body in a medical view, —————

39

If Stahl and his followers attributed too much to the soul's feelings, which they could not prove; yet the mechanical and other physicians have equally erred in denying the soul any power or knowledge of the diseases of the body. Experiments made to determine the soul's connection with the body. The mind or soul not definable but by observations on the ostensible effects, operations, &c., in the body, —————

40

The future man an inert mass in the ovulum before masculine impregnation, &c. Impregnation shews the *punctum saliens*, how the embryo grows in the womb. While the foetus is in the uterus there is no reason to suppose it possesses any qualities of the soul that appear afterwards. On the foetus being excluded at the ninth month from the uterus, some operations of the soul immediately appear after breathing and receiving the atmospheric air. The circulation of the blood changed, —————

41

The air seems to contain the *pabulum vitæ* of rational life. In the infantile first months, very imperfect sketches of the soul's powers appear; afterward it gradually receives various impressions by no evident intuitive knowledge; but by the senses, it imitates sounds, &c. &c. —————

42

Infantile impressions operate through life for those who do not reflect or think for themselves.

The soul, united with the body, collects ideas. The extent of human knowledge, in *different* men, exceedingly *different*.

The operations of the soul begin and end with respiration. The soul as fugitive as air; how it receives, retains, and increases in knowledge. The soul only *retains* what it is *taught* or *invents*, and reflects, reasons, and judges

only

only in proportion to the *number* and diversity of ideas it has received or collected. Where there be *few* ideas, reflection, reasoning, and judgment proportionably confined: where they are *extensive*, the soul views men and things extensively. The inferiority or superiority of human understanding, generally depend on the paucity or multiplicity of ideas and just reasoning possessed by the mind,

44

The soul has powers to *impel* a greater quantity of blood to the head for either mental or bodily exertion: it can diminish or augment the heart's action by sorrow or joy. Effects of music, &c. The soul can direct blood to the organs of generation, &c.

45

Violent anger has ruptured the blood vessels of the brain. The soul an invisible agent or power acting in various modes on that animal matter called brain. The soul acquires strength and knowledge by the organs of sense, but not without human growth and human industry,

46

The brain being the soul's principal receptacle, conveys, in health, the soul's intentions to the body by means of the distribution of the nerves, &c. No perceptible nervous fluid admitted. The soul's influence pervades by its subtilty all parts, the conductor and governor of all its various feelings and actions, &c. All causes equal to their effects. The brain being sound, the soul's powers not impeded; but the brain being diseased, the free exercises of the soul are interrupted variously, which dissections demonstrate. A sound understanding, by diseased brain, converted into madness, folly, &c.

46

The soul's action annulled, or its free influence obstructed, from affections of the medullary or cortical substance and mem-

branes of the brain ; from hence false conceptions, reasoning, and judgment.

In the nervous parts, remote from the brain, irritability excited by *vitiated*, changed, and acrid blood, acting as *stimuli*, and arterial action is increased. Insensibility or numbness produced by ligatures, pervert the regular influence or perception of the mind. What that invifible influence the foul is, must be beyond demonstration or human comprehension. It is resident in the brain or nervous system ; and as these parts pervade all the body, the foul influences and perceives the molestation of every sensible part, — 48

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his

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A
TREATISE
ON
MADNESS, SUICIDE,
&c. &c.

INSANITY.

MADNESS, or insanity, is an alienation of the mind, *without* fever.

It is distinguished into two species; melancholy, or mania; furor, or raving madness.

The former is known by fullness, taciturnity, meditation, dreadful apprehensions, and despair.

The latter is attended with a violent and inordinate desire often to do mischief; fury, vociferation, impetuosity of temper, an indomitable turbulence and vehemence; an angry

and wild staring look in the eyes, actions rashly attempted, and as suddenly relinquished; obstinacy, perverseness, immodesty, are amongst its characteristic signs.

These are the two general species of insanity; but they are often complicated; and in madness, as in the natural tempers of human beings, there is an infinite diversity.

Various are the opinions on the causes of madness; but *pathemata animi* certainly are the principal, as love, pride, grief, &c. Hoffman thinks it to be a debility of the brain; others suppose it to arise from black blood, diseased liver and spleen, acid humors in the stomach, suppressions of accustomed evacuations, &c. &c.

Venal bleedings, arteriotomia, vomiting, purging, immersion in cold water, hot baths, diuretics, setons, blisters, the soliciting accustomed evacuations, *diluters*, camphor, nitre, mineral waters, light diet, air and exercise, stripes, soothing words or flattery, and attention to the minds of patients, are the principal remedies prescribed by all authors in madness.

From a contemplation of the plans of cure adopted for madness, it seems, that the disorder has neither been scientifically considered, nor judiciously treated. The general use of evacuants by purging is rational, but *vomiting* and *diluting* are certainly very absurd. The vessels of the head, by dissection, are found over-distended, and vomiting sends up a greater quantity of blood, accumulating evil on evil. Where the vessels are already turgid with blood, the admission of great quantities of *diluting* liquors must add fuel to fire, and increase the fullness; not to mention its incongruity with evacuants. If *evacuating* the vessels be a proper curative intention, *filling* them again must be a contradictory practice, and re-productive of the disease.

not

The few opportunities practitioners in general have to examine, deeply, the nature of madness, except those who turn it greatly to their emolument, may be the cause of these disorders being little understood. I have attended some few instances, and have opened the bodies of some mad persons after death, and finding my dissections correspond nearly

with others, from these sources of intelligence will some new opinions be advanced on the subject; that those who have the power of attending the insane, may, if they approve, apply the methods.

As to dependance on medicine, I have seen enough of the mad to know, that many cannot be prevailed on, without violence, namely, what is called spouting, to swallow any; therefore, the manner of treatment here proposed will be derived from anatomical information, and greatly consist in a strict attention to diet, as well as medicine.

Dissections of mad Persons.

The dissections of mad persons after death shew various indispositions of the brain and its membranes*.

The

* Appearances from dissections after death.

MELANCHOLIA.

Symptomata morborum.

Extispicia cadaverum,

Melancholia cum capitis dolore quem sequuntur convulsiones.

Pus in cerebro.

----- fiti molestissima
stipatur, subito moritur.

Ventriculi cordis infarcti
pituita.

Melan-

The veins of the dura and pia mater, cerebrum and cerebellum, are greatly *distended* with *dark-colored blood*.

hot

Symptomata morborum.

Melancholia cum insania.

————— tabe confecti.

————— in febre cum dolore dorsi, cui succedunt fluxus hæmorrhoidales & corporis tumescencia.

————— asthma & tabes dein,

————— cum furore, dein amentia.

————— melancholicus gladio se confodit, fanatur; sed dein subito vomitu enecatur.

————— semet ipse suspendit clavo fenestræ.

————— post usum fructuum horariorum moritur.

————— cum summo calore.

Extispicia cada-verum.

Venæ capitis varicosæ.

Viscera abdominis scirrhusa.

Pancreas & pulmones purulenti, cerebrum turgens colluvie serosa.

Hepar scirrhosum; pectus aqua scatet; pericardium cordi adnatum.

Cerebrum exsuccum & flavum.

Cor marcidum, aqua citrina in pericardio.

Lien putridus.

Pancreas calculosum.

Sanguine nigro turgent venæ encephali, aqua stagnat in ventriculis cerebri.

MANIA.

Symptomata morborum.

Mania, a lochiis suppressis post septennium oborta, hæmorrhagia uteri sedatur, qua tamen nimis perdurante, moritur ægra.

Sectiones cada-verum.

Uterus passim scirrhosus & passim cartilagineus.

Mania

The meninges have been found ossified.

Congestions called *polypi* and pus, have been discovered in the brain; but this, perhaps, is the effect more than the cause.

The

Symptomata morborum.

Mania succedit cephalalgia
& animi perturbationibus, post
se trahit syncopem lethalem.

———— post studia intensa.

Sectiones cadaverum.

Hepar exiguum, vasa encephali sanguine turgentia, meninges ossæ, plexus choroides hydatidosus, & aqua in ventriculis cerebri.

Cerebrum ingens, compactum; vasa ejus sanguine turgida.

In aliis subjectis fuerunt inventæ meninges ossificatæ, & aqua in ventriculis cerebri; plexus choroides scirrhus; cerebra perdura; cranii ossa solito multo majora; vermes in naribus.

Pauca depromuntur ex observationibus anatomicis:

Vasa cerebri sanguine crassiori, subatro turgida, colluvies ibidem serosa, plexus choroides muco obductus, glandula pinealis vitiosa.

Cor polypis refertum—abdominis vitia varia. Ovarium steatomatopilosum repertum—*Miscell. Beroll.* iii. p. 16.

Mania. The seat of this disease about the vena portarum. *Simson.*

Meninx dura sicca. *Fantoni & Baglivi.*

Lapilli inventi in glandula pineali. A plica resecta tumidum cerebrum, membranæ putridæ. *Haller.*

Polypus in cerebro. *Idem.*

Anatomia maniacæ mulieris; 1. in the intestines were found a great many tæniæ and some lumbrici; 2. the mesenteric glands obstructed

The veins of the brain are varicous.

The ventricles of the brain are sometimes full of serum or lymph.

Scirrhoties and hydatides, or rather varices of the plexus choroides, are frequent.

The pineal gland vitiated and scirrhou.

The brain turgid with a serous colluvies.

Worms, or rather polypi, in the nose, and sinuses of the os frontis.

Polypose concretions in the sinuses of the dura mater.

Various diseases of the viscera, which, excepting the ovaria and uterus, appear more the effect than the cause of madness.

In

obstructed and indurated; 3. the aliments in the intestinal duct every where of a white color, the chyle not having been yet separated; 4. the intestines very much distended with wind, in some places inflamed; 5. the brain inflamed also; 6. in the anterior ventricles extravasated serum; 7. a large polypus in the sinus falciformis, also in the left lateral, in the right a small one; 8. the whole substance of the lungs full of pus, and scirrhou; 9. œdematous legs. *Harmer.*

From some disorder of the brain, from hot and acrimonious blood, juices, vapors, but chiefly from yellow or black bile. *Galenus.*

Maniæ causæ. Ab amore, a belladonna, datura, a graviditate hemicrania, a herpete represso, hystericalgia lactea, sine materia, melancholia, suppressione metastatice, a pathemate periodica, a plica resecta, scabie repressa, semine retento, terrore & veneno. *Sauvages.*

In what few dissections I have been able to obtain, were the subsequent appearances.

A turgency of the veins of the dura and pia mater ; but of this latter in particular, through all its various directions in the cortical and medullary substance of the cerebrum and cerebellum.

A dilatation of the vessels in the plexus choroides.

Serum in the ventricles of the brain.

By injecting the internal, external carotids, and arteria cervicalis, no dilatation of the coats, congestions of blood, nor indeed was any blood whatever found in the arteries ; but the dilatation and turgency were either in the capillaries, or venal system.

The same circumstance has been observed in the habitual inflammation of the eyes.

Inferences drawn from the antecedent appearances in mad persons.

Passions, or meditation, certainly force a greater quantity of blood to the brain than is usual.

This increased quantity of blood, when moderate, or when accidental or temporary,

is prevented doing any great injury, by means of the sinuses of the dura mater.

When the passions are often repeated, or the mind constantly meditates with great energy, attention, force, or violence on any one object, the veins are constantly in a state of distension, by which means their coats become weakened, and the dilatation, or enlargement of their diameters gradually increase, from the quantity of the blood forced by the arteries into the veins.

The inability of the veins, destitute of valves, to re-convey the blood to the jugulars, &c. with a rapidity equal to its celerity and augmentation, preserves the distension.

In proportion as the veins dilate to receive the increased quantity of blood, their coats become weaker and weaker, of course less able to make resistance to the augmented quantity of fluid, and less endued with power to force the blood on to the sinuses of the dura mater, or to the larger returning veins. This increased and constant dilatation of the veins may increase the size of the veins considerably in every part of the cerebrum and cerebellum, through all their foldings, and
in

in short in every part containing the pia mater, which is proved by injections to be almost universal in the brain, and all its appendages.

The sinuses of the dura mater themselves may be over-distended.

The increased velocity of blood in the arteries, and its tardy circulation through the veins, may occasion irritation in the *pia mater*, the same as the *ophthalmia* causes, in the *tunica conjunctiva* of the eye.

This increased force, or quantity of blood passing through the arteries, may change the blood, and produce vitiated acrimonious fluids in the brain itself. Local contaminations of the fluids are not uncommon in other parts, by which the whole body may become tainted, although the morbid effects shall chiefly predominate in the particular part first diseased.

The constant generation of these acrid, vitiated, and irritating fluids, probably produces those effects called *amentia*, *furor*, *mania*, *insania*, *melancholia*, &c. creating confusion and absurd ideas in the mind, or rather the mind cannot act with precision on a disordered brain.

After

After parts have been long accustomed to act with increased energy, and the vessels to suffer reiterated distension, they may continue in a state of disease *, as is demonstrated in the *habitual ophthalmia*, ulcers, and other diseases arising from vitiated fluids acting on the solids, and irritated solids and vessels increasing their forces, and acting on the fluids.

An over-distended bladder loses its elasticity and contractility, and becomes paralytic; incapable of forcing out the urine, or overcoming the resistance of the *sphincter vesicæ*.

The differences observed in maniacs, as approaching more or less to furor, melancholy, or despondency, may be rationally explained from the natural disposition of each individual mind; the habit of body, the healthful or vitiated powers of digestion, chylification, sanguification, and nutrition; the secretions and excretions.

In debilitated habits, where solids are lax, and the blood ferous, the face pallid, with
natural

* Whoever desires to have more explained on the possibility of local diseases, as ulcers, &c. contaminating the whole body, may consult my treatise on ulcerated legs, and their cure without rest, and on scorbutic complaints.

natural slowness of conception or expression, melancholy of different gradations takes its seat.

In strong habits, or where the conceptions are quick, the passions violent, and the expression impetuous, and where fluids and solids approach nearest a healthful state, furor or mania are most likely to prevail.

When constitutions partake of a mixture of health and sickness, of violence and insensibility, of rashness and timidity alternately, the madness may be complicated,

As all human beings think differently, and as the variety in nature is infinite with regard to constitutions, passions, and propensities, so is madness; every one being mad in his own particular mode,

Pain or irritations from acrimony or distension of vessels in other parts, are conveyed to the brain, and conceived by the mind; but a changed or vitiated state of the fluids, and a continued distension of the veins, in the brain itself, seem to destroy the mind's powers.

The images of the mind create confused ideas, impressions, or false perceptions.

In

In madness, the brain perceives not its own indisposition, or irritation.

The phrenitis is temporary or accidental, and seems an universal inflammation of the membranes and the brain itself; attacks suddenly and with vehemence, and terminates in a few days; but madness is commonly caused by a gradual, flow, and continued determination of blood to the brain from *pathemata animi*, or meditation on one subject, until the fluids of the brain become, and continue, vitiated.

The immediate connection of the mind with the body, how they reciprocally act on each other, how the sensations are distinctly conveyed, or what are the means by which they are communicated through the nerves to the brain, are objects, however desirable to know, beyond the limits of human comprehension. It is, however, indisputably proved, that the nerves are the organs which receive and convey all our sensations.

It is the nervous system which acts, and is acted on by the mind, in all voluntary muscular action. Destroy the nerve going to any part, and the power of motion and sense
in

in the part wholly ceases, or is but very imperfectly performed by means of other anastomosing nerves.

Irritations on the brain produce convulsions.

Compressions on the brain, from over-distended vessels, fractures, or depressions of the scull, concussions from falls, or any violent shocks, and extravasated blood on the brain, produce delirium, convulsions, stupor, comatose symptoms, loss of sense and voluntary motion, insensibility, and death.

In depressions and fractures of the scull, all those fatal symptoms are frequently cured by the operation of the trepan, and removal of compression, extravasated blood, or matter from the brain.

Though human knowledge has not yet discovered, nor perhaps never may discover, what the *soul* is, how it operates on the body by means of the nerves, or how the nerves operate on the *soul*, and convey our will, or sensations ; yet an industrious application to dissections after death, shews frequently the
im-

immediate causes of various symptoms, and even death itself. *

In

* Although dissections in delirium from fevers are not immediately connected with madness, yet, from the similarity of symptoms, the fever excepted, I have been induced to add the following appearances found on opening the dead bodies. These dissections shew various affections of the brain and other parts, and the symptoms they produced during life.

DELIRIA.

Symptoma.

Delirium soporem accersit lethalem.

—— cum convulsionibus febrem vulnere frontis succedaneam sequitur.

—— cum epilepsia.

—— excipit capitis dolorem cum febre continua.

—— cum spirandi difficultate variolosum cruciat.

—— buboni se adjungit.

—— in febre ardenti & convulsionibus.

—— cephalalgiam committatur.

—— furiosus excandescit in febre chronica.

Extispicia cadaverum.

Cerebrum durum, concretiones in ventriculo.

Abscessus in dura matre.

Meninges putridæ; aqua in ventriculis cerebri.

Ventriculus tertius cerebri lymphæ turgens.

Pustulæ in bronchiis.

Cor sanguine infarctum.

Pulmones & hepar putridi, cerebrum illæsum.

Tumor cysticus in cerebro.

Hepar durum & ingens: cerebrum colluvie purulenta inquinatum.

Delirium

In powerful exertions of the mind to produce great bodily strength, large inspirations are

Symptomata.

Delirium cum febre vehementi & dolore circa costas nothas.

—— in febre tertiana duplici & tumoribus brachii dextri.

—— in febre maligna epidemica.

—— cum tremore prehendit capitis dolorem.

—— puer delirians, floccos colligit, lingua exusta, faeces nigræ.

—— cum convulsionibus in febre petechiali.

—— cum alvi fluxu.

—— excipit colicam.

—— post se convulsiones trahens, accedit melancholicum vomitionibus & capitis dolori obnoxium.

Delirium succedaneum capitis dolori, cum convulsionibus, sævit.

Extispicia cadaverum.

Diaphragma inflammatum.

Ventriculus inflammatus, vesica fellis aëre turgida.

Aqua in abdomine & encephalo, hydatides in cerebro & hepate.

Pulmones scirrhusi, valvulæ aortæ induratæ, aqua sanguinea in cranio & spina dorsi.

Cystis lymphæ turgens in cerebro.

Pulmones scirrhusi, pleuræ adnati, omentum & intestina putrida, lien ingens.

Intestina putrida.

Intestinum cæcum putridum.

Omentum exesum, intestinum colon inflammatum.

Abscessus cerebri.

Delirium

are made, the increased air is retained as long as possible in the lungs, the face reddens, and

Symptomata.

Delirium succedaneum in febre ardente.

———— alvi fluxui.

———— item.

———— lipothymia.

———— ischuria.

———— animi perturbationibus.

———— post capitis contusionem & tetanos sibi accersit.

———— post cerevisiae haustum viget: remediis fugatur, sed dein recrudescens convulsiones lethales accersit.

———— post insolationem oriens, convulsiones.

———— post casum ab alto cum dolore in vultu.

———— propinato arsenico.

———— cum somnolentia, & ictero, obscuro hepatis dolore post contusionem capitis.

Extispicia cadaverum.

Gelatina circa vasa cerebri.

Abdominis inculcata viscera, hydatides in meningibus & aqua in ventriculis cerebri.

Intestina putrida.

Aqua in capite & spina dorsa.

Ren dexter & ureter calculosi.

Hepar inflammatum.

Aqua in ventriculis & juxta basin cerebri: meningum purulentia.

Meninges ossae.

Cerebrum inflammatum.

Sanguis stagnans in cranio; cerebri involucra inflammata.

Ductus alimentaris exesus.

Dura meninx & hepar putrida.

and by the command of the will the bodily powers and strength, for a short space of time, exceed greatly the natural; so that people run swifter, support and carry greater weights, fight with undaunted violence, and strike with an incredible force, and effect surprising things, by summoning a vigorous resolution and mental determination.

The strength to be acquired by the command of the will is astonishing, yet it cannot be accomplished but by a greater determination of blood to the head, and its retention there some short space of time; so as to give the increased nervous energy to all the acting muscles.

Persons of delicate weak habits, in madness or convulsions, acquire such an additional force and *strength*, as to require two or three strong persons to prevent their doing themselves or attendants mischief.

Hence it must appear rational, that the increased force in convulsions, delirium, madness, or any extreme violent actions, in a great measure, depend on a greater quantity of blood flowing to the brain, or particular nerves.

By

By the command of the will, by passions of the mind, by close meditation, a greater quantity of blood can be sent to the brain than ordinarily flows there, without such intentional influence. Two effects can be produced by this increased quantity of blood in the brain, according to the pleasure of the will, either *stronger sublimer ideas* in the mind, or an *increase of bodily strength* in all the muscles destined to voluntary motion.

According to inclination, human beings, by exertions directed differently, may increase the bodily or mental powers to a surprising degree.

Poetical sublimity, superior reasoning faculties, clear conception, penetration, judgment, a refined imagination and expression, are all the effects of mental, as the exercises of the *palestræ* are of bodily exertion.

An over-exertion of both body and mind continued, will injure the most robust constitutions; lassitude is the consequence of either; but, conjointly exercised, great debility and palsies have originated.

A strong attraction to any particular art, science, or pleasure, an ambitious and con-

stant desire to excel the gross of mankind in whatever is the particular object of attainment, are sometimes attended with symptoms little short of madness, but is denominated ardor, zeal; or if religious, devotion, enthusiasm.

An over-affection for horses, dogs, music, painting, the chase, flowers, the gratification of amorous passions, or, as the French express it, *il est fou de telle ou telle autre chose, il aime à la folie les jeux ou les chevaux, &c.*; or the violent and unremitting pursuit to acquire greater knowledge than others in any art or science, have all produced madness.

Whatever may be the pleasure or object in view, there is in the mind a proneness or propensity, either through choice, necessity, or hopes, according to the various tastes of the parties, for its acquirement, which may aptly be called *mental attraction*.

This *mental attraction*, not always the effect of deliberative reason, but often of chance, example, caprice, or whim, produces all the diversity of tastes, desires, and pursuits discernible amongst society.

While

While the words and actions of mankind, in the different attachments, or *mental attractions*, correspond with the objects of pursuit without wild ravings, loss of sense, or mischief to society, they should not be censured as madness; for every being has a natural and just right to be *suo modo* happy.

These *mental attractions*, when directed to the improvements of arts or sciences, or to render mankind wiser and happier, although they may give a singular cast of character to the possessor, yet merit the utmost respect. A philosophical apathy, or that indolent, torpid state of mind some ancients sought for in vain, could it have been attainable, would have produced an injurious inactivity. The passions, or active principles in the human breast, have invented all that is laudable and excellent; if they have injured in some instances, in others, society have been equally benefited.

The inordinate attention of the mind to objects above human comprehension, or attainment, may appear, in some measure, ridiculous, though it frequently produces some new discovery; but disappointed love, grief,

or

or any affections of the mind arising from human calamities, imaginary or real, merit the utmost humanity and compassion.

There are *corporeal attractions*, that give each individual, in a certain degree, his own particular constitution and apparent character.

Corporeal attractions, are the assimilations and adhesions of constituent particles from nutrition, and their conversion into certain states of the blood and body peculiar to each individual, the effect of which is likewise called *idiosyncrasia*.

The fat and corpulent attract and retain, from their daily food, abundance of oily particles.

The thin or slender attract less oil, but more earth and gluten.

The pale attract ferous particles of blood in nutrition.

The florid, what composes red particles.

The fallow-coloured, a considerable portion of coagulable lymph, &c.

These corporeal attractions give the different appearances amongst human beings,

as to fatness, leanness, pallidness, and floridness, &c.

The *mental attractions* and character are much dependant on form of body and state of blood.

A gross habit of body produces indolence; slenderness, activity and alertness; pallidness, debility and slowness; floridity, warmth of constitution and quickness of temper*. The rudiments, or *prima stamina* of this natural variety, are formed perhaps in the embryo, *ab origine*, while in the uterus, or in the vesicles containing the *animalculum* in the ovarium.

All the differences in one and the same disease, amongst different patients, arise from this variety of *corporeal* and *mental attractions*. Appearances and symptoms in diseases may be nearly the same, but the sensations are different: a scratch on the finger of a delicate nervous person, appears as great a calamity, as a large wound to the robust and more torpid. Sympathy in woe, therefore, or human feelings for the distressed

* These subjects are pursued and considered more minutely, with their causes and effects, in my treatise on diet, &c.

distresses of others, should not be proportioned merely to the magnitude of the evil, but to the acuteness of the miserable sensations perceived in the afflicted breast*.

The evident existence of *mental* and *corporeal attractions* comes within the knowledge of every reflecting observer, and is subject to ocular demonstration. The component parts of different human bodies may be analyzed, and it may be easily discovered, whether oil, gluten, earth, &c. most predominate, with their relative proportions.

From the difference of the natural or acquired *mental attractions*, or cogitations,
and

* General modes of practice prescribe a variety of remedies in various diseases; but the selection of what is most beneficial, at what times, and under what circumstances, must always be left to the skill of the prescriber. All mankind differ; in a certain degree, all require some different treatment.

These observations on *corporeal* and *mental attractions*, and diversities of opinions on one and the same subject, apply more closely to the differences of constitutions in nature, than many written precepts on diseases, which can only give general knowledge, leaving much to discretion. Nature is full of irregularity; what then can be more absurd, than to expect success in physic by following one beaten track or confined *routine* in practice?

and the different proportions of the component particles and figures of human bodies, all the varieties and singularities of mankind, whether in health, sickness, or even madness, originate.

These diversities, in corporeal and mental attractions, give the character, personal difference or identity, and distinguish one human being from another *.

The corporeal and mental attractions not only differ in each individual, by which one man is distinguished from another; but diet, air, soil, climate, and pursuits, produce different human attractions.

The light air and diet, and customs of France, produce gracility and agility of body; cheerfulness and levity of mind; while
the

* In the animal, vegetable, or mineral kingdoms, affinities or attractions can be proved by chemistry, and various experiments of *analysis* and *synthesis*.

Particles attract similar particles, and repel dissimilar. All the figures of human bodies, whether tall, short, fat, lean, &c. depend perhaps on original formation in the uterus, and the power of attraction afterward with similar particles, while the foetus, or human being, is in a state of growth. Different vegetables attract different particles as well as their component parts; minerals have likewise attractive and repulsive powers, &c.

the swampy bogs, and moist atmosphere of Holland and Zealand, Flanders, Lower Germany, give magnitude and slowness of body, seriousness and solidity of mind. These people, though they live not widely distant, are as dissimilar as the snail and grasshopper. A transudation of volatile particles fly through the former, while the latter attract and retain humidity and sluggish phlegm, fat, or coagulable lymph; the causes of these differences are easily suggested and discovered by a philosophic and inquisitive mind.

It must appear evident, that the reception, attraction, and retention of certain particles from diet, air, &c. and the volatilization, or repulsion of others, give to the human body all its various and peculiar forms, powers, energy, &c.

The *mental attractions*, which are often dependant on the corporeal, in a certain degree, form attachments to favourite pursuits, from example, passions, or sentiments in the mind, and direct the corporeal to certain purposes; this may be called

called *mental attractions* to any art, science, pleasure, or passion. While reason guides the helm of human affairs, and the attention corresponds with the object proposed to be acquired, or the means pursued are rational, man may be pronounced in his perfect senses; but when the objects desired exceed all bounds of possible acquisition, and yet are pursued with ungovernable assiduity and unreasonable expectation, such a state of the mind is, in a certain degree, folly bordering on insanity.

Various are the species of folly that have terminated in madness.

Mental attractions to pride, arrogance, insolence, duplicity, falsehood, envy, and malevolence, are all instances of folly; they are the temporary support, and the sublimest refinements of little disingenuous minds; but on meeting disrespect, detection, or disappointment, have produced madness in the possessors.

Mental attractions to strict justice, integrity, truth, and sincerity, are the strongest marks of superlative wisdom, and are the appen-

appendages of truly great minds: they generally give a philosophical calmness in prosperity or adversity, and an happiness to the possessor, unknown to the artful, treacherous, or deceitful.

It is to be regretted, that in the human affairs of the polite refined ages, artifices are the only weapons to counteract artifice; falsehood and duplicity, falsehood; pride and insolence, haughtiness, or self-assumed dignity; hypocrisy, low cunning and hypocrisy. The books that have reduced these immoral practices to a regular system, instead of applause for their politeness of style or manners, should have been concealed for ever from the face of the earth; for they teach the vicious knavery, and render the upright suspected.

In proportion as the arts, sciences, and luxury increase, so do vices and madness. In countries where the fewest wants and desires are experienced, there are the smallest number of mad persons; in those kingdoms where the greatest luxuries, refinements, wealth, and unrestrained liberty abound, are the most numerous instances of madness.

England

England, according to its size and number of inhabitants, produces and contains more insane than any other country in Europe, and suicide is more common *.

In other nations, mankind are obedient under either military or religious despotism, and are educated from infants in implicit submission and non-resistance; in Britain, every one thinks and acts as he pleases; this produces all that variety and originality in the English character, and causes arts, sciences, and inventions to flourish.

The agitations of passions, the liberty of thinking and acting with less restraint than in other nations, force a great quantity of blood to the head, and produce greater varieties of madness in this country, than is observed in others. Religious and civil toleration are productive of political and religious madness; but where
no

* I have examined this matter in France, Italy, Germany, and Holland, but find no comparison in the numbers who commit suicide in those countries and England. Infidelity in a wife rarely makes a Frenchman cut his throat, but has often produced suicide amongst the English, &c. To live in France *à la Parisienne* is common,

no such toleration exists, no such insanity appears.

The remote causes of madness are various :

Anger, pride, and insolence mortified, malice and envy ungratified, merit unprotected, or crushed by the unworthy ; love, fear, hope, disappointment, anxiety, grief, despondency, avarice, and a diversity of human vices, folly, and calamitous feelings, have all been productive of *idiopathic* insanity.

There are accidental remote causes, as suppressed evacuations, metastasis, &c. ; this may be called *symptomatic* insanity, and is oftener cured than the former.

It appears from dissection, that an augmented portion of blood vitiated in the brain, or its membranes ; coagulation of the humidity in the cortical or medullary substance of the brain, concretions, &c. are the principal immediate causes producing the effects of delirium or madness.

How an increased quantity of blood vitiated in the brain, or a coagulation of the
fine

fine ferous fluid transfuding the structure of the cerebrum and cerebellum, produce such continued different effects in the mind, as false apprehension, reasoning and judgment, are questions replete with difficulty; but their investigation shall be attempted. The speculations and reasonings, however, on this dark subject are not delivered as indisputable truths, but merely as matter of opinion, or probable conjectures.

1. The brain has not been proved to secrete any fluid known by the common names of *nervous juice*, *nervous fluid*, *liquidum nervosum*.

2. No fluid, called *nervous juice* or *fluid*, has been discovered to pass and repass through the nerves.

3. Nor is it rational to suppose any liquid can pass and repass with such rapidity as thought itself, either through tubes, supposing they were existing, or by transfusion. Nothing but light could pass so rapid.

4. The *arteries* pass through all the nerves in every part, internal and external, by means of the *tela cellulosa*, or *pia mater*; this I have frequently

frequently proved by minute anatomical injections.

5. Where arteries pass in other parts of the body, veins are generally found; from hence it is reasonable to infer, that minutest veins, as well as arteries, pass through all the nerves and nervous filaments, though the veins cannot be demonstrated, owing to the coagulation of their contained fluids, immediately after death, as in the lymphatic system, except amongst those who die of dropsies.

6. The last action of the arteries, in *articulo mortis*, is to force their fluids into the veins; the former are empty, the latter filled after death.

7. The experiments of physiologists to discover the *nervous* fluid, or *liquidum nervosum*, are erroneous; ligatures passed round nerves have only impeded the course of the blood in the arterial system, hence tumefaction above the ligatures, and insensibility of parts below.

8. It appears clearly that many physiologists have not been deeply versed in anatomical

cal injections, or they never could have supposed tumefactions above the ligatures of nerves, or the loss of sense and motion, any proof of a *nervous* fluid existing; because those effects arise from other manifest causes.

9. Impeding the course of blood in the artery, will effectually produce a coldness and insensibility of a part; an *aneurism* of the subclavian artery, which is only a partial impediment of blood to the arm, produces *coldness and wasting* to the arm and hand, with loss of motion.

10. Heat, in the human body, is proved to be the effect of arterial action, and its strongest residence is in arterial blood: where arterial action ceases, heat is abolished, and death ensues. Human life depends on heat, and heat on human life; death is the total deprivation of arterial action, absence of heat, and of arterial blood in the arteries*.

11. Arterial

* I have formerly injected mortified parts, and found I could push my injections all through the arterial, but not into the venal system: from hence I conclude, that the stagnation of blood in mortifications is rarely or never in the arteries, but in the veins.

11. Arterial action ceases in a nerve on which a ligature is made; hence, independent of any *nervous fluid*, the nerve below will become cold and insensible, and all its ramifications, going to different parts, lose their influence on any attempt to voluntary or involuntary motion.

12. It may hereafter be proved, that *animal heat* and *arterial action* are the effects of certain particles extracted in respiration from *atmospheric* air, and conveyed through every vital, animal, and natural function of the human body.

13. Ligatures round the nerves, producing a tumefaction on the part of the nerve toward the brain, and the loss of sense and motion in the part to which the nerve proceeds, is no proof of the presence of any *nervous fluid*, because those effects are produced by the destitution of arterial blood, and the pulsatory actions of the arteries; and certainly it is not necessary, nor sensible, to usher in unknown causes as producing effects, when evident facts, juster causes and conclusions, are present.

14. In

14. In short, not one experiment, hitherto made, proves that the brain secretes a *nervous fluid*, or that any *nervous fluid* passes and re-passes through the nerves in voluntary or involuntary sensations or actions; nor is there any such fluid as the *nervous fluid*, of the consistence and manner of action universally taught and generally received.

15. All anatomists or physiologists, therefore, who have written in their works the term *nervous fluid*, its regular or irregular distribution, force, energy, &c. have advanced what has never been proved to exist. All physicians who talk of the nervous liquid in the human body, under the appellation of *liquidum nervosum*, or *animal spirits*, speak at random on an imaginary existence, and without any conclusive experiments or demonstrations to support the supposed substance called *nervous fluid*. Something acts, but what it is, has not been discovered; and it is more candid to acknowledge a deficiency of human science, than to propagate error.

16. In this treatise, then, the appellations of *nervous fluid*, *liquidum nervosum*, or *spiritus animales*, have been excluded as non-entities,

and the *nervous powers*, *nervous influence*, or *nervous principle*, have been substituted.

The non-existence of the *nervous fluid*, as generally received, has been strenuously urged, because it is of great consequence in medical practice; it may likewise be useful to the fabricators of curious hypotheses on matter, spirit, and metaphysical subjects.

17. What subtile matter it is, or whether it is an exceeding volatile penetrating air, similar to that which is supposed to rush through the Fallopian tube, and impregnate the ovum in coition, giving life to the inert animalcula, are subjects that are more accurately considered in the *Schola Medicinæ*.

18. The subtile matter which pervades, and passes equal to the mind, is the electrical fire; but I doubt much, whether the electrical fluid would be impeded in its progress through the nerves by a *non-electric* ligature; indeed, all the conclusions I have been able to collect from electrical experiments, prove the contrary.

19. Nor is the nervous influence secreted in the brain acting as a gland; but it is, perhaps, *particles of light*, or fire attracted with
the

the atmospheric air in respiration by the lungs, and conveyed to the brain in the blood, the brain being only its receptacle; probably through an attractive power, similar to other parts of the body *.

The vital principle of heat, or human fire, resides chiefly in the arteries, or in the blood they contain. Mr. Hunter supposes blood alive, not without some reason.

20. It is sufficient, perhaps, for the practice of medicine to know, that all voluntary, involuntary sensations and actions are conveyed by the nervous powers, and nerves at large, from the brain itself, proportionably to the utility and magnitude of the sense.

21. The senses, as hearing, seeing, smelling, tasting, feeling, are all received and communicated by the nerves; and their abolition is a deprivation of sense.

22. Deprive

* There is an attractive power *ab origine*, perhaps, in the cells of the adipose tunic or accumulate adeps; in the liver, to receive particles to make bile; in the salivary glands, to attract particles from the blood proper for saliva; in the kidneys, for urine; in the eye, for that pellucid aqueous humor, &c.; in short, all healthful, regular functions are performed by each attracting the properest particles for its peculiar purposes, &c. and repelling or excluding the improper.

22. Deprive a human being of the nervous power, and a sense of life no longer is perceived by the person: tie a large nerve proceeding to any part, and all communication with the soul is either greatly diminished, or totally destroyed.

23. Irritations on the nervous powers produce convulsions or irregular actions, a quicker pulse in parts, and often confused ideas in the mind; but compressions or ligatures, according to their powers or force, torpidity or total insensibility. The soul cannot act on a part of the body beyond the nerve's ligature.

24. From the acrid or putrid changes produced in the blood during the last stage of fever, or from a greater quantity of blood determined to, or irritating, the brain, either a furious delirium or stupor and insensibility is produced; the regular powers of the soul being resisted by accumulated or changed blood in the brain.

All diseases whatever are changes of the blood acting on the solids and nervous powers, and these latter again on the fluids.

25. There are, therefore, four conditions necessary to the causes of any disease present.

i. Some

- i. Some change of the blood or other fluids of the human body.
- ii. Irritation of the solids from the changed fluids acting as stimuli in the body, either partial or universal.
- iii. Increased or diminished action in the whole or part of the arterial system; the contractions of the heart or arteries of parts are quicker or slower.
- iv. Perceptibility of an universal or partial disease in the mind, conveyed by the nerves of the whole body, or irritated nerves of morbid parts communicating with the brain.

26. The soul, therefore, cannot be separated from the body, in either considering, or even having positive intelligence of disease; without impressions on the mind no disease would be felt or described by the patient, and much less comprehended by the physician.

27. Though *Stahl* and his followers were extremely absurd in attributing diseases and their cure too extensively to the soul's feelings and powers; yet the mechanical and other physicians, who have denied the mind any power in the affections of the body, have
equally

equally erred, which is amply demonstrated in the *pathologia generalis* of the *Schola Medicinæ*.

I formerly made a great number of experiments to determine the connection of the soul with the body ; as when the faculties of the soul first appeared ; how it enlarged in knowledge ; what were its properties without the advantages of obtaining ideas by different senses ; what were the consequences of the loss of hearing, seeing, smelling, &c. These curious pursuits, though not always rewarded with a complete knowledge of the object pursued, yet opened some discovery unexplored, or at least imperfectly understood.

28. The mind or soul cannot be defined by any other means, than by attentive and close observations on its ostensible effects, operations, and powers in the human body.

29. While the *ovulum*, containing the rudiments of the future animal, remains in the female ovarium, before the impregnation by the male, what is to form the future man is inert, without any perceptible action whatever of heart or arteries, &c. according to the minutest microscopical inquiry.

30. When

30. When the female *ovulum* is impregnated by the male, the pulsation or *punctum saliens* is soon after evident; the embryo, in its pellicle or ovum, descending through the Fallopian tube, and taking its residence in the uterus, increases in an evolution of all its constituent parts, and gradually obtaining its perfect form, grows, from being smaller than a pin's head, to a most surprising bulk in the course of nine months.

31. During the time that the foetus continues in the uterus, there is no reason to suppose it enjoys any qualities of the soul, which display themselves afterwards: it possesses, perhaps, *stimulum insitum*, or an internal irritability, for the performance of the peculiar circulation of the blood, and some secretions and excretions; but in itself knows nothing of the one nor the other; in short, it has no thinking qualities, no ideas of sense or reflection.

32. When the foetus is excluded from the uterus, some operations of the soul appear immediately after the first respiration, after receiving *atmospheric air*; for it cries, and soon shews a desire for food, and will elect

sugar in preference to *aloes*. The circulation of the blood is changed and performed in a different manner ; for instead of passing thro' the *ductus arteriosus*, *venosus*, and *foramen ovale*, the auricles and ventricles receive the blood : the pulmonary arteries and veins acquire their power of circulating the blood through the lungs, &c. in a mode that continues through life.

33. The soul seems to have no power until the atmospheric air has rushed into the lungs ; for without this the infant perishes soon after delivery. The air or light seem to contain the *pabulum vitæ* ; but after being received by the lungs, what is emitted by expiration is unfit for the purposes of life, a supply of fresh air being constantly necessary. *Light*, perhaps, is the nervous principle.

For the first month after being in the world, the infant scarcely shews any visible signs of the soul's powers, except in crying for food, and then it sleeps, if not in pain.

34. Afterward it gradually receives impressions of objects by *vision* sounds by *hearing*, and, in process of time, imitates the language it is to learn by the soul's powers
on

on the organs of speech, until it be able to articulate guttural, nasal, oral, or other sounds, and distinguishes one thing from another.

35. Then the mind is impressed in civilized nations with some religious worship, which it is taught to believe to be the only true religion, and that all others are erroneous: these infantile impressions very often continue with zeal or superstition through life.

36. The soul afterwards expands, and having collected a store of ideas by the senses, has the power of reflecting, remembering, comparing, and reasoning, by which it begins to form a judgment on men and things. The *extent* of human knowledge in different men is extremely different; for some pass through life without considering, examining, or performing any thing, except the offices of nature; while others busy themselves in investigating the causes of all the effects they perceive, and produce, by an elevation of sentiment and indefatigable industry, the most important discoveries in different sciences, according to the genius, bent, or inclination of the parties.

37. The

37. The properties of the soul then begin with respiration, and, on respiration ceasing, the soul loses all its faculties ; does it not appear, that it receives constantly something from the atmospheric air we breathe ? The soul seems as fugitive as air. It receives all its primary knowledge by its operation to, from, and by the evidence of the senses : it retains what it is taught, can afterwards reflect, remember, reason, judge, always in proportion to the number and diversity of ideas it has received or collected. Where there be few ideas, the reflection, reasoning, and judgment are proportionably confined ; where they be various and numerous, the soul views men and things very extensively. The inferiority or superiority of human understanding generally depend on the paucity or multiplicity of ideas and just reasoning possessed by the mind.

38. The powers of the soul on the body have been already observed ; it can act on the heart, and impel a greater quantity of blood to the head, for either mental or bodily exertion.

39. The

39. The soul's powers in checking or diminishing the heart's action on any sudden intelligence of misfortune, or quickening its action by joy, must be evident to all persons capable of quick feelings or sensibility. Music has similar powers. Handel's funeral anthem has for a short space of time stopped or suspended the circulation in my heart; lively music has quickened it; and others, who exquisitely feel music, have perceived similar effects, though incapable of accounting for the causes of such sensations.

40. The soul can direct a greater quantity of blood to the parts of generation, and create a great turgency in the vessels and cellular structure, and retain the fluids there a considerable space of time.

41. Violent anger has forced so great a quantity of blood to the head, that the vessels have been ruptured, the blood extravasated, and sudden death has been the consequence.

42. The soul itself is some invisible agent, or power, acting in various modes on that human matter called the brain, and the soul gradually acquires strength and knowledge by
the

the powers of the senses, but not without human growth, and human industry.

43. The brain being the soul's principal receptacle, conveys, in health, the soul's intentions, by means of the nerves, to answer all the functions of life with order, precision, and regularity, according to the laws of the animal œconomy.

44. Instead of a nervous fluid passing and repassing all our sensations, either voluntary or involuntary, it seems more probable that it is the soul's influence that pervades, by its subtilty, all organized and other parts; it is the grand conductor, as well as governor, of its various feelings and actions.

45. All causes must be equal to their effects, and while the soul's powers are not impeded in the brain or nerves, the invisible agent performs with more or less energy all the necessary mental functions of life; but the organization of the brain being diseased, the soul is interrupted in its various powers by delirium, stupor, madness, false images, &c. &c.

46. The soul's powers, however great in an healthful organization of the brain, cannot
conquer

conquer the impediments nor diseases of that organ ; neither can it perceive its derangement from morbid affections in the brain : mad persons, like the obstinate and superficial, frequently conceive all the world to be in error except themselves.

47. The brain then, that principal organ on which the soul acts primarily, being injured or diseased, resists or prevents the soul's regular impulses, and so conquers it, as to convert a sound understanding into folly and madness, or produce a false association of ideas.

48. The due order and regularity of the soul's influence being impeded, perverted, or prevented in different parts of the cortical or medullary substances of the cerebrum and cerebellum, an irregular influence is the consequence, and the soul's action on different parts annulled ; the free influence being obstructed, false images are conceived, false reasonings and conclusions result from false ideas and apprehensions ; wild projects, furious ravings, ill-founded fears, strange unusual conceits, violent attempts to do mischief, accompanied with incoherent expressions, are the

the consequences of the brain's resistance to the regular influence of the soul.

49. In the nervous parts, remote from the brain, irritability is excited by vitiated, changed, and acrid blood acting as stimuli, and arterial action is increased; insensibility is produced by ligatures or compressions of the medulla oblongata or nerves, which are the immediate appendages, and possessing nearly the same structure as the brain. If such effects are producible by evident causes in parts distant from the brain, but immediately under its influence, it is easy to comprehend similar causes producing similar effects in lesions of the *brain itself*, and perverting all regular influence or perception in the powers of the mind.

50. Though what this invisible influence, called the soul is, may remain eternally beyond ocular demonstration, or the utmost limits of the most cultivated human comprehension, yet it must be something sufficiently powerful to act on human matter during life; to increase in strength and energy, in proportion as it aptly receives and treasures
up

up true ideas, and exercises its faculties in conceiving, reasoning, and judging, &c.

51. It is clear, that its principal residence is in the brain and nerves, and these latter pervade every part of the body.

In a sound brain, the soul performs its functions with regularity according to individual character. The brain being in a morbid state, the animal functions are particularly injured, and false ideas, with all their concomitants, are evident, &c.

52. The over-exertions of the soul force an abundance of blood to the brain, either in attempting poetical sublimity, or pursuing deep and continued metaphysical reasonings and meditation.

This increased quantity of blood, or its acquiring a vitiated morbid change, may cause the brain's resistance to the directions of the soul, and may over-excite, or obtund mental impressions; in the former, fury, and in the latter, melancholy may be the effects.

53. Poetical fury, or violent tragic action, are sensations excited in the soul bordering on madness, and indeed have produced that disorder.

Enthusiasm is another species, which has frequently terminated in madness.

Love is a passion lighted up in the soul by a mental attraction for some particular object, and has frequently terminated in insanity.

Anger, pride, envy, and all passions or miserable sentiments, what are they, but over-exertions of the soul's faculties, operating with augmented or diminished energy on the brain ?

54. Despondency or melancholy seem to be more the effects of relaxation and a diminution of mental exertion, in which the brain is more chronically affected, and less likely to be cured than in the more inflammatory or animated species.

These reasonings or facts, duly considered, may not only point out superior methods of treating hypochondriacal or nervous diseases, but also insanity.

The consideration of the patient's mind is, therefore, of the utmost importance in many diseases, but more particularly in the mental, to form the prognostics ; the timid and dejected require an inspiration of courage and hope, or medicine often fails. In the yellow

fever of the West Indies I have seen numerous instances of persons seized with that fever, mournfully assert their assurance of dying, and they too often confirmed their intuitive prognostic. This was nothing but fear from others dying daily, and if that apprehension could be removed, patients have recovered.

In nervous diseases and madness the intellectual faculties should be principally considered, and the state of the body previous to, and accompanying, insanity.

From reflecting on the powers of the arteries in the brain and nervous system, and the influence of the brain and nervous system on the heart and arteries, and the powers of the mind on both, without the union of which human life cannot but very imperfectly exist, the subsequent causes of madness have been deduced.

1. Either by the will, or some accident, a greater quantity of blood has mounted to the brain, or has been retained there, than was agreeable to the laws of the animal œconomy.

2. The same causes have continued the same effects, whether from reiterated meditation, or any violent passions of the mind,

or accidental suppression of usual evacuations, &c.

4. The minute capillary vessels and the veins suffer a continual distention, either by the increased force of the arteries directed, or repeatedly determined by the will, or from the relaxation of the vascular coats, and increase of the venal diameters*.

This increased force in the arteries, and partial detention or retardation of blood in the venal system, cause a change in the state of the blood within the minutest folds and particles of the cerebrum and cerebellum.

5. This change of blood and its additional weight irritate and change, to a certain degree, all the ferous particles of blood in the tela cellulosa, or in the substance of the brain, and produce callosities by a coagulation of the fluids in the medullary or cortical substance. In the *ophthalmia habitualis*, or *consensualis*,
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* In evacuating urine, feces, or flatus, a large inspiration is made by the lungs, and the air is retained there during the expulsion as long as possible, especially in costiveness. During these strong inspirations performed by command of the will, the vessels of the brain have been so over-distended as to burst, and the effused blood has caused instant death or a fatal apoplexy. Thus persons have sometimes been found dead in their water-closets.

the ferous particles of the blood, from increased action in the arteries, and distention of the minute veins, become hot, acrid, and irritating: similar effects may be produced in the membranous and cellular expansions through the whole brain and its depending nerves. Local inflammation is very common, local acrimony likewise: does not rheumatic acrimony fix its seat in the tela cellulosa of the muscles, the venereal in the periosteum and bones, the gout in joints, the scrophulous in lymphatic glands, &c.?

6. As clear perception, sound reasoning, and solid judgment are observed in a healthful state of the brain and its fluids; so can their alteration or perversion be easily conceived by the effects of acrimony, irritation, and over-distention, from febrile heat and friction of their component parts, &c.

7. Anatomical inquiry leads to think, that the delirium in fevers is chiefly owing to morbid changes of the fluids in the brain; putrid *miasmata* produce more dangerous and acute deliriums than perhaps any other: putrid *miasmata* are received by the lungs and stomach, absorbed by the pores of the skin, or
by

by a cut or scratch on the finger, and have contaminated in a very short time the whole body, changing the blood to a putrefactive state, and ending fatally.

8. Phrenitis is an increased action of the solids, with inflammation of membranes and an over-abundance of blood in the brain, producing a most dangerous acute fever, raving, or delirium, terminating like violent acute fevers, in a few days.

9. Madness is another species of delirium, chronic, not acute; is commonly slow in its progress, *without fever*; neither producing the violent symptoms and fatal effects of putridity, canine madness, not acute phrenitis.

10. Whatever, then, determines a greater quantity of blood, whether it be mental affections, the will, or any accidental suppression of accustomed evacuations, or different species of acrimony, as febrile, nervous, gouty, venereal, &c., may produce temporary delirium, with or without fever, which in an extensive practice may be frequently observed.

11. If the blood has once distended the vessels of any part, a debility or relaxation may remain,

remain, and on any future occasion of fulness, passions, &c. they may be redistended; but particularly the brain, if the same meditations or passions be often repeated, and long continued, which first gave rise to the distention. Where an hæmorrhage has once happened, as in the nose, lungs, uterus, or anus, there is apprehension of its returning by plenitude, accidental coughs, colds, &c.; pleurifies happen to the pleuritic, gout and rheumatism to the gouty and rheumatic, &c.

12. Madness, then, is nothing but the effects of distended vessels, a checked vicious circulation, and changed fluids opposing or perverting the soul's regular action or power in the medullary substance of the cerebrum and cerebellum; in which perception, reasoning, judgment, imagination, and memory reside; as well as the nervous powers over the body, for performing voluntary and involuntary motion, &c.

13. What the soul or mind specifically is, has not as yet been satisfactorily explained, and perhaps never may be discovered; but it is certain, that morbid changes of the blood, or its over-distended accumulations,

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concretions, indurations, extravasations, &c. in the brain, produce the effects observable in madness, from the prevention or perversion of the soul's powers. This is perhaps sufficient for human beings to know, to ascertain either the difficulty of curing insanity, or to direct the choice of remedies most proper for the malady.

Prognostics of Insanity or Madness.

From a review of the causes of madness by dissections after death, and the foregoing observations, it will not be difficult to judge in what instances madness is, probably, curable or incurable.

1. When madness is recent, and has arisen from fever, accidental suppressions, accustomed evacuations, from metastasis, or bodily affection alone; there are prospects of curing the complaint by removing the respective causes.

2. If the insanity originate from mental perturbation, violent passions, or any affections of the soul, constitutional or continued long,

long, the cure will be difficult, and frequently impossible.

3. When the vessels of the brain only suffer by distention, reducing them to their original diameters may prove a cure.

4. Acrimony irritating the brain, may be curable by discovering the species; whether scrophulous, venereal, gouty, or rheumatic, &c., and by applying, judiciously, the remedies adapted to each particular species; regimen, &c. &c. These four causes of insanity are, perhaps, more common than the subsequent.

5. Preternatural accumulations in the brain, from a coagulation of the fine serous particles, which transude through the minute structure of the different regions in the cerebrum and cerebellum, foldings, circumvolutions, windings, fissures, connections, various cavities, &c., scarce admit of cure; because the effused thickened fluid requires *liquefaction* by resolvers, and absorption; which, though possible in the external parts of the human body, when arising from contusions, &c., yet in the brain the success of any medicaments must be extremely doubtful,

ful, having no assisting muscular powers to agitate and promote the impacted blood from the less elastic and debilitated vessels.

6. Bony exostoses, or concretions, or preternatural substances, as polypi, &c. are irremediable, could it be ascertained that they exist in the brain, which, however, is impossible; but these are rare cases.

7. A preternatural dryness and diminution in the brain, or a paralytic affection of the coats of vessels, &c., are in general incurable, which may be easily conceived from the prognostics in palsies of other parts of less dignity than the brain.

8. Indurations of various parts of the brain are, when confirmed, incurable, or, at least, extremely difficult to remove.

9. Maniacs of a florid complexion have been known more frequently to recover, than the pale melancholic; the reason of which may be, that the former only suffer from distention of vessels, the latter oftener from concretions in the brain, &c.

10. Hereditary madness, or the disorder being caused by an ill-shaped head, as the
cilo

cilo or steeple-crowned, are generally irremediable.

11. The difficulties medicine has to counteract in attempting the cure of maniacs, must be manifest from the appearances of the brain, &c., after death; its utmost efforts may prove fruitless in many instances, the cure, from analogical reasoning, being sometimes altogether impossible; in others uncertain, and in some only probable.

These prognostics are drawn from considering the importance and soft structure of the parts diseased, the difficult access of medicines, or their powers, on parts contained in such a bony receptacle as the skull; the difficulty of drawing off blood from the various parts of the brain, which may be affected; and lastly, from experiencing an opposition in changing the natural tempers of human beings in health; much less then can disorders of the soul be removed, when deprived of calm reason, reflection, and true judgment.

On the Cure of Madness.

The first thing to be considered in the cure of madness is, the cause which gave rise to the disease, and its rational mode of removal; secondly, the constitution of the patient, whether florid, plethoric, and healthy otherwise; or pallid, debilitated, and cachectical. The former require profuse evacuations and abstinence; the latter deobstruents, and perhaps in many cases tonics. Thirdly, the force of the disease, and temper of the patient: the rash, impetuous, and mischievous must be restrained by the strait waistcoat or chains, and exciting fear by the menacing aspect, or the acquired and determined authority of the keeper or attendant: the low and melancholic require rousing, soothing, and amusement. The practical domestic management, however, of the insane, is well known to several gentlemen, who receive and humanely attend those melancholy diseases.

The *cure* of madness, when arising from suppressed evacuations, requires the sollicitation

tion of whatever is obstructed, as the hæmorrhoids; menses in women; perspiration, or alvine feces, &c.

Although it be much doubted, whether madness ever arose merely from suppressed hæmorrhoids, without the junction of some other efficient cause, yet, if such a circumstance should happen, opening the hæmorrhoidal veins with a lancet, or bleeding with leeches, would be proper.

Irritating aloetic purgatives,* or centaury, &c. would likewise promote the flow of the hæmorrhoids.

If, however, the suppressed hæmorrhoids or piles occasioned insanity, from a turgency of the blood vessels in the brain, bleeding in the jugulars, or even in the arm or leg plentifully, observing for a considerable time a very dry diet to prevent repletion, would most probably succeed.

Pediluvia are likewise necessary.

Suppressed menses are reproduced by remedies adapted to the constitution.

If the suppression originate in debility, with a very pallid countenance, aloetics and the
gum

gum pill, night and morning; and chalybeates, not of the heating kind, are useful, particularly the flores martiales with bitters, &c.; other steel preparations in some constitutions affect the head, and are improper.

If the suppression should arise from an inflammatory diathesis, with floridity of face and plenitude, bleeding, alkaline salts, sal diureticus, &c. may be prescribed, and occasionally a smart evacuating purgative.

Pediluvia of salt and water, repeated two or three times a day, an hour each time, in either instance of suppression, are advisable.

Suppressed menses, from obstructed uterine vessels, or coagulations, or congestions in the lymphatic system, cannot with certainty be removed, but by mercurials, either prescribed as evacuants or alteratives. See *Chlorosis* and *Suppressions of the Menses*.

The obstruction of the lochia, after parturition, has produced insanity, and this happens to some women during every child-bed period. The removal of the effects of obstructed lochia depends on circumstances, and

and should be treated differently in different subjects.

These cases of madness commonly cede to a skilful application of medicine, of the deobstruent, uterine, or evacuant class.

The milky mania, or that delirium which has been succeeded by melancholy or madness from suppressed secretion of milk, should be treated by venæsection, evacuates, and blisters, if no contra-indications forbid their use; purging particularly is useful, and antimonial diaphoretics, as small doses of *tart. emet.* with nitre, and camphor to 10 or 15 grains, every four or six hours. When I formerly practised midwifery, I have known these methods remove insanity.

Those women who are attacked with a maniacal affection after the birth of every child, commonly acquire their reason, by skilful management, in a few weeks or months.

Nasal hæmorrhage, if customary, on being suppressed, has caused a maniacal affection; bleedings in these cases are necessary in the *jugular, occipital, angular, frontal*, or
nasal

nasal internal vein, if possible; for these four last veins communicate with the *sinuses* and *veins of the brain itself*; therefore, more promptly evacuate the blood from the part affected, and should be particularly attended to in *sanguineous apoplexy*, *epilepsy*, and *maniacal* affections *.

Irritating the internal part of the nose, by a feather or straw, will likewise produce the nasal hæmorrhage, which is superior to sternutatories or snuff, as the violent action of sneezing, in a plenitude of the vessels of the brain, has ruptured a blood vessel, and proved fatal.

A *nasal hæmorrhage* often cures that most violent of all deliriums, the *phrenitis*; and all experienced physicians must have observed, that a very small portion of blood issuing from the nose in the deliriums accompanying inflammatory or other fevers, has immediately brought the patient to perfect sense and reason.

In

* See the origin and progress of the arteries, sinuses and veins of the dura and pia mater, cerebrum and cerebellum, accurately described in the *Schola Medicinæ*, with copper-plates.

In maniacal affections it appears very rational to pursue a similar mode; it is, however, difficult, or impossible, perhaps, to evacuate a sufficient quantity of blood occasionally from the nasal, frontal, angular, or occipital veins; but anatomy certainly demonstrates the communication of these veins with the brain itself, and when it be supposed a turgency of the cerebral vessels is the cause of madness, nothing can appear more rational, than to *replete the vessels of the part*, and restore the sinuses and veins to their original size by a very great *abstinence from liquid foods*.

If the suppression of accustomed perspiration or costiveness have occasioned madness, diaphoretics of antimony and camphor, or purging, are indicated. See *Costiveness* and *Dry Skin*.

If perspiration should be wished in the head, the fumes of vinegar and water in a large basin, and covering the head, will produce a plentiful evacuation of perspirable matter.

Pediluvia of salt and water, or tepid vapor, or water baths, will answer the same purposes.

The *cure* of madness from a perturbed mind, or passions long indulged, is to be attempted by the apparent gratification of the desire, or sometimes opposition, as far as mental cure extends.

Anger, whose intemperance is augmented by opposition, is easiest calmed by silent neglect.

Pride, which commonly assumes great superciliousness and arrogance, and pretends to mental or bodily qualities it seldom possesses, is best soothed by affected obsequiousness, and adulation.

Mad pride renders the possessors, in their own imagination, persons of very great consequence. The proudly mad conceive themselves emperors, kings, or great personages, generals, rich merchants, &c., and they are generally tyrannical, pompous, observe a reserved distant behaviour, and expect great homage; which if they receive not, are ferocious, vindictive, revengeful, or sullenly mischievous.

Pride, in those who are not insane, is generally the concomitant of folly, and is commonly used as a masked battery to cover the

defects of the mind, or to acquire importance among the undiscerning vulgar: it is pitied by true wisdom, and ridiculed by wit.

Envy, which ever maliciously indulges itself in the misfortunes, mistakes, mental or bodily defects of others, is happiest in hearing scandal and detraction, especially against those whose superior excellence is marked and acknowledged by mankind.

As its highest enjoyment is the misery of others, so its most pungent sensations of horror arise, on viewing any elevation of sentiment or happiness.

Avarice or *covetousness*, which never enjoys what it possesses, but thirsts after wealth with an inordinate desire and sedulous attention, is rendered most easy by the contemplation and expectation of future Peruvian mines.

Disappointed expectation is no unfrequent cause of madness; or hopes frustrated, that have been long dwelling on future acquisitions*. What is more disagreeable to the human mind than long suspense, or alternate

F 2

hope,

* It was remarked, that on account of the famous *South Sea bubble*, many, who were ruined, became mad.

hope, fear, and apprehension? Desperate attempts at suicide are often the consequences of disappointment: there is no remedy but setting bounds to human desires, many of which are chimerical and unreasonable; but this is only practicable before the approach of insanity or desperation, which, when present, never listen to reasoning advice.

Love, that fiery flame, when lighted up in the human breast, consumes its votary, if not gratified with the object of *mental attraction*. It is a passion the least of all, perhaps, governable by reason, and when productive of insanity, which, in proportion to its violence, it is most approximate, is commonly incurable.

Jealousy is a sensation of suspicion, where the greatest confidence is expected. In both love and marriage it has produced suicide: its remedy is indifference to the object adored, or a philosophical resignation to infidelity. In France, and other warm countries, infidelity in a mistress or wife is treated with levity or laughter; in England, with sober sadness, detestation, or self-murder.

Misfortunes

Misfortunes in life, if nearly producing madness or desperation, are only curable by a timely alleviation of the present or expected distress. If from domestic unhappiness, from children or relations, vexation has produced madness. An apathy of soul feels nothing except for self; but great philanthropy earnestly engages in the conduct and welfare of all mankind, and has thousands of emotions and fears unknown to the insensible or torpid.

A nice sense of honor has produced rash suicide, or insanity, from the most exquisite feelings; where such sentiments exist, nothing can be more inhuman than to torture them; they are the companions of the most elevated and noble minds. There have been instances of officers in the army committing suicide on only receiving a sharp reprimand for some trifling omission, from a superior officer. The experiencing neglect or harsh treatment from relations or friends, where affections have been warm, have produced shocking instances of misery and insanity.

Unjust persecutions are amongst the causes of madness. In this country of liberty, men of superior

superior rank or fortune, even if accompanied with haughtiness, pride, or a malignant disposition, have very little power to gratify malevolence; the greatest, as well as the lowest, being equally amenable to the law. In other countries, superiors either in rank or profession have great power over inferiors. The modern education and philosophy have, however, softened the ferocity of all ranks; but yet, there are too many instances, where, if mankind have an opportunity of doing mischief one to another, they seldom want the inclination *.

The

* An anecdote of the medical kind, though it gives no lustre to the professional character of the party, yet ought here to be mentioned, as a most inhuman trait of a man, who has figured in an elevated medical situation.

While I was at Vienna, the following story was recent :

Baron Van Swieten, physician to the late empress, considered by many not the most successful practitioner, and who, all the world knows, was a rigid *Boerhaavian*, had attended a lady of some rank in the dropsy, and the Baron followed the *Boerhaavian* doctrines implicitly, but without the least success, and declared the case *incurable*; asserting, that any physician who *undertook the cure* deserved the appellation of an *ass*. Dr. *Hirneis*, a popular physician in that city, much esteemed for his humanity, skill, and gentleness of manners, was called, and soon cured the patient by methods not mentioned in *Boerhaave*. The lady wished to re-
compenc^e

The persons most capable of gratifying rancor at the expence of honor or justice, are the
haughty,

compence the worthy doctor ; but he declined accepting any pecuniary reward, and only requested the patient to go to Baron Van Swieten, and prove, by ocular demonstration, that the *ass* had cured what the *ox* could not, alluding to the overgrown pride of the court physician. The Baron, inflamed at the cure being performed by methods he was unacquainted with, meditated and accomplished the destruction of the doctor for curing the patient, contrary to his opinion and prognostic. The Baron had sufficient power with the Empress to have Dr. *Hirneis* banished from that city to *Passau*, by which the unfortunate man lost all his practice, and he, with a numerous family, were reduced to poverty. On the death of the Empress the late Emperor was applied to, in order to recal the banished doctor, who had been in exile twenty years. The emperor, perhaps, not being disposed to shew disrespect to his imperial mother's memory, or to her favourite physician, denied the request ; but after the death of *Baron Van Swieten*, the exiled doctor was suffered to return to Vienna. In his twenty years absence his principal friends had died ; he soon found his practice was unlikely to be restored, and he expired a short time after at Vienna from extreme grief, or, some say, by shorter means. Thus an able practitioner fell a victim to medical success, through the mortified pride and tyranny of a powerful, but mean, court physician.

In a learned profession like ours, the very basis of which should be founded in gentleness, humanity, and the perfection of acquired excellence and science ; no such narrowness of soul should exist, as to be envious at the success of another. Wherever the dawnings of industry and superiority of medical knowledge appear, they should be cherished, protected, and brought forward,

haughty, proud, mean, and envious. The objects of persecution are those, commonly, who excel in mental ; or who acquire great reputation from real merit, liberality, and probity.

The remedies against malevolence are patient forbearance, perseverance in rectitude, foresight of future mischief, and a manly opposition to its wily snares, and low-cunning inventions. Integrity, discernment, and resolution are terrors to the proud, mischievous, or designing, and formidable shields against artifice, dissimulation, or unjust persecution.

Where an exquisite sensibility pervades the human frame, without a masculine habit of
body

forward, to benefit society. In this happy country of liberty, physicians are upon a more equal rank; real abilities, and successful practice, will always procure friends and protectors, which no professional envy can crush ; nor can court edicts be obtained to banish useful physicians from serving mankind in the manner most agreeable to their skill and inclinations. The royal college of physicians in London, alone, have the power of interdicting improper persons from practising within seven miles of this metropolis ; but it is hoped the censors of that learned body never exercise such power, from personal pique, or envious motives ; but act on the liberal principles of the *salus populi*, in the suppression of quacks and impostors ; for which purpose charters were granted, and extraordinary powers delegated.

body and mind ; long-continued vexation has been productive of insane grief, melancholy, and suicide.

The *consciousness of immorality* has caused despondency, desperation, and, lastly, insanity, or suicide.

Injustice, cruelty, or murder have tortured the perpetrators and actors with the most pungent mental torments. The paths of strict justice are straight and happy ; those of injustice, low cunning, and deception, full of dangers, disgrace, or mazed perplexities. True wisdom always pursues the former ; left-handed wisdom, with various degrees of artifice, the latter. The recollection of barbarity or injustice, though it may have answered a temporary interested purpose, has stung the parties afterwards with remorse, horror, despair, melancholy ; they have been haunted with a thousand hideous imaginary spectres. Medicine seldom avails here, when the guilty mind, preying on its own depravity, has become insane.

Change of situation, reparation of injuries, the conversation of friends, and attempts to direct the mind from its melancholy pressure,
are

are the chief aids under such miserable circumstances.

The heart, suddenly dilated by over-joy, has produced madness ; therefore good intelligence should be delivered with prudence and circumspection.

Distentions of vessels, which include various madnesses, are of two species.

1. *Vessels* are over-dilated, by an increased force of the heart and arteries, with too flow a movement of blood in the veins ; the effect of mental perturbation, acting powerfully on the heart in robust subjects, whose muscular powers are strong, and cohering particles firm, joined with plethora, and viscosity of the blood.

2. *Vessels* can be over-distended, and continue so, from relaxation of their coats. The heart may be sufficiently powerful, with *stimuli* of degenerated acrid blood, to force rapidly the irritating blood into the aorta, and this vessel into the arteries. The fibres of arterial coats, or the cohering particles forming muscular fibres of arteries, may be less firm, joined with irritability of the nervous powers,

powers, and, therefore, easier excited to action.

The muscular powers of the heart are often very lax and debilitated; the fibres composing this organ may be more irritable in proportion to the nervous irritability of other parts; or, the heart being over-excited by a sharp, debilitated, lax texture of the blood, its contractions and dilatations become rapid, though feebler. These causes conjointly produce the quick, low pulse in hectic and other low fevers, occasion little heats or flushings, universal or partial, by a rapider, though in general a weaker arterial action. The acrid blood having a stimulating quality similar to *artificial stimuli*, may act most powerfully in parts, which have already suffered distention, and accustomed to an inordinate excitement to action. Parts that have been once convulsed, on slight occasions are reconvulsed. Vessels once excited to a quicker action, which may be called a convulsed motion of their muscular coats, or muscles, from equivalent causes, are easily irritated to repeat increased action. This is illustrated by any slight colds producing in various persons their accustomed,

accustomed, though different effects; as to the pleuritic, a pain in the side; to the gouty or rheumatic, the gout and rheumatism; to others, inflammations of the eyes, pains of the head, teeth, cough, intestinal complaints, &c. &c.

The vessels of the brain, then, having already suffered distention with phlogisticated or dephlogisticated air, blood, or acrid fluids; the membranes and vessels may be re-irritated by viscid, or too lax a blood, acrimonies, &c.

It has been already observed, that the arterial coats of the arteries in the brain, are much thinner and weaker than in any other part of the body.

The first species may be called *tonical distention*, the second *atonical distention*. A great variety of diseases may be more accurately considered under these two distinctions.

The former comprehends all the degrees of the true *inflammatory diathesis*, in which the blood is viscid and of a firmer texture than usual, with stronger muscular action; the latter, *tonia*, debility, relaxation of the nervous system, &c.; in which the coherence of the blood and its texture are in various degrees laxer than usual, and the muscular powers weaker, though more irritable.

The *tonical distention* is most common to the florid, robust, and vigorous; the *atonical distention* to the pallid, debilitated, and relaxed: one arises from the muscular powers acting strongly on the blood; the other, from the force, quantity, and pressure of acrimonious fluids, against the sides of over-irritable vessels, deprived of sufficient strength to make the proper resistance.

The examples of both may be illustrated, by considering the distention of the vessels in the conjunctiva, during the ophthalmia.

In both the continual, and intermittent inflammation of the eyes, the vessels are preternaturally distended with red blood; yet the former requires bleedings, evacuations, and antiphlogistics; the latter, *bark* and *tonics*: the first is a *tonical distention*, the second an *atonical distention*; in both cases the vessels are dilated, but evidently from opposite causes.

Another illustration may be drawn from the differences between the true inflammatory tumors of sanguine temperaments, and the tumors in the *anasarca*. In the first, the cellular cavities of the *tela cellulosa* are filled
with

with red inflammatory blood, forced into the cells by the mouths of arteries accompanied with redness, pain, heat ; in the second, the cellulous cavities are filled with *cold serum*, with almost a transparent pallidity of the parts, not accompanied either by heat, redness, or pain. Nothing can be more contrary than these two causes giving rise to tumors ; yet nothing would be more dangerous than to bleed plentifully in the dropfy, and prescribe antiphlogistics ; or to invigorate the over-acting system by tonics, bark, steel, &c. in the inflammatory *diathesis*.

What cures the former, would do mischief in the latter. From visible and evident causes, effects, and the remedies which remove them, may inferences be drawn highly conducive to the cure of the diseased membranes, vascular structure of the brain, and all other membranous or vascular parts.

It is evident, that *tonical* or *atonical* inflammation of the eyes produce similar appearances and acute pains ; yet practitioners, from a want of this knowledge, have frequently failed in treating the ophthalmia. Let these doctrines be applied to the florid
and

and robust, or the pallid and weakened habits, and medical success will be more certain*.

In raving, or other species of *madness*, attended with *tonical distention*, the cure should consist, in repeated venæsection of the frontal, occipital, nasal, temporal, angular veins, or indeed the external jugulars, or in the arm, if punctures about the face should be objectionable.

The quantity of blood in the whole body requires reduction, to a considerable degree.

Drastic, evacuating cathartics of jalap, nitre, and cremor tartar, or any other effectual purge repeatedly prescribed, greatly assist in lessening the quantity of fluids.

Extreme dry diet: inanition of vessels, or of the cellulous cavities of the *tela cellulosa*, cannot long continue, unless great circumspection be observed in the quantity of liquids which the *insane* use.

Two ounces of tea, coffee, or milk, will be sufficient for breakfast, with three ounces of bread, and a small portion of butter.

At

* See treatise on Diseases of the eyes, &c.

At *dinner*, light food will be advantageous, with not above four ounces of liquid, whether table beer or water, and the same weight of bread.

Vegetables should be sparingly eaten, as they are apt to create flatulencies. It has been already mentioned, that flatus in the œsophagus, stomach, or intestines, may obstruct the return of blood, or irritate the brain, &c.

As substitutes for drink, tamarinds, roasted apples, or any fruits in season, are proper; if they should not create too much flatulency.

If the insane person should have been indulged with tea in the afternoon, not above two ounces of that liquor should be drank.

For *supper*, if any be eaten, a roasted apple and a little bread, with four ounces of the accustomed drink, will be sufficient, which may be water, or cold tea.

These remedies and regimen have performed several extraordinary cures in the true inflammation, distended vessels of the eyes, and other inflammations: from analogy, great advantages may be expected in maniacal affections;

fections ; wherein the vessels of the brain suffer from *tonical distention*.

The *medicines* most proper to act uniformly with such a regimen, are antiphlogistics ; nitre, camphor, neutral or alkaline salts, as the sal sodæ, sal tartari, sal polychrestus, &c., antimonial diaphoretics, and laxatives.

In a few recent maniacal affections, with *tonical distention*, I have successfully prescribed the following, or something similar :

No. 93. R. Camphor. gr. x. ad ʒj.

Amygd. decort. No. vj.

Sacch. alb. gr. xv. tere simul, deinde adde gradatim

Aq. pur. ʒij.

Sal nitr. ʒss. F. haustus, quartâ vel sextâ quâque horâ fumendus.

To keep the intestines constantly in a lax state :

No. 94. R. Elect. lenitiv. ʒiij.

Pulv. crem. tart. ʒss.

— jalap. aa. ʒij.

Syr. simp. q. s.

F. elect. cujus capiat Q. N. M. bis vel ter de die.

The *decoctum nitrosum* may accompany the antecedent regimen and medicines, *pro potu*

ordinario, but not to much exceed the quantities prescribed.

These, or similar plans, continued many months, would most probably cure madness, when principally arising from *tonical distention*.

The evacuating plentifully the fluids of the body, must certainly empty the vessels of the brain.

The emptying of vessels being continued for many months, or perhaps a year or two, by the *dry antiphlogistic* regimen, may permit the coats of the vessels to recover their former size; from the canals being continually emptier, and contracting and accommodating themselves to the force and quantity of the circulating fluids.

Nitre and *camphor* acting chiefly as sedatives, whose excellent qualities I have experienced near thirty years in the *phrenitis* and *delirium*, in inflammatory fevers, &c. are very proper to diminish arterial action, or by acting as antispasmodics on the nervous system, distracted by *tonical distention*.

Laxatives constantly taken, strike at the very root of repletion, by not suffering the lactea-

lacteal system to absorb much of what enters the stomach or intestines.

Profuse sweating is, likewise, amongst the evacuants of superabundant fluids.

If a diaphoresis should be thought necessary, one or two drams of the *solutio antimonialis* may be added to the draughts, so as never to excite vomiting.

SOLUTIO ANTIMONIALIS.

No. 95. R. antimon. tart. gr. j. solve terendo in
Aq. pur. ʒj.

In certain cases, wherein drink cannot be dispensed with, water acidulated with vinegar, with or without nitre, will be beneficial; as it is cooling, and *diminishes lacteal absorption*.

Large doses of vinegar, without any other remedy, have cured the mania*. Vinegar acts as a diaphoretic and refrigerent in many fevers; it diminishes nutrition by contracting the lacteal absorbent vessels, and perhaps

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would

* Bergius M. M. vegetabil. p. 164. De aceti vini egregiis virtutibus medicis bene differunt Jos. Benvenuti in Nov. Act. Ac. N. C. vol. ii. p. 132, seq.

De felici effectu aceti in mania larga dosi propinati, observationes pulchras edidit, Locher in Obs. Pract. p. 68.

would be very efficacious with water, as a drink for the insane, whose state of stomach or intestines do not contra-indicate the use of vegetable acid.

The *cure*, then, of insanity arising from, or accompanied with *tonical distention* of vessels, depends on *depletion*, the preventing *repletion* with the use of antiphlogistic regimen, and remedies.

The *cure* of insanity with *atonical distention*, pallor of countenance, or fallowness, debility in the moving muscular powers, or a depraved state of the blood, and, of course, all other human fluids, will be comprehended from its opposition to the former species.

The natural state of the patient's constitution should be considered, before the insanity commenced; to discover, whether the appearances of pallor, fallowness, or depraved blood pre-existed; if they did, with so much the more difficulty can the constitutional depravations be changed, either by diet or medicine.

The mania or melancholy appear both in the *tonical* and *atonical distention*, and sometimes are complicated, as far as I have been able

able to collect from those conversant in maniacal affections. The modes of cure must be complex, if disorders originate in compound causes.

In the *atonical distention* of vessels, after proper evacuants of the cathartic kind, tonics of bark, elixir of vitriol, cold bathing, and exercise, should be prescribed.

The diet may be equally of the *dry kind*, as in the *tonical distention*, but more nutritious, in order not only to change the lax texture of the fluids, but likewise to give more firmness to the solids. The blood being diminished, and the solids firmer; the distended vessels will gradually contract, and, in time, resist the milder impulse of healthier fluids*.

The seasons of the year and climate should be adverted to; for when the air be cold and humid, less drink is to be permitted, than in dry and sultry weather.

The excretions are likewise not to be neglected; for when they be copious, more drink is to be allowed, than when perspiration, urine, or feces be long retained, or evacuated

* Dr. Perfect, of Town Mall, Kent, has published some extraordinary cures of madness by the plans here recommended.

cuated in small quantities : but these circumstances are to be ascertained by the portion of the foods daily received.

It appears rational, in either species of madness, that in proportion to the force of the insanity, and length of time it has continued, a longer space of time is proportionably required for its removal. Vessels once distended, in some constitutions, may require months, or years perseverance, in the most rational plans, to obtain a cure, and defend the patient from a relapse *.

Acrimony, joined with distention of vessels, may be of various species, and may greatly augment,

* An officer, a most worthy man, who was in his Majesty's service with me in the French and Spanish war of 1761, to 1763, was apt to drink a cheerful glass, which always rendered him raving mad, and extremely troublesome to his brother officers: the delirium lasted two or three days; but I always cured him by acetum and water, bleeding, &c. He committed a rash action in one of these fits, which, when sober, made him determine never to drink any thing but water: this sudden change of diet soon produced anasarcaous swellings, but by chalybeates and a dry diet he was cured. It is now a period of 25 years or more since he commenced his water-drinking plan, which he has constantly continued without any return of madness, but apprehends, that spirituous liquors would soon produce a relapse. This great change of diet, though salutary to this individual patient, might be injurious, or fatal to many others.

augment, or continue the effects on the brain in madness.

The acrimony most prevailing, whether inflammatory, in which a greater quantity of coagulable lymph, or in any debility, in which a less portion of coagulable lymph, but a greater of serum, abound, should be considered.

The former requires evacuants, antiphlogistics, resolvers of the coagulable lymph, such as diluted alkaline salts, whether fossile or vegetable, as the *sal sodæ* or *sal tartari*, and similar remedies; the latter tonics.

The *scrophulous*, *venereal*, *gouty*, or *rheumatic* acrimony, is to be removed by antivenereal and metallic alteratives; amongst which, hydrargyrus and antimony joined, claim the preference as most safe and effectual. They may be repeatedly given, if well prepared, in small doses, after my manner, without disturbing the most delicate constitution. Prescriptions of this nature will be found in the former part of the treatise, as correctors of chronical acrimony, and cause-removing remedies.

The

The *pineal gland* has been found morbid, withered, indurated, and dry, in ideots; but as the absorbent lymphatic system is not discoverable in the brain, it is doubted, whether this affection could produce madness.

The gouty, rheumatic, scorbutic, or any other prevailing acrimony, should be treated according to circumstances. In all which cases, the blood must undergo a thorough change, or no success need be expected.

Accumulations of serum, or coagulations in the brain, being amongst the causes of insanity, their removal, if possible, should be effected: these congestions seldom happen, until the disorder has ravaged many years.

In conjunction with the methods already recommended, in *tonical* or *atonical distention*, profuse sweating, without much drinking, will be useful.

The vapor baths; or antimonial solution, so as not to vomit, or vinegar whey, or vinegar and water, or any other certain diaphoretic, continued many days, seem most likely to dislodge and evacuate the accumulated or offending matter.

If these should prove unsuccessful, then a long-continued mineral alterative course gives the best, though doubtful, prospects of relief.

Blisters to the head, neck, and back may be prescribed, cupping, issues, or setons.

The *coagulated serum* in the interstices of the brain, most likely, may be removed by a long perseverance in the more powerful metallic alteratives, nitre, and camphor*. This I mention from analogous reasoning. Glandular tumors, and many accumulations and obstructions have been discussed in other parts by these means, and it is rational to conclude, that the brain itself and membranes, suffering from such causes, may be relieved by similar remedies, given in the new manner†.

Exostoses

* See *treatise* on diseased breasts, and the new modes of administering *alteratives*, their manner of operating, powers, and various preparations in chronic diseases, king's evil, scirrhus, cancers, ulcers, and all depravities of the blood.

† Several new modes of preparing, and administering mineral alteratives, I have invented; which will be communicated in a small treatise on those subjects, in addition to those already published.

Exostoses pressing on the brain, or in the longitudinal sinus, &c. are incurable; supposing they were discoverable, unless their exact situations were known, and the trepan could be with safety performed, which hazardous operation is not applicable to the sinuses.

Preternatural dryness, or palsy of the vessels of the brain, which most commonly happen in the last stages of insanity, might be treated with diaphoretics, stimulants, or metallic alteratives long repeated; though little or no success may be expected. In difficult cases, however, it is more humane to try some probable remedy, rather than totally desert the patient; especially where no mischief can accrue from the attempt.

Indurations of the brain indicate a similar prognostic, and attempts to cure with the former.

The four last causes, namely, accumulations or coagulum of serum, bony concretions, preternatural dryness, or induration of the brain, are not discoverable during life. Dissections after death have shewn
their

their existence; therefore, to prevent them in life by the antecedent remedies, is, perhaps, the most that medicine, however skilfully applied, can rationally attempt.

Florid complexions with mania, and strong muscular powers; or where the brain acts with great energy and violence, require powerful evacuants and relaxants.

The *pale, melancholic, and debilitated*, tonics, cold bathing, &c. *

The *acrimonious*, alteratives of the mineral class, &c.

Opium, a noble remedy in many diseases, has been recommended in maniacal affections; to the use of which are the following objections:

1. It cannot cure madness, nay, it is known often to increase the paroxysms of furor.

2. Supposing it would allay irritation by diminishing the nervous influence and arterial

* I lately cured a young lady of a melancholic species of madness, by two grains of the *pulvis alterans* in a pill, three times a day, and large doses of nitre and camphor. The *pulvis alterans* is washed calomel, which has been 12 times sublimed, or six times sublimed, if the former be not procurable, and sulph. aurat. ant. p. æ. rubbed together for 10 or 12 hours.

terial action, yet these effects would be diametrically opposite to every rational attempt to remove the causes of the disease; for if madness be principally caused by fluids, over-distended vessels, and a tardier circulation through the veins; or from accumulations or stagnations in the brain; *opium*, by its sedative properties, would be more likely to *fix* the disorder in those parts, than *remove* it.

3. In perturbations of mind, amongst the nervous and easily irritable, *opium* produces wanderings of the fancy, delirium, and distracted pains of the head, similar to strong intoxicating liquors. If its sedative powers act on the nervous system, this checks the circulating arterial pulsations, by lessening the irritability of the heart, and muscular fibres of arteries, rendering their action slower; hence a greater quantity of blood may be collected and retained in the brain; which counteracting, as in madness, the nervous animal principle is productive of phrenzy, delirium, &c. in proportion as the party who takes *opium* is nervous, and irritable in mind and body.

4. It occasions costiveness, which in madness should always be prevented; there are likewise many other objections, not necessary to be recited on the present occasion.

5. *Opium*, therefore, as it cannot rationally be prescribed but as a mere palliative *pro tempore*; the effects of which, are never permanent, but by a repetition and increase of its dose; incurable cases excepted, it is excluded in treatment of madness, as contrary to the cure recommended.

This is not intended merely to palliate at the expence of future mischief; but to eradicate, if possible, the very causes of that melancholy disorder.

If allayers of irritation be thought necessary, camphor and valerian are most proper for the *tonical distention*; and the fetid gums, as asafoetida, myrrh, sagapenum, olibanum, &c. in *atonical distention*; which must be left to the skill and judgment of the prescriber.

Thus have been explained, and communicated, many new doctrines concerning madness, its causes, and cure. The *data* or *facts* on which these principles have been
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constructed, are anatomical inquiries, the most certain of all, and inductive reasonings from the morbid appearances of parts, constituting many new lights on insanity. Several methods of cure, hitherto unattempted, are drawn from the foregoing reasonings, and above thirty years constant and extensive experience and reflection on the powers of medicine in every branch of the art.

If the curative modes recommended should, as they must, in several instances fail; yet the causes of this failure, from contemplating what is here advanced, will be better understood, than heretofore. The next useful knowledge to curing diseases, is, to comprehend, and give the reasons, why cures should not be expected. This is the distinguishing mark of real medical learning, contrasted to rash boasting, and delusive empiricism.

One of the most ancient and most curious anecdotes concerning madness, is amongst the works of Hippocrates, who was called by the Abderites to come to Abdera to cure Democritus of insanity. The embassy and epistles on this famous occasion

demonstrate the origin of the doctrine of madness, as arising from *black bile* or *melancholy*, which opinion prevailed for above 2000 years.

The most considerable circumstance concerning Democritus is, the dissection of animals to discover the cause of madness. His countrymen, observing him to pursue these kind of studies, which were very extraordinary in those ages; retiring and living in sepulchres; engaged in the deepest contemplation; they concluded, he was in a state of melancholy madness. This is no uncommon compliment to all men of extraordinary genius, or who possess an elevation of sentiment above the generality of contemporaries.—Democritus continually laughing, on all occasions, whether serious or mirthful, confirmed their suspicions. For this reason, they sent Amelesagoras, one of their chief citizens, to *Hippocrates*, that most eminent physician at Cos, with the subsequent epistle. *

* “ *The Senate and People of Abdera to Hippocrates. Health.*

“ Our city, Hippocrates, is in very great danger, together with that person, who, we hoped, would ever have been its
greatest

greatest ornament. But now, (O ye gods!) it is much feared, that we shall only be capable of envying others, since he, who, through extraordinary study and learning, elevated the city, is fallen sick : so that it is much apprehended, if Democritus become mad, our city Abdera will be desolate : for, wholly forgetting himself, watching day and night, laughing at all things, small and great, and esteeming them as nothing ; he occupies, after this manner, his whole life. One marries a wife ; another trades ; another pleads ; another executes the office of magistrate ; goes on an embassy ; is chosen officer by the people ; is rejected ; falls sick ; is wounded ; dies : he laughs at all these : on beholding some to appear discontented ; others pleased. He likewise inquires, what is done in the infernal regions, writes his contemplations, and affirms the air to be full of images ; that he understands the language of birds, and often, rising in the night, sings to himself ; and says, that he sometimes travels into the infinity of things ; and asserts that there be innumerable Democritus's like him. Thus, together by the exercise of his mind, he destroys his body. These are the things we fear, Hippocrates ! these are those which deeply afflict us. Come quickly, therefore, and preserve us by your advice. Despise us not ; for we are not inconsiderable ; and if you restore him, we shall not fail, either of money or fame. Though you may prefer learning before wealth, yet accept of the latter, which shall be presented to you in great abundance.

To restore Democritus to health, if our city were all *gold*, we would give it. We think *our laws*, Hippocrates, are sick. Come then, thou best of men, and cure a most excellent person. Thou wilt not come as a physician, but as the founder of all Ionia, to encompass us with a sacred wall. Thou wilt not cure a man, but a city, a languishing senate ; and prevent its dissolution : thus becoming our law-giver, judge, magistrate, and preserver. To this purpose we expect thee, Hippocrates ; all these, if you come, you will be to us. It is not a single obscure city,
but

but all Greece, which implores thee to preserve this body of wisdom. Imagine that learning herself comes on this embassy to thee, begging that thou wilt free her from this danger. Wisdom is certainly allied to every one; but especially to us who live so near her. Know for certain, that future ages will acknowledge themselves obliged to thee, if thou desert not Democritus, for he is capable of communicating the truth to all mankind. Thou art allied to *Æsculapius* by thy family, and by thy profession. He is descended from the brother of Hercules, from whom came Abderus, whose name, as you have heard, our city bears; wherefore, even to him, will the cure of Democritus be acceptable. Since therefore, Hippocrates, you see a whole people, and a most excellent person falling into madness, hasten, we beseech you, to us. It is strange, that the exuberance of good should become a disease. Democritus, by how much he excelled others in acuteness of wisdom, is now in so much the more danger of being mad, whilst the common, unlearned people of Abdera enjoy their senses as formerly; and even they, who before were esteemed very foolish, are now most capable to discern the indisposition of the wisest person. Come, therefore, and bring along with you *Æsculapius*, and *Epione*, the daughter of Hercules, and her children, who went in the expedition against Troy: bring with you the receipts and remedies against sickness. The earth plentifully affords fruits, roots, herbs, and flowers to cure madness, and never more happily than now, for the recovery of Democritus. Farewell.

Hippocrates returned this answer.

Hippocrates to the Senate of Abdera. Health.

Your countryman Amelesagoras arrived at Cos that day on which was celebrated the assumption of the rod, which, as you know, is an annual assembly and solemn feast amongst us, held at a cypress tree, which is carried by those particularly consecrated

ted to the god. But finding by the words and countenance of Amelesagoras, that your business required much haste, I read your letter, and much wondered to find your city no less troubled for one man, than if the whole city were but one man. Happy indeed are the people, who know that *wise men are their defence; not walls and bulwarks, but the sound judgment of wise persons.* I conceive the arts are the dispensations of the gods, men the works of nature; and, be not angry, ye men of Abdera, if I conceive, that it is not you, but nature itself, which calls me to preserve her work, which is in such imminent danger of falling.

Wherefore, obeying that which is the invitation of nature and of the gods, rather than yours, I shall make haste to cure the sickness of Democritus, if it be a sickness; and not, as I hope, an error in you. It would be yet a greater testimony of your good-will, if you were troubled only on suspicion. Neither *nature* nor the *gods* have promised me any thing for my coming; and therefore, men of Abdera, do not you force any thing upon me; but suffer the works of a *liberal art* to be *free*. They who take *rewards*, compel sciences to *servitude*, and make them slaves, depriving them of their freedom. Besides, it is possible that such may dissemble in a great disease, and deny in a little; and when they have promised, *not come*, and *come*, when they are *not* sent for. Miserable indeed is human life; for that the insatiate desire of *wealth* continually invades it, as a winter wind! I wish that all physicians would join together to cure it of this disease, which is worse than madness; notwithstanding it is thought happy, but is indeed a pestilential sickness. All distempers of the mind are, as I conceive, high madness; for they excite, in the reason, strange opinions and fancies; which reason must be purified, and cured by virtue. As for me, if I at all made it my design to be rich, I would not, ye men Abdera, come to you for ten talents; but would rather have gone to the great king of Persia, where there are vast cities full of all kind of
wealth:

wealth : there I would have practised physic ; but I refused to cure a nation which are enemies to Greece ; and to the best of my power have myself opposed the barbarians. I thought it a dishonour to accept the wealth of a king, foe to our country, by which means I might become a destroyer of Greece. To get wealth, by all means, is not to be rich ; the principles of virtue are sacred and just. Do you not think it an equal offence to cure our enemies, as to take money for the cure of our friends ? But this is not my custom. I raise no wealth out of *sickness* ; nor did I wish, when I heard Democritus was mad, that it might prove so in reality : if he should be well, he is a friend ; if he happen to be cured of his sickness, more a friend. I understand that Democritus is a person of firm and settled parts, the ornament of your city *.

It is said that Hippocrates, in order to perform this voyage, sent to his friend Dionysius to take care of his family in his absence ; to Damagetus, that he would provide a ship ; to Crate-ras, that he would furnish him with medicaments.

How Hippocrates was received the next day at Abdera, he gives the following description to his friend Damagetus.

To Damagetus. Health.

It was as I conjectured, Damagetus ; Democritus is not mad ; but is extraordinary wise ; and hath taught us wisdom ; and with us, all men. I have sent back, with many thanks, the Æsculapian ship, on the prow whereof, to the picture of the sun,

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* Artexerxes offered an hundred talents to Hippocrates to come into Asia, and cure a pestilence, which desolated the provinces and army. The sum, in silver talents, is supposed to be 35,000l. in gold about 400,000l. This shews the great riches of the Asiatics, and the patriotic virtue of that noble Greek to resist the temptation, though the island was threatened with a dangerous war. Men have been less scrupulous in our refined times : whenever they have an opportunity of acquiring immense wealth, *per fas vel nefas*.

may be added health; for we made a quick voyage, and arrived the same day, that I had sent word I could be at Abdera. I found all the people flocking together at the gate, in expectation, as it appeared, of our coming; not only men, but women, the old and the young, and by Jove, the very children; so much were they affected at the madness of Democritus, who at that time was seriously employed in *philosophy*. When they perceived me, they seemed a little to be comforted, and to have some hope. Philopœmen offered to conduct me to my lodging, as all of them likewise desired; but I told them, Men of Abdera, I will do nothing before I have seen Democritus; which, they no sooner heard, than they applauded, rejoiced, and brought me immediately along the forum; some following, others running before, crying out, Great king, Jupiter, help! heal! I advised them to be comforted; for that it being the season of the Etesian winds, I was confident, there was not any sickness that would continue long: and, in saying this, on I proceeded. The house was not far, nor indeed the city; we went to it, being near the city walls, whither they conducted me quietly. Behind the tower there was a high hill, very full of tall poplars; from whence we beheld the habitation of Democritus. Democritus himself sat under a shady, but low plane-tree: in a thick grove, all alone, squalid, upon a seat of stone, wan and lean, with a long beard. At his right hand, a little brook ran down the hill; upon which was a temple consecrated, as it should seem, to the muses, encompassed with vines, which grew there spontaneously. He sat very composed, having a book on his knees, and round about him lay other books; with the bodies of many animals dissected. Sometimes he wrote hastily; sometimes paused, seeming to consider things within himself. Soon after he arose and walked, and intently examined the dissected creatures; then laid them down again, and returned to his seat. The Abderites, standing about me, and hardly *refraining from tears*, said, You see, Hippocrates, the life of Democritus, how mad he is; he knows neither what

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he would have, nor what he does. One of them, who would have given me a farther description of his madness, on a sudden fell a fobbing, and howled like a woman at the death of her son, and then began to lament like a traveller robbed of his goods; which Democritus hearing, sometimes smiled, sometimes laughed, not writing any longer, but shaking his head. Men of Abdera (said I) remain*here, while I approach nearer; that, by hearing him speak, and *observing his constitution*, I may judge clearly of the distemper: in so saying, I went gently down; the place was very steep, so that I could hardly keep myself from falling. When I came near, it happened that he was writing something, in a rapture, earnestly; whereupon I halted, waiting till he should give over. It was not long before this occurred; and, perceiving me advance towards him, said, Hail, stranger! I answered, Hail also, Democritus, the wisest of men! He, as I imagine, a little concerned that he had not saluted me by name, replied, What may I call you? for my ignorance of your name is the reason that I styled you stranger. My name, said I, is Hippocrates, the physician. You are, said he, the glory of the Æsculapians, the fame of whose worth, and knowledge in physic, is arrived as far as me. What business has brought you hither? but first sit down. This seat, you see, is pleasant, green, and soft; better than high thrones, which are subject to the envy of fortune.—When I was seated; is it a public or a private business, saith he, which brought you here? tell me freely, and we shall, to our utmost power, assist you. I answered, It is on your account that I came hither, to be acquainted with you, a wise person, the occasion being afforded me by an embassy from your country. He replied, then let my house entertain you. Having thus made trial of him several ways, and not perceiving any thing like insanity; You know, said I, Philopœmen, one of this town? Exceeding well, answered he, you mean the son of Damon: he lives near the Hermæan fountain. The same, replied I; he has been an old acquaintance, and kindly received me for his guest. But you, Democritus, I intreat to afford me a better entertainment; and,

and, first tell me, what it is that you are writing. He, after a little pause, answered, concerning *madness*. Good Jupiter, said I, you write seasonably against the city! What city, Hippocrates? answered he. I replied, that I only spoke at random. But what do you write of madness? What else said he, but explaining what it is, how it comes to be generated in man, and how it may be cured. These animals which you behold, I have dissected for that purpose; not as hating the works of the gods, but to make enquiry into the nature and seat of *choler*. You know, where *bile* abounds too much, it most commonly causes madness in men: it is in every person; but in some less, in others more: its excess causeth diseases, being a matter partly good, partly bad. By Jove, said I, Democritus, you speak truly and wisely, and I judge you happy, who can enjoy a serenity I cannot partake of. But why cannot you? saith he. I answered, Because either travels, children, or estate, sicknesses, deaths, servants, marriages, or the like, interrupt my repose. Hereupon he fell into his usual passion, and laughed for some time exceedingly, suspending discourse. Why, said I, Democritus, do you laugh? Whether is it, that I have spoken well or ill? Upon this, he laughed more than before, which the Abderites, who stood a distance off, perceiving, some shook their heads, others beat their foreheads, others tore their hair; for, as they afterwards said, they observed him to laugh at that time more than ever he had before. Democritus, thou best of wise men, replied I, I desire to know the reason of this passion? What have I said that seems ridiculous? for if it prove such, I may reform it; but if otherwise, you may desist from this unreasonable laughter. By Hercules, said he, if you can convince me, Hippocrates, you will effect a cure greater than any you have yet performed. Wherefore, said I, should you not be convinced? Know you not, that you act absurdly in laughing at the death of a man, sickness, madness, murder, or any thing worse than these; and on the other side, on marriages, assemblies, the birth of infants, solemn rites, magistracies, honours,

nors, and, generally, at every thing that is nominated good? Those things which deserve to be pitied excite laughter; and those, for which we should rejoice, you laugh at also; therefore you appear not to place any difference between good and evil. Then he, You speak well, Hippocrates! but you are not yet acquainted with the reason of my laughter, which, when you know, I am confident you will prefer to the cause for which you travelled here, and convey it as a medicine to your own country, thereby improving both yourself and others. In requital, perhaps you will think yourself obliged to teach me physic; when you shall understand, what trouble all men take for things that deserve not labor, things of no value, and consume their lives unprofitably in actions that deserve nothing but ridicule. What, said I, is all the world sick, and knows it not? If so, they can send no where to solicit help: for what is beyond the world? He replied, There are infinite worlds, O Hippocrates; have not so mean an idea of the riches of nature! Teach me this, said I, Democritus, some other time; for I am afraid, if you begin to talk of this infinity, that you will fall again into a fit of laughter. But now inform me the reason, that you laugh at the accidents of life. Then looking stedfastly upon me, You think, saith he, there are two circumstances occasioning my laughter; good and ill; whereas indeed I laugh but on one principle. Man, full of folly, destitute of upright actions, playing the infant in all his designs, undergoing *great toils for little benefit*, travelling to the end of the earth, and sounding bottomless depths to get silver and gold; never ceasing to accumulate, and with an increase of store, increasing endless troubles; lest, if he should want, he might be thought miserable. He digs into the bowels of the earth by the hands of slaves; whereof some are buried by the earth falling on them; others dwell under ground, as though it were their native soil, searching for gold and silver, sifting one sand from another; cutting and tearing their mother earth, which they both admire and trample. How ridiculous is this, to love that part
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of the *earth* which lies *hid*, and condemn that which *lies open* to them! Some buy dogs, others horses; some delight in having large possessions, which they may call their own, and would command multitudes, when they are not able to command themselves. They marry wives, and in a short time are divorced; they love, and then hate; they take delight in children, and when they are grown up, disinherit them; they war, and despise peace: they conspire against kings, murder men, dig the earth to find silver, with the silver they have found they buy land; what the land which they have bought yields, of corn or fruits, they sell, and receive silver again. To what changes and misfortunes are they subject! When they possess not riches, they desire them, when they are acquired, they are hid, or scattered. I laugh at their ill-designed projects, I laugh at their misfortunes. They violate the laws of truth, through contention and enmity with one another; brethren, parents, and countrymen, fight and kill each other for those possessions, of which, after death, none can be possessors. They pursue an unjust course of life; they despise the poverty of their friends and country; mean and inanimate things they account for riches: they will part with a whole estate to purchase statues, because the statue seems to speak; but those who speak indeed, they hate. They affect things difficult to be acquired; they who dwell in the continent, covet the productions of the sea; they who inhabit islands, those of the continent; perverting all things to their own depraved desires. In war they praise valor, while they are daily subdued by luxury, avarice, and all passions; and in the course of his life every man is a *Thersites*. Why did you, Hippocrates, reprove my laughter? No man laughs at his own insanity, but at the madness of another. They who think themselves to be sober, laugh at those who appear to them to be drunk; some laugh at lovers, whilst they themselves are sick of a worse distemper; some at those who travel by sea, others at those who follow husbandry; for men do not agree with one
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another,

another, neither in arts, nor actions. All this said I, Democritus, is true; neither is there any argument that may better prove the unhappy state of man; but these actions are caused through necessity, by reason of the government of families; the building of ships, and other civil offices, wherein a man must necessarily be employed; for nature did not produce him to be idle. Again, height of ambition causes several men to deviate from the paths of justice; they aim at all things, as if there were nothing immoral; not being able to foresee the darkness that attends their futile attempts. For, Democritus, what man is there, that, when he marries, thinks of divorce or death? Who is there, who, while he educates children, thinks of losing them? The like on husbandry, navigation, dominion, and all other offices of life. No man foresees, that his expectations may prove abortive; but every one flatters himself with hopes of good success, and does not anticipate the worst. Why therefore is this ridiculous? Democritus replied, you are yet far from understanding me, Hippocrates, neither perceive, through want of knowledge, the bounds of serenity and perturbation; for if they ordered these things prudently, they might easily discharge their duty, and evade my laughter; whereas now, they are blind to the offices of life, and with minds void of reason, are carried away by inordinate appetites. It were enough to make them wise, if they would but consider the mutability of things, how they wheel about continually, and are suddenly changed; whereas they, looking upon these as firm and settled, fall into many inconveniences and troubles, and correcting things injurious, they tumble headlong into many miseries. But if a man would rightly consider, and weigh in his mind all things that he attempts, understanding himself, and his own abilities, he would not let his desires run to infinite, but follow nature, out of whose store all are nourished and supplied. As a corpulent body is in the greatest danger of sickness, so a high estate is in greatest danger of falling. Great minds are known in extremities. Some
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there are, who, taking no warning by that which happeneth to others, perish by their own ill actions; minding things manifest, no more than though they were not manifest; whereas they have many precedents to guide their life, of things effected and not effected, by which we ought to foresee the future. This is the occasion of my laughing. Foolish men, punished by their own wickedness, covetousness, lust, enmity, treachery, conspiracy, envy: it is a hard thing to give a name to many of these evils, they being innumerable, and practised so privately. Their behaviour as to virtue is still worse; they affect lies, they follow pleasure, disobeying the laws: my laughter condemns their inconsiderateness, who neither see nor hear; whereas the sense of man only, of all others, is able to foresee future events. They hate all things, and then again apply themselves to them; they condemn navigation, and yet sail on the sea; despise husbandry, then fall a plowing; put away their wives, then marry others; they bury their children, beget more, and bring them up; they wish to live long, and when old age comes, are grieved; never remaining constant in any state whatever. Kings and princes commend a private life; private persons a public. He that rules a state, praises the tradesman's life, as free from danger; the tradesman applauds the courtier, as full of honor and power; for they pursue not the direct, true, and smooth way of virtue, in which none of them will endure to walk, but crooked and rough paths. Some tumble down, others run themselves out of breath, to overtake superiors in fortune or reputation. Some are guided by incontinence to the beds of their neighbours; others are sick of a consumption, through insatiate avarice. Some, by ambition, are carried up into the air, and through their own wickedness, thrown down headlong. They pull down, and then they build; they do good, and oblige others, then, repenting, break the laws of friendship, commit wrong, fall at enmity, and fight with their nearest relations; of all which,
avarice

avarice is the cause. Wherein do they differ from children that play, whose minds, being void of judgment, are pleased with every thing they meet with? In their desires they differ not much from brute beasts; only the beasts are contented with that which is enough. What lion is there that hides gold under ground? What bull fights for more than he needs? What leopard is insatiably greedy? The wolf, when he has devoured as much as serves for his necessary nourishment, gives over; but whole days and nights put together are not sufficient for men to feast and riot. All brute beasts have their yearly set times for coition, and then leave; but man is continually transported with lust. How can I, Hippocrates, but laugh at him that laments the loss of his goods? and especially if, without regard to dangers, he travels over precipices and on the sea, how can I forbear to laugh exceedingly? Shall I not laugh at him whose ship founders, by lading it with rich merchandize, and then blames the sea for sinking it? If I seem injudiciously to laugh at these, there is, at least, something that deserves to be lamented. These stand not in need of the physic nor medicines of your predecessor, Æsculapius, who, preserving men, was struck dead by thunder*. Do you not see, that I am also partly guilty of insanity, who, to inquire into the causes of madness, dissect these several living animals, whereas, indeed, I ought to search for it in man himself? Do you not see that the whole world is full of inhumanity, stuffed, as it were, with infinite hatred against man himself? Man is from his very birth a disease: when first born he is useless, and sues for relief from others: when he grows up, foolish, wanting instruction: at full growth wicked; in his decaying age miserable, toiling, throughout all his time, imprudently. Such he is from the womb. Some being of furious, angry dis-

* Æsculapius, the fabulous histories inform us, was destroyed by thunder.

dispositions, are continually engaged in quarrels; others in adulteries and rapes; some in drunkenness; others in covering the goods of their neighbours; others in consuming their own: so that if the walls of all houses were transparent, we should behold some eating; others vomiting; others wrongfully beaten; others mixing poisons; others conspiring; others casting accounts; others rejoicing; others weeping; others plotting against their friends; others raving mad with ambition. Some actions there are more remote within the soul. Some young; some old; suing; denying; poor; rich; starved; luxurious; sordid; imprisoned; murdered; buried; despising what they possess, and aiming at what they have not; impudent; niggardly; insatiate; vain-glorious. Some setting their minds on horses; others on men; others on dogs; others on stone and wood. Some affect embassy; others the command of armies; others sacred rites. Some wear crowns; others armor. Some fight at sea; others at land; others till the ground. Some plead in the forum; others act on the theatre: every one is differently employed. Some embrace pleasure and intemperance; others rest and idleness. How then, can I but laugh at their conduct? It is to be feared that your art of physic will not please them; for intemperance produces forwardness, they esteem wisdom, madness; and I doubt much, that many things in your art are openly reproached, either through envy or ingratitude: for the sick, when they are cured, ascribe the cause either to the gods or chance. Many are of such a disposition as to hate those who have obliged them, and can hardly refrain from being angry if they have occasion for assistance. Numbers also, being themselves *ignorant*, prefer *ignorance* before *science*. *Fools* give their suffrages; neither will the *sick* commend; nor they, who are of the *same art*, give their approbation through *envy*. It cannot be, but you must have suffered injury of this kind; for I know very well, that you have often been treated unworthily, and reproached by *malice* and *envy*. There is no know-

knowledge, nor attestation of truth. In saying this, he smiled, and seemed to put on a divine look, casting off that which he had before. Then I said, excellent Democritus, I shall carry back with me to *Cos* the great gifts of your hospitality, full of your wise instructions. I shall return to proclaim your praises; for that you have made inquiry into human nature, and understood it. I shall go away cured in mind, it being requisite, that I take care for the cure of the bodies of others. To-morrow, and afterwards, we shall meet here again: which said, I arose, and he readily accompanied me. A man came to him, from whence I know not, to whom he delivered his books. When I came to the Abderites, who all this while staid for me—Men of Abdera, said I, I return you many thanks for the message you sent; for I have seen Democritus, the wisest of men, who only is able to reduce men to sound understanding. This, Damagetus, is all I have, with pleasure, to relate to you concerning Democritus. Farewell!

These epistles, translated from the Greek of Hippocrates, give an admirable description of that most excellent of men, Hippocrates, whose noble soul exerted its utmost efforts to relieve the afflicted, and prove serviceable to society:—an example well worthy of imitation—an example which, if followed, must raise medical reputation above all the detraction and calumnies of malicious enemies. Great, however, as Hippocrates was, his superior excellence excited envy among physicians of inferior abilities: these frequently compose the majority
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in most liberal professions. Great minds only can pursue noble objects, and attempt actions above the vulgar comprehension, but little minds industriously employ their whole genius in fervilely adapting themselves to the common prejudices of the multitude. The superior excellence of the first are only known to the discerning few: the others, from similarity of souls, and leisure for stratagem, impose on the major part of mankind.

These epistles, likewise, contain a description of the luxury of the inhabitants of Abdera, and mankind in general in those ages. The Greeks, about the same period, were in a most voluptuous, lethargic, and corrupt state, which soon terminated in the total subversion of their liberties: for Philip, the Macedonian prince, in proportion as they were indolent and credulous, became vigilant and enterprising, availing himself of the depravity and corruption of the times. He bribed the principal inhabitants and senators of the different states, and by slow, imperceptible degrees, planned their overthrow. This was afterwards accomplished by his son

son and successor, Alexander. The most excellent and powerful orator, Demosthenes, could scarcely rouse a spirit of opposition in the Athenians; nor could they be excited to any noble or patriotic action, to retard the growing power of Philip. A fatal supineness, and slothful security had seized their souls, and benumbed every enterprising faculty; thus they fell a sacrifice to the ambitious conqueror, and illustrious protector of Aristotle and science.

ON

ON SUICIDE.

SUICIDE is a voluntary and self-deprivation of life, or the commission of self-murder.*

In a religious, moral, or political view, any human being destroying himself is criminal.

1. In a *religious view*, it is contrary to the divine precepts of Christianity, and therefore criminal.

2. In a *political view*, it robs mankind of those services, whether corporeal or mental, that society at large has a right to expect and demand of each individual forming a part of the whole. Suicide is a crime, then, where the duties of every individual are politically considered.

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* Suicide, in Greek, is called *αυτοχειρία*, which is very expressive of the action, for it comprehends self-killing by one's own hands.

3. In a *moral view*, it is an heinous crime, as far as it relates to the duties a man owes to his relations or friends through life : it is a dissolution of all those ties by which men are bound either by interest or affections. No human being can exist without the assistance of some of his own species ; nor does any person live whose corporeal or mental services, either for labor or advice, may not become useful. Men receive, and they are bound, by family affections or gratitude, to give protection, and distribute favors or assistance. He who deprives society of his services, either in a political or moral view, therefore, must violate those obligations he owes to his country, family, or friends, and becomes immoral and criminal by the act of suicide.

According to the principles of the Christian religion, political or private policy, and the legal institutions of most European nations, suicide is considered criminal.

Elegant writers have appeared in defence of suicide, and have produced many specious reasons in its favor, without solid argument.—*Rousseau* says, “ To seek good, and avoid
“ evil, in that which does not injure another,

“ is a right of nature. When life is an evil
“ to us, and a good to no other person, we
“ may then get rid of it. If there be in the
“ world a maxim evident and certain, I think
“ it is this ; and if it is overturned, there is
“ no human action which cannot be made
“ out to be a crime !”

1. If a man robs society of his present, or the prospects of his future services, he injures that society : it is immoral to commit injuries.

2. Though life may be an evil to a disappointed, miserable man, yet no man can judge how serviceable his present or continued life may be to other persons ; therefore he has *no right to get rid of it.*

No human being can exist, who may not, in some measure, be useful ; therefore M. *Rousseau's* supposition, that any one can live without being beneficial, or probably so, to some other person, is visionary, and cannot possibly happen.

3. Men cannot live without the necessaries of life, food, raiment, and lodging. In a commercial view, other persons must be benefited by the consumption of every individual,

dual, consequently no person can live without being serviceable to some person in society: he must, in some measure, supply his own, and the wants of others. These reciprocal services or benefits to society are lost by suicide.

4. There is scarce any person without relations, as father, mother, sisters, brothers, cousins, or friends, to whom mutual benefits are given and received through life; of all which death is the total deprivation. Is life *no good to others* in this view?

Do not surviving relations or friends suffer great misery of mind from losing, by death, whomsoever they esteem? how much more is the mind distressed if suicide robs us of affectionate friends? Is it not ungrateful, nay barbarous, to wound the feelings of our warmest friends, by an action which is not only considered horrid, but criminal by divine and civil laws.

The sincerity of the vindicators of suicide is best determined by their own practice: for there is no proof of any one of these celebrated philosophers committing the horrid ac-

tion : they have endeavoured to praise a crime which they had not resolution to execute.

Were suicide much to prevail, it might occasion depopulation ; therefore heavy fines and punishments, either to prevent or deter mankind from suicide, have been generally adopted in all civilised countries. Whether confiscation of property or estate, by which heirs descendant are deprived of the fortune of their ancestors, is not too severe, should be considered by the judicious legislator. In one view, it appears highly unjust that an innocent descendant should be punished for the crime of an insane ancestor : in another view, it may seem necessary to deter mankind from such actions, and induce families to prevent their commission by an active vigilance.

The *remote causes* of suicide are similar to those of insanity — perturbations of mind, or corporeal acrimony.

The more *immediate causes* are, paying too great a respect for the opinion of the world, or not being sufficiently courageous or collected in mind to bear misfortunes *æquo animo*.

An impatient, ambitious, or boisterous temper, that will not submit to common reason, or comply with circumstances of time and situation in life; warm, unreasonable expectations damped by cruel disappointment; imaginary disrespect received, timidity, and despair, have all terminated in suicide. In none of these instances can the party be considered as composed in mind. In every violent passion there is a certain degree of madness.

The mind, dwelling on one subject, in which is perceived calamity, preternaturally excites the passions. When the misery of the mind appears greater than the present or future advantages of life, a sufficient resolution is summoned up to destroy that life, which is become insupportable.

It has been considered courageous for a miserable man to determine not to live; but if the subject be examined by just reasoning, self-murder may appear cowardice. In proportion to human misfortunes, human exertions and courage are required. Whoever deserts his friend in danger, is stigmatised with the opprobrium of cowardice; but how much

much more pusillanimous is it to desert himself or family?

+ The example of Cato is applauded by some writers as a proof of great magnanimity.

20 The action was the reverse; it was the effect of pride and timidity. If ever Rome required his experience and patriotic counsels, it was at that very period. To desert the duty Rome had a right to demand, by a voluntary death, was the meanest conduct in his character. It stamped an indelible stain on his reputation, which, only a supposition that his intellectuals were impaired, could rationally excuse. It was not the virtuous Cato, who had stemmed the torrent of intentional tyranny, who had spiritedly crushed the Catiline conspiracy, who had given the most noble examples of virtuous resolution and rectitude in moral conduct; but the enfeebled Cato, sinking under an accumulation of evils, whose soul was depressed with suspense and distracting passions, waiting an opportunity for revenge, or preparing to finish his life, on disappointment. If such examples were admitted magnanimous, in every serious
22 quarrel, or war, where none can command success,

success, it might be laudable to commit suicide, the consequences of which are obvious.

On such occasions countries would lose their bravest generals; private families their noblest and most experienced supporters.

“ If I cannot acquire what I wish,” says Cato, “ I will kill myself, I will not live to
 “ grace Cæsar’s triumph, though I know
 “ Cæsar to be the most generous and cle-
 “ ment of conquerors. I cannot submit to
 “ receive Cæsar’s favors; my pride is wound-
 “ ed; my fears destroy all tranquillity; my
 “ body is sinking under adversity. I will
 “ not dedicate my services to my distressed
 “ country, under the auspices of successful
 “ Cæsar: I will plunge a sword into my
 “ bosom, and commit an injustice to myself,
 “ which, through a long life, I never com-
 “ mitted to others. From the uniformity
 “ of my former patriotic character, writers,
 “ without deep reasoning, will paint this
 “ concluding action in glowing colors, they
 “ will give additional lustre to an immor-
 “ tal reputation.” Such, I conceive, were
 the

the secret springs of action in Cato's mind; such were the contending passions which excited the delirium: it was not the placid, judicious Cato of former years; but the depressed Cato, *impos mentis*, committing a rash action contrary to all his former great reasoning and virtuous persevering conduct. It was, in fact, Cato's act of insanity: it was not dying to serve the country, but to effectually rob Cæsar and the country of his eminent services: it therefore appears more the effect of private pique and despondency, than a demonstration of public virtue or courage. Had all others, concerned in that civil war, followed this extraordinary example, the country would have been robbed of many of its brightest and surviving ornaments. Cato could not say with Horace,

“*Dulce & decorum est pro patria mori;*”

for, it was not for the country, but the gratification of a selfish caprice, a personal resentment and hatred to Cæsar and his power. Had Cæsar attacked the city while Cato enjoyed a vigor of mind, body, and popularity; when the citizens were better disciplined,

disciplined, and less corrupt, he would have despised such inglorious conduct: he would rather have hoped for some future opportunity to dispel the dark clouds overwhelming the distracted country. 27

Physicians have frequent opportunities of observing the diminution of human courage and wisdom from long-continued misfortunes, or bodily infirmities. The most lively, spirited, and enterprising, have become depressed from reiterated disappointment: cowardice and despair have succeeded to the most unquestionable bravery and ambition. The man is then changed; his blood is changed; and with these his former sentiments. 28 The timidity is no longer Cato's; but the miserable, *debilitated body* of Cato, without that *vigorous soul* that so eminently distinguished, on other important occasions, this excellent and divine patriot. +

The example of *Lucretia* merits admiration and compassion; of *Cleopatra*, as a female, pity: but *Marcus Curtius*, who voluntarily killed himself to liberate his country from famine and pestilence, justly merits the praises

praises of all succeeding ages; as a real patriot, he deserves immortality.

It is certainly clear, that when a man meditates how he shall destroy life, or dwells unreasonably on any misfortune, he is no longer *compos mentis*; the commission, therefore, of suicide, must, necessarily, be always considered an act of *insanity*.

This is contradicted by some, from observing, that previous to suicide, many arrange their temporal affairs, write sensible letters to their friends, talk, and appear as rational persons, except on the subject, whether concealed or known, which occupies and attracts the attention, absorbing all the other mental powers.

On the common occurrences of life, if the intender of suicide talks and acts rationally, yet if in any one point he is irrational, and urged by that single instance of irrationality to be the perpetrator and executioner of suicide, it must be admitted, that though he was sensible and composed in most instances, yet in one thing his mind was urgently discomposed. This discomposure, when

when it can induce a man to hurt himself, or destroy life, cannot be considered the act of a rational being, but of evident madness.

All mankind pursue, to the best of their judgment, what is thought real or imaginary good, and naturally, from experience, example, or reflection, avoid whatever is considered evil.

+ Pain is an evil; death the deprivation of every hope or comfort in this life. No man in his senses will burn, drown, or stab himself; for these all produce what are called evils: neither can any of these actions be executed without the probability of pain in the convulsive action, or struggles of death. As no rational being will voluntarily give himself pain, or deprive himself of life, which certainly, while human beings preserve their senses, must be acknowledged evils; it follows, that every one who commits suicide is indubitably *non compos mentis*, not able to reason justly; but is under the influence of false images of the mind, and therefore *suicide should ever be considered an act of insanity.* +

Whether

Whether the causes which lead to suicide arise from acrimony of the blood producing false images ; changes of the seasons, as in the dreary month of *November* ; imaginary or real misfortunes occupying the mind ; the treatment should be similar to that of insanity.

The mind should be diverted by music, conversation, &c. ; the body exercised. Evacuants, antiphlogistics, bleeding, &c., to the plethoric and florid, tonics to the debilitated, antispasmodics to the irritable nervous, and mineral alteratives to the obstructed, should be, according to circumstances, prescribed. Wherever there may be the least reason to suspect intended suicide, it is best to secure the life of the patient by a rigid watchfulness over all his actions. All instruments, weapons, or means of executing such impious and irrational intentions, should be removed.

The body should be sweated with exercise or antimonial diaphoretics, and the patient kept constantly in bed. The commission of the mischief may be thus prevented. If these
direc-

directions be thought insufficient, it is better to commit the intender of suicide to the persons who receive the insane into their houses; for the cunning contrivances of persons, in such a distracted state of mind, are astonishing: they often elude the greatest vigilance, and will affect to be perfectly sensible, but a few moments before they commit these rash insane actions.

This short doctrine concerning suicide shall conclude with an anecdote of the celebrated *M. de Voltaire*.—An English gentleman of fortune had been sitting many hours with this great wit and censurer of human character. They discoursed chiefly on the depravity of human nature; on tyranny and oppression of princes; poverty, wretchedness, and misfortunes; the pain of disease, particularly the gout, gravel, and stone. They worked up each other to such a pitch on the evils of life, that they proposed next morning to commit suicide together. The Englishman arose, and expected *M. de Voltaire* to perform his promise, to whom the

genius gravely replied, "*Ab ! Monsieur, par-
" donnezmoi, j'ai bien dormi, mon lavement a
" bien operé, et le soleil est tout-à-fait clair
" aujourd'hui.*"

The customs, religious ceremonies, and superstition of some of the Eastern countries, countenance a voluntary death ; and women who did not courageously suffer themselves to be burnt on a funeral pile, were considered infamous. This horrid act the priesthood, for reasons best known to themselves, frequently advised, as the most compendious way of being again happy with those, we most loved in this sublunary globe. Whether this arose most from the artifices of the priests, or the false pride, enthusiasm, and folly of the people, is difficult to determine ; but this is not the suicide arising from the causes already enumerated, but a religious suicide.

Though the rules for ascertaining whether any person who may have lost his senses, and may be either phrenetic, delirious, or insane, have been long established; yet, for want of true definitions in the medical mind, but, more commonly, amongst those who have not studied medicine, these three diseases, different in their nature as light and darkness, have been frequently confounded with one another: in consequence of which, what are actually *phrenitis*, or *delirium*, have been pronounced insanity; and, on the contrary, insanity has been called phrensy of the brain, or delirium.

The distinctions and true definitions of these diseases, though apparently the same to persons not acquainted with the laws of medicine, are all different in their causes, effects, duration, and termination, as hath been observed.

Phrenitis, or phrensy, or what is vulgarly called a brain-fever, is an inflammation of the brain, short in duration, and always accompanied with fever, and loss of reason.

Delirium is a *symptom* of many *fevers*, in which the patient loses reason, raves, and talks incoherent; it is not of long duration, and is either, with the fever cured, or proves fatal, or ends in mental alienation.

Madness is loss of reason, *without fever*, continuing for weeks, months, years, and often during life, and is not attended with danger, nor apprehension of death; therefore, called a *chronic*, not an acute, disorder.

These precise definitions are well known to all learned, scientific, physicians, and they have been ascertained and determined, beyond the possibility of refutation, in my treatises on *fevers*, the *putrid* and *nervous phrensy*, *madness*, and *truth vindicated*, in the second volume of the Rational and Improved Practice of Physic, published many years ago, but, first in a Treatise on Female and Nervous Diseases, now out of print.

The chief intentions, however, of this treatise are to demonstrate to all rational and learned physicians the irrationality of some received modes of treating madness.

Vomiting, or Exciting Nausea.

This practice is to be found recommended by almost all authors, and is now frequently and repeatedly prescribed; though a more erroneous, nor a more dangerous doctrine cannot exist, for procuring the durability of madness, or, in
confirming

confirming the dreadful disease, that it is intended to remove. By destroying nutrition they may produce swelled legs and dropsy, &c.

Proved by Dissections after Death and Physiological Reasoning on Facts.

Numerous dissections, made by myself, and others, after death of persons who have died phrenetic, delirious, or mad, shew, amongst other appearances, a superabundance of humidity, or watery accumulation in the brain, or between the arachnoid membrane and pia mater.

2. Over distension and fulness of the vessels.
3. Increased vascularity of red vessels in the dura, pia mater, and in most parts of the brain.
4. Tumefactions, and various other appearances and congestions.

Reasoning from these Facts.

1. It has been clearly proved, that mental perturbation, and various affections of the mind, as anger, grief, pride, disappointed revenge, and a number of human passions determine a great quantity of blood to the head by the arteries, especially by the moistening exhalents.

2. If the inhalents, or the absorbents, of the brain do not act promptly, and keep exact pace

with the effusing and moistening exhalent arteries, and absorb, or inhale, with equal alacrity, all the superfluous moisture, and convey it back to the blood, accumulation of fluid and congestions in the brain must be the consequence, and this, dissections, in eight cases out of ten, fully prove.

3. Every violent effort that can send an increased quantity of blood to the brain, as sneezing, coughing, &c. is sensibly felt; but if nausea and vomiting be excited, by emetics, frequently, where there was already too great a quantity of blood in the brain, and a constant determination of blood from mental perturbation, in proportion to the violence of the passion predominating, is there not even great risk of forcing a blood-vessel to burst, and destroying the unfortunate mad patient, by apoplexy? This circumstance has happened.

4. But supposing emetics in nauseating or vomiting doses be frequently administered, must it not appear clear to the mind of every reflecting physician, that every *time* an *emetic* may be *administered*, the brain, already surcharged with fluid, or water, must receive, by every additional vomiting effort, some increased distension,

or turgency in the tardy venal system, or twenty-two venal sinuses.

5. These facts, repeated dissections have fully proved after death.

Conclusions from the foregoing Facts.

1. Where a direct tendency of blood to the brain produces disease, every means should be practised to keep the blood-vessels of the brain from being overfilled.

2. Vomits force an immense quantity of blood to the brain, as is evident by the redness of the face, sensations and pain of the head, &c. &c.

3 Therefore, as continued fulness in the vessels of the brain, and serous effusion in the very substance of the brain, are the principal causes of many mental perturbations, every thing that can increase the cause, which *vomits* do, must be highly hazardous, injurious, irrational, and, most probably, they give permanency to madness, which, if otherwise treated, might be often cured, as hath been amply demonstrated, in repeated instances, at the St. Marylebone infirmary, and amongst the numerous insane which my worthy and respectable colleagues, and myself,

have attended at the receptacle for these unfortunate, miserable beings. Indeed, in the course of *three years*, we have been able to discharge between thirty and forty insane patients, and out of that number, not above three or four have relapsed. The humanity and liberality of the noblemen and gentlemen, the directors of the poor of St. Marylebone, are highly laudable, and it must be acknowledged, that the humane business of that large and extensive, opulent quarter of London, is conducted with an energy and benevolence that does the highest honour to humanity.

Objections to Opium, Hemlock, Henbane, and Digitalis, &c. &c.

It is with the greatest respect to the profession that some observations are necessarily delivered on the extensive abuse of *narcotics*.

There are none in use now that have not been tried in former ages, have been found wanting, have been rejected, and become obsolete, except opium. This has always preserved its reputation; because, it has always answered the anodyne purpose for which it has been prescribed

* It is remarkable, that before we attended the insane, it rarely happened, even for years, that any were cured, or discharged.

with

with less danger or inconvenience than any other. Its use and abuse is well understood by all learned and experienced physicians.

The promoters for the abuse of poisonous narcotics, have taken up the false and visionary conceits of Dr. Brown, and the mischiefs that have ensued are incalculable. Palliation of symptoms is not radically curing diseases, and the physician, who only palliates, when he may, and ought, to remove the causes of disease, neither acts rationally, nor with integrity.

Opium, or other narcotics, given to the insane] tends to *fix* the melancholy disease. It checks the natural fecal evacuations, inspissates the blood, retards, in certain degrees, the animal, vital, and natural functions, and cannot promote the absorption of those superfluous fluids, that overload the brain, and its vessels; and, which, more than any other causes, are the true sources of mental perturbation. The soul cannot act rationally, consistently, and with clear perception, reasoning, and judgment, when the very principal function, on which all true reason depends is in a morbid state. This, the anatomical enquiries of my whole life fully prove; near fifty years of which have been unremittingly directed to make medical improvements from those

only true sources of intelligence—dissections after death. How far I have succeeded must be left to the determination of those, who will candidly examine the Latin and English edition of *Schola Medicinæ*; the *Rational Practice of Physic*; and, by those learned auditors, who have honoured my present medical lectures, *excluding false systems*, with their presence and protection.

Therefore, from dissections *post motem*, facts, reasoning, long experience, and observation resulting from extensive practice, it is asserted, that vomits, opiates, and many other remedies given to the insane, frequently do more mischief than is apprehended; and, instead of removing madness, or rather its causes, fix and confirm the disease; so that the most judicious application of medicine, afterwards, cannot correct the errors arising from fallacious doctrines; and thus, many unfortunate insane are lost to their affectionate friends and society, and destined to spend the remainder of their lives in close confinement and misery!

Much more might be said on these very important subjects, than may be fit to meet the public eye, lest it heighten sorrow in humane relatives,

relatives, and fill the mind with horror ! It will be more to the purpose to give some additional hints how the treatment of the insane may be improved, and how, when recent, the cure should be spiritedly attempted.

1. Vomits and opiates are to be rejected.

2. Every individual case ought to be treated according to constitution, age, sex, and existing circumstances.

3. In true inflammatory cases, with plethora, large and repeated venæsection, saline evacuants, camphire, nitre, antimonials and hydragyric preparations are requisite, with the driest diet possible. To deplete, prevent repletion, to expel and promote the absorption of those fluids that irritate, and are directed to the brain, comprehend the whole practice for recent maniacs.

4. In the debilitated with melancholia and diseased viscera, mineral alteratives, night and morning, and tonics of *flores zinci*, *cortex peruvianus*, *myrrh*, and *bitters*, are proper to be given, between the times of exhibiting the alteratives. In all cases dry regimen is to be observed, for it diminishes the fluids in the plethora, and prevents continued relaxation in the more debilitated.

5. Whe

5. When there may be any reason to suppose schrophulous affection, then alteratives of the mineral class, powerful or mild, according to circumstances to be prescribed, at such distances, that every prior dose should be succeeded with another, and these plans should be many months, nay, years, continued. The schrophulous tumors should be examined from time to time, and penetrating liniments of *linimentum ammoniæ, spiritus terebenthinæ et unguentum ex hydragyeo* should be applied according to the direction of the lymphatics, *omni, vel alterna quaque nocte*.

6. Artificial drains should be promoted, by setons in the neck; issues, or artificial ulcerations should be produced in the inferior extremities. I have known instances of accidental ulcers of the legs perfectly curing insanity—let art imitate accident.

7. The minds of the insane should be amused and diverted in every mode good sense and experience can suggest, according to rank, affections and circumstances.

8. Coercion must be applied with firmness, though dictated by strict humanity—never make a remedy worse than disease!

9. Apparent

9. Apparent lucid intervals of reason are not to delude the physician into a belief the patient is cured, or better; therefore, it is best to be ever on the watch; for the cunning of the insane surpasses all calculation: they frequently appear most sensible when they are meditating the greatest mischief.

It is no proof of a patient being perfectly rational, because, at times, he may appear so; for, unless human reason be uniform, correct, and constantly permanent, for a great length of time, without the least momentary symptom of incoherent expression, or action, it cannot be pronounced the party is fit to be depended on in any momentuous concern; nor is it prudent to liberate any person, once insane, to mix amongst society, until the proofs of a return of sound reason are as evident as the preceding insanity—fatal have been the consequences of an opposite conduct.

11. In giving legal evidence, it behoves the physician to be very circumspect. Those who are not conversant in mental derangement are frequently deceived by the plausibility of the insane, and are led into error. Touch on the right string, and apparent sense and serenity are converted,

converted, immediately, into bitter gall, reproaches, and furious resentment. It is common for the insane, and those who have been insane, to violently hate those who have rendered them the greatest friendship and services, and even they are frequently furious and ungrateful to those who have liberated them by skill and judgment from their disastrous and melancholy situation. When such conduct is manifested, it ought to be doubted, whether the party be clearly in his senses. It is unnatural to hate those who have most obliged us.

12. It is earnestly recommended to those who attend the insane, to examine the principles, or rather hypotheses, on which they act; take a re-survey of those evident causes that are delivered in the foregoing treatise, reason from effects visible to causes, and from causes to rational, efficacious practice, and remedies. These disorders, thus considered, by such means, will be frequently cured, when recent; but if a continuance of fallacious theory and practice continue, little can be expected, except the consignment of the insane to places of confinement for life.*

* Dr. *Perfect*, of Town Mall, Kent, has succeeded in curing the insane, by practising some of the doctrines advanced in this Treatise, &c. &c.

Many

Necessity of an Accurate Judgment in Mental and Maniacal affections.

Many learned medical writers on the continent, have promulgated various rules for determining on law cases, that come under criminal, civil, and canonical jurisprudence, on which medical principles, the accused have been convicted, condemned, or acquitted. Specific rules, however, for determining the symptoms that constitute actual insanity, have never been delivered with clearness nor precision. This has occasioned numerous disputes and litigations, in which, error has frequently vanquished truth, and persons, *non compos mentis*, whose unfortunate mental derangement required confinement, have been let loose, to the annoyance of the public; sometimes fatal effects to their families or friends have been the direful consequence. On the other hand, many have been confined for life, as insane, who were not so; and thus, a dangerous tyranny hath been exercised over those who merited compassion, and mild consolation.*

* I may hereafter publish a work comprehending the rules for determining law cases, as far as medical science extends. What works have already been published are, in many respects, fallacious superstitious and defective.

2. The explanation of these points shall be now attempted.

Inebriation, Fatuity, Idiotism, Epilepsy and Hypochondrias.

Drunkenness--Persons who are only insane *pro tempore*, from too free use of strong liquors, are not properly *mad*, except, during the effects of their Bacchannalian freedoms they may appear so; they are certainly in some instances, dangerous to the rest of society; and while the furor lasts, they should be restrained, confined and prevented from doing mischief; but not considered as persons *mad*, nor should they be consigned to a mad-house, unless, in their drunken excesses, they threaten or attempt murder; under which circumstances, the law considers the case, and, on receiving true information, proceeds according as prudence, wisdom, and foresight may suggest. But, before law determinations, which are necessarily slow, can be accomplished, to the medical art should be permitted a controuling power, in confining the inebriated until he return to his sober senses, in all cases of absolute apprehension of danger.

Fatuity, or foolishness, imbecility of intellects,

lects, or mental weakness, if innocuous, are certainly not madness; therefore, under such circumstances, except for convenience of families, they are not proper objects for confinement amongst the insane. Idiots are not maniacs.

Epileptic persons, subject to convulsive fits, are, likewise, not insane; although in the intervals between the paroxysms, they are often stupid, forgetful, and suffer under various degrees of a weakness of understanding; but these are certainly not subjects for confinement amongst the truly mad; for they are neither maniacs or melancholics.

Hypochondriacs, though bordering on insanity are not insane. Dejected, low-spirited, ever-complaining, and expecting dismal events, that are irrational, all indicate mental or nervous debility, originating in bodily disease, and are often curable, by modes recommended in the *Treatise on Nervous Diseases*. It is certainly inhuman to mix such unfortunates with the insane, though it often has been practised. It were to be wished, that these afflicted beings, whose friends may be incapable of supporting them, might be relieved in a place not occupied
by

by maniacs ; for to be constantly with the insane, under such description of desponding disease, is sufficient to sink the spirits, add affliction to affliction, and render those insane, who otherwise might recover their perfect health, and sound reason. Therefore, neither inebriation, fatuity, foolishness, nor idiotism ; epilepsy leaving mental stupidity, or weakness of understanding ; nor hypochondriasis, are to be considered insanity ; nor, except under particular circumstances, are they fit objects for insane receptacles.

*Diseases similar to Madness, though not
Madness.*

These are, *delirium* arising from fevers, inflammations of the diaphragm, stomach, bladder, and other viscera ; *phrenzies* or inflammation of the brain ; two distinct species of which, besides the truly inflammatory, I have first discovered, namely, *phrenitis nervosa*, and *phrenitis putrida*—nervous phrenzy, and putrid phrenzy.* All these, more or less, are attended with *fever*, therefore, not madness ; but, from

* See putrid sore throat, and scarlet fever in the Rational Practice of Medicine, with certain modes of cure.

errors in medical practice, they have been treated as such, and the unfortunates have been dragged away from their families in a *strait waistcoat*, and treated, in every respect, as though they were *mad*, until some skilful physician hath demonstrated the error. None of these cases, then, though similar to madness, are true madness, which is always *without fever*; nor are they subjects for a mad-house, though often hurried away for want of knowing the precise distinctions of mental diseases. Such circumstances, when the phrenetic person hath come to his reason, and found himself apparently abandoned by his friends, and confined amongst strangers, in an insane receptacle, have operated so forcibly, as to actually produce a permanent insanity, where originally there was only a temporary delirium, or phrensy. The same circumstance has rendered persons and families truly miserable, when, by similar errors, gentlemen, who only accustom themselves to attend the insane, have been called to attend such cases of phrenitis; for, on a supposition that the party afflicted must have been mad, when those, who only attend the mad, are called, a stigma or odium has been cast on the family,

as though they were 'of an insane race, and no arguments, no reasoning, no explanation, could ever wipe away a stain, that originated in error, and was communicated, and, perhaps, continued by artifice and calumny.

In a legal point of View.

Now, though all these mental affections, be not madness, yet, they are equivalent to insanity; as to the intellectual powers of conceiving, reflecting, reasoning, remembering, and judging correctly, and rationally. In such mental perturbations, then, no request, no act, should be considered *legally valid*, even though there may, in the opinion of those not acquainted with medical definitions and rules, appear lucid, or temporary intervals of reason. No honourable physician would advise or countenance any will-making, or other act of consequence, under such circumstances of mental imbecility, delirium, phrenzy, foolishness, *vel mens non sana*; though to the disgrace of human nature, artifice, stimulated by self-interest, has, even under the coercion of the strait-waistcoat, menaced the unfortunate phrenetic, delirious, or imbecile old age, to sign *last wills and testaments*, or other writings

ings of the greatest importance to individuals, relatives, friends, and society. These stratagems, horrid to reflect on, have often succeeded, from the great difficulty of detection. They have been practised in the absence of the medical profession, who are the only true judges of mental rationality, or the faculty have been excluded, under pretence of secret transactions or conversations being necessary, and the parties concerned and interested, being all implicated in the villanous guilt, have all been ready to swear, that the insane afflicted was perfectly rational at the moment of signature, however fatuitous, inebriated, delirious, or phrenetic, he might have been before and after the transaction. In the course of my long practice, I have had many reasons to believe, that such infamous and iniquitous deeds have been more common than the world, in general, would suppose. Therefore, when any important acts, in which the clearest mental faculties are absolutely requisite, the medical art should always be consulted in every doubtful mental derangement; and, those who have been most accustomed to study, reflect, and reason on such subjects,

must always be superior to those who have less considered the morbid affections of the mind, however excellent they may be as physicians for other purposes.

What constitutes Insanity or Madness.

It is the office of learned, scientific, and experienced physicians to determine, whether persons be insane or not, in a medical point of view. Other persons, or professions, however sensible and learned, are not competent to judge on these subjects; for they have often pronounced apparent, not real, rationality, for sound reason, and a capability of performing all the mental functions requisite in man. Even learned physicians too, have been deceived by false appearances, and subtle-cunning of the insane; therefore, unless physicians have been accustomed to visit and comprehend insane diseases, and have practically observed, the origin, progress, mutations, and terminations of madness, they may be incapable, through want of actual experience in these calamitous affections, to determine on such cases with precision and certainty. The most skilful, in other respects,

spects, should tread cautiously on unknown ground.*

2. It

* *Suicide the consequence of rashness.*—A noble lord, whose family I had the honour to attend, had received, it is said, some little reproof from a great personage, concerning a military omission. It seized his lordship's mind so seriously, that, on examination, it was evident to me, that suicide was intended. All weapons, and dangerous means, whatever, were removed. It being a circumstance of delicacy, I sent for his lordship's son, then about eighteen, from Westminster-school, communicated my apprehensions, and requested his constant attendance on his noble parent: this the young gentleman strictly executed for some days, and prevented the commission of the crime apprehended. In my absence a few hours in the country, a very eminent, learned, and, indeed, remarkably sagacious, physician, but, my mortal and vindictive enemy, was called. I had, contrary to medical *etiquette*, enforced the necessity of promptly bleeding a most noble lady, in an apoplexy, which saved life; but, brought down invectives, hatred, and vengeance, on me. Whether out of opposition to my vigilance, or from malicious motives, it would be difficult to determine, but the noble lord was liberated from all restraint, and my apprehensions treated by injurious insinuations, and with contempt. Thirty-six hours had scarcely elapsed, before the noble lord put a period to his existence, by a sword he had concealed, which had been a present from Prince Ferdinand; he wounded his breast in two places, but the third thrust pierced his heart. Thus perished a nobleman, whose liberality, feelings, and many virtues,

2. It is the duty of physicians to conceal, as much as possible, human intellectual infirmities ; and, it is laudable and humane to give every possible latitude for the recovery of mental derangement ; but there are certain bounds even to the laws of humanity—integrity and strict justice require the truth, and no mistaken affection, friendship, nor interested motives, should induce any medical practitioner, to declare persons not insane, who are actually so ; for, much confusion, mischief, and even self-murder, or the murder of nearest relatives have arisen from such sources.*

3. *Madness*, whether what may be called *mania*, or furious madness, as well as *melancholia*, or even mixed madness, has been defined, an alienation, or irrationality in the mind, *without fever*.

4. Those

tues, did honour to human nature ; and, who, might, in all probability, have been now living, had not medical arrogance and illiberality, merely from personal opposition, dictated error, at the risk of human destruction ! *Horridum ! valde Horridum !*

* Fathers have murdered their wives and children ; children their parents. The bloody scenes transacted are innumerable

4. Those, who are insane, and who have only temporary intervals of *apparent* rationality, cannot be considered in any other light than as *insane*. Lucid intervals of reason are no proofs of the cure of insanity, and who dare to pronounce a partial return of sense, or reason, *perfect* understanding?

5. No persons can be considered perfectly cured of insanity, who require the least temporary restriction, or, who have rationality at one time, and are incoherent at others. A man in his perfect senses is able to *think, reason, judge, conclude, speak, and act for himself*, without any *restraint whatever*; and he who is not, cannot have the clear free use of his intellects.

6. Under alternate states of apparent reason then, and mental derangements, no *legal act* ought to be executed. It is the complete possession of sound, permanent reason, discernment, and sense, without even a moment's de-

* L 4

viation,

merable, and those who trust to the supposed reason of the insane, or put a sword into the hands of a madman, are *foro conscientiæ*, guilty of whatever may be the consequences. Numerous acts of suicide, numerous horrid events, I have been witness to in the course of near fifty years extensive practical experience in the medical art.

viation, or mental derangement, that constitutes mental sanity.

7. All important acts, therefore, done by persons under temporary, suppositious, returns of reason, who are, at times, insane, can only be considered as the acts of madmen, and, in a legal point of view, they should neither be determined valid nor binding. No rational physician, who understands the case, and has the least pretension to probity, will suffer persons under such circumstances to make a *will*, or sign any *papers* relative to estates or other business. What such insane persons think, or say, is generally disregarded. Even those who have apparent temporary reason, and converse as though they were in their right senses, touch on the string, or subject, that may have given rise to the mental perturbation, and, generally, off they go, rail, storm, complain, threaten, or attempt mischief. This fact proves they are not in their senses, nor in a state to act for themselves.*

8. Phy-

* Numerous instances of this sort occur in my monthly visits to the St. Mary-le-bone insane, and it is generally the mode I use to determine the state of the afflicted. Out of some hundreds, at the mad-house, we visit, numbers will always be found, who seem, to bad judges, to act rational and consistent *pro tempore*, and who would be thought perfectly sensible

8. Physicians, and attendants on the insane, should always be on their guard, and mistrust appearances; for the artifice or stratagem of the subtle insane, surpasses all calculation. The crediting of appearances has often led to fatal errors.

9. But when the insane may have been perfectly cured, and their reason permanently returned; after they have, for a time, been tried by all the dictates of sound medical reason, erudition, and by the foresight, long and skilful experience of observing practitioners, and no mental defects are perceived; it is but just, that the unfortunate insane, when it may be certain, they are cured perfectly, should be re-admitted into society, to hold their rank and condition, to act for themselves, without restriction or molestation, as though they had never been afflicted with mental irritation or insanity. But whilst their insanity may remain, others should act and officiate for their benefit.

10. But it should be observed, after one or more proofs of insanity, that the party, though liberated to perform all rational functions of life, yet, a watchful eye should be kept over such persons, and all their words, actions, and
conduct

conduct should be scrutinized, though not apparently to the former sufferers, lest their feelings be injured.

11. In the legal examinations of physicians, a diversity of opinions sometimes prevail; those who are not accustomed to the surprising artifice of the insane, at times, are easily deceived, and pronounce an insane person sensible; whereas, those who have had experience, are not so easily imposed on. The experienced practitioner almost knows, by the countenance of the insane, the state of mind. The wild look in the eye, the sullen taciturnity of some, the daring, menacing looks of others, the arrogant proud deportment, and a thousand other marks are confirmations strong of probable insanity, which are not so well discerned, or comprehended, by the inexperienced. Numerous are the insane who are perfectly rational in all points but one; they will appear, in every respect, collected and correct, except on the certain subject which gave origin to their malady, on which they will be guilty of a thousand excesses. In all cases of insanity, as the parties are not their own keepers, and placid reason is off her throne, the greatest humanity and sympathizing mild compassion should be exercised. It should be remembered

remembered, they know not, correctly, what they say, or do, but while the humane medical art practices every reasonable indulgence, it is necessary always to exercise its vigilance and coercive authority on all those occasions that require force to prevent mischief; but all painful corporeal punishments are cruel in the extreme.

12. When the insane have continued to think rationally, talk sensibly, reason and constantly act consistently, without any deviations from a sound understanding; another mode of trial should be adopted, which establishes the strongest proof of the insane having returned sound to reason.

The strongest proof of returned rationality.

1. Let them receive letters from their affectionate friends, or those whom they have been accustomed to correspond with, and suffer these epistolary communications to be continued daily for a limited time. Have the answers written in the presence of persons of strict honour and integrity, and let the whole be examined by disinterested judges.

2. Let them have pen, ink, and paper in their possession, and enjoy the fullest liberty to answer the epistles they receive, without menace,

or

or the least interference of their keepers, or any other persons, for where there may be any restraint, it is not acting by self-will, but under the influence of others.

3. Let the subjects be from easy to more difficult, some that require greater than ordinary reflection, this is acting with humanity, probity, and justice, and will determine the truth.

4. Let the subject be mentioned, if known, that gave *rise to the mental perturbation*, or on which they dwelt with more than usual energy during their disease. If they be perfectly well they will not be affected.

5. If after every trial of this nature, the former maniac continue sensible and correct, without any signs of mental perturbation; there is every reason to conclude the cure is complete. If the contrary happen, in these rational trials, it may be determined, that the unfortunate is by no means fit to perform by his own reason, or intellects, the purposes of life; nor should any act, whatever, be deemed *legal* that he executes.

6. Such are the proofs, and only conclusive proofs, that determine whether the parties afflicted, continue insane, or have returned to their usual reasoning faculties; these are the proofs, that the nearest relatives should expect and require,

quire, and physicians inculcate. These are the proofs, on which all legal determinations, according to my opinion, should rest: for they are founded in the strictest rules of justice, equity, and medical science, and are such, as no honourable man can have the least objection to.

7. Every thing of this nature, should be conducted with great delicacy and prudence, with the most tender regard in supporting the just claims of the unfortunate, and they should be encouraged by every rational and soothing means, to endeavour to acquit themselves with propriety, in order to regain their free liberty, by the total removal of all restraint.*

8. Though

* There is a man by the name of *Davis*, at the insane receptacle, whom we visit among the rest monthly. He always appears with a most malignant, malicious look; never shews the least respect to persons, will never have his beard shaved, unless by means of coercion in a straight waistcoat. He never gives an irrational answer; but always behaves insolent, and looks menacing. He is a rank *democrat* in principle, and breathes liberty and equality, and once, actually, as I have been informed, seized the colours in the square at St. James's, and was running off with them. His answers, are all clear and precise to any question, and, in his own opinion, he is in his perfect

8. Though in the second volume of the Rational Practice of Physic, published 1793, in answer to anonymous abuse, are delivered all the rules for juries to determine on cases of insanity ;

perfect senses. This man has had every latitude to be discharged from his confinement; but his persistance in these strange manners and menacing looks, oblige us to keep him confined. He is a boot-maker by trade, and was permitted to make a pair of boots. By some means he concealed the half-round cutting knife, similar to a cheese-knife; when he had been asked a few questions, with the humanest intentions of taking him back to the St. Mary-le-bone Infirmary, to make trial of his conduct, he produced the knife, from his bosom, and exclaimed, he *could cut and dissect* as well as Dr. Hooper, Mr. Phillips, and myself; and after we had reasoned with him, in the mildest manner, he went out, rudely damning us, and our intended humanity. At all other times he appears sullen; never speaks irrationally; but looks, at times, with a murderous, blood-thirsty look, and, no doubt, his wife, or we, should, if possible, be the first victims of his bloody revenge, the moment he should be liberated. To inexperienced persons, he would seem perfectly rational, but to the experienced, a dangerous member of society.

Another man is there of the same cast, perfectly sensible, but, on being liberated, twice attempted the murder of his own mother, after intoxicating himself with liquor. In the same place, there are some hundreds of insane, and, out of this number, on our visits, we may perceive and converse with

sanity; yet it may be necessary to repeat them in this place. The authority on which they are founded were quotations from almost all the authors and practical physicians, ancient and modern, who have appeared in the world, and they are confirmed beyond the power of refutation by my own practice and long experience.

1. That *insanity* is a *loss of reason, without fever.*

2. That an inflammation of the *brain*, called *phrenitis*, is always accompanied with fever.

3. That a delirium arising from *fever*, is neither *insanity* nor *phrensy*; but being a mere symptom of the fever, as it is called, to distinguish it accurately from the other two, *febrile delirium*.*

The with many, who appear perfectly sensible, at lucid intervals; but who are never to be depended on from these appearances. It is only a permanent and certain return of sound sense, unalloyed with false perception, false reflections, false judgment, and false reasoning, or injudicious expression and action, that constitutes the certain return of rationality.

* Authorities from which quotations have been produced amongst the Greeks, Romans, Arabians, and Moderns, are the subsequent:

1 *Hippocrates*

12 *Ettmuller*

23 *Joel*

2 *Paulus Aegineta*

13 *Fr. Hoffmann*

24 *Pitcairn*

3 *Ale*

The various facts relative to mental derangements have been fully discussed in a manner, it is hoped, every reader, medical or not, may comprehend. Though it was first intended only to refute anonymous deception, yet, on second consideration, it was determined to render this work more extensive in its utility.

1. No errors can arise in ascertaining the differences of mental affections, if the doctrines be understood.

2. Families under the greatest affliction, lest unfortunate temporary accidents should be exaggerated into an idea of hereditary or chronic complaint, may be satisfied, by the rules of science, whether mental diseases be *chronic* or *symptomatic*.

3. Juries appointed to examine mental complaints, if they attend to the foregoing truths, can

3 Aretæus Cappadox	14 Nenter	25 Valentinus
4 Cælius Aurelianus	15 Boerhaave	26 Heister
5 Galenus	16 Home	27 Brooks
6 Alexander Trallianus	17 Ludwig	28 Shaw
7 Arabians	18 De Sauvages	29 Ball
8 Fernellius	19 Lieutaud	30 Hugh Smith
9 Gorraeus	20 Caldanus	31 Van Swieten
10 Riverius	21 Gregory	32 Stoll
11 Willis	22 Meza	33 Cullen, &c.

can neither be influenced by fallacious appearances nor misrepresentations.

4. The treatment of the unfortunate may be rendered more mild, and all severity, in many instances, avoided.

5. The greatest numbers, it is proved, are *symptomatic*: these only require an accurate discovery of real causes, and skilful medical treatment, to restore patients to the free and judicious use of the mental faculties.*

6. The health, fortunes, and liberties of the most unfortunate of human beings, are humanely protected from the direful effects of erroneous prejudices, and from all possible violence of unfeeling and mercenary persecution.

QUESTIONS FOR JURIES.

If relations or juries, after conversation with the deranged in mind, ask medical practitioners the following questions, the species of disorder may be easily ascertained:

1. Has any acute, eruptive, or chronic disease preceded the mental perturbation.

* M

2. Has

* Houses that receive the afflicted are real benefits, and of great utility; but the disordered should not be sent while fever or other irritating causes remain.

2. Has the mental perturbation, soon after its commencement, been attended with continual, remittent, intermittent, or nervous fever?

3. Has the loss of senses soon followed the vanishing of any gouty, rheumatic, scrophulous, or other swelling? *

4. Have the *natural* and *vital functions* been retarded, accelerated, or shewed probable signs of febrile or chronic indisposition sufficient to affect the brain?

An affirmative, or the answer *yes*, to the foregoing questions, gives sufficient reason to conclude the disorder *symtomatic*.

5. Has the irrationality commenced and continued with heat, thirst, quick pulse, inflamed eyes, and violent ravings?

The

* The symptoms of absorption do not appear until the fluids have been contaminated many days. The small pox in inoculation, the venereal affection, do not immediately appear, though absolutely in the habit; but sometimes remain from seven to fourteen days, according to constitution. Putrid infection often circulates many days before its effects are evident; why, therefore, may not gouty, rheumatic, scrophulous, or other latent acrimony, remain in the habit a considerable time before it fixes on the membranes of the brain? This merits attention.

The affirmative *yes*, to this question, proves the disease a phrensy.

6. Has the mental alienation arisen from violent passions of the mind, as love, grief, anger, pride, religious enthusiasm, or despondency?

7. Did the mental irritation *begin* and continue some months *without fever*?

8. Are the *natural* and *vital functions* performed with little or no impediments?

9. Are the *animal functions*, or the mind, only affected?

The affirmative *yes*, proves the disorder *chronic*, and, in fact, *madness*.

Thus is determined by the authority of the most learned physicians, as well as by my own long experience, what constitutes the different affections of the intellectual faculties, and they are consonant to what I have observed in all the principal hospitals, or receptacles for the reception of what have been improperly nominated lunatics, in France, Italy, Germany, Holland, and the low countries. The anonymous censurers of the first edition of this Treatise on Madness, published in 1793, as to the veracity of my definitions, must have therefore only exhibited their own ignorance, or malevolence, and they never more will be considered worthy of the least attention.

It has been observed, in my Treatise on hysteric and nervous Diseases, &c. that “*mental disorders have neither been scientifically considered, nor judiciously treated.*” Whether those assertions be proved, or whether the studios have been conducted to many new recesses, hitherto unexplored, on those abstruse subjects, must be submitted to the consideration of learned judges in the profession; judges who are capable of reading with impartiality, and determining with justice.*

* By professional judges should be understood, those physicians who have acquired the most extensive knowledge in medicine the art admits, by unwearied industry, perpetual study, reflection, and long experience, and who shew their erudition, not in magnifying trifles, but by successful practice in difficult cases, who say, with Hippocrates, *the art is long, life short, &c.* not those who have got great fame by little artifices, and who depend chiefly on the advantages obtained by dissipation and gay company. These latter study more how to attack human foibles than diseases, and depend more on the approbation of the credulous than the discerning, or in a skilful and honourable discharge of the humane duties of the profession: such probably are the persons who have inconsiderately attacked the definitions I formerly published, concerning madness.

FINIS.