CRITICAL RETROSPECT

OF

MEDICAL AND PHYSICAL LITERATURE,

[FOREIGN AND DOMESTIC.]

Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge. Illustrated with copper-plates. Vol. II. 8vo. pp. 380. London, Johnfon. 1800.

The design of this work is fimilar to that of Duncan's Annals of Medicine, or Dr. Simmons's Medical Facts. It appears to be the intention of the editors to admit original papers only; and while they are supplied by such names as ornament the present volume, there can be no doubt that the work will maintain its popularity.

This volume contains twenty-nine papers on fome of the moft interesting subjects of medicine and surgery, from which we select the following extracts.

Account of a Case in which Death was brought on by a Hemorrhage from the Liver. By G. Blane, M. D. F. R. S. &c. Read May 6, 1794.

"A boy, aged eight years, of a delicate conftitution, small ftature, and pale complexion, whose family on the father's fide had been extremely subject to phthisis pulmonalis, but he himfelf having no symptoms of fcrofula or rickets, or any external blemifh or deformity, except that his belly had always been too large, and he had been subject to complaints of the ftomach and bowels through life, began to complain on the 12th of March, 1794, of languor, loss of appetite, and fitght pains, which he referred to his breast and ftomach. These symptoms continued the fame next day, but became more severe on the 14th, and remained fo the three following days, on the laft of which he became feverifh, and there was an eruption of red spots on the neck and breast, which lafted only a few hours. On the 18th and 19th, the symptoms were milder, and he was thought to be recovering; but in the night between the 19th and 20th, he was seized with a severe pain, which he referred to the left hypochondrium. This continued between five and fix hours,
hours, and he then became suddenly faint, and losing all sense and motion was thought to be in a swoon, but from this he never recovered.

"This is the account which I received from the family and the medical gentleman who attended, for I did not see him during his illness; and not having been sent for till he was in extremities, he had died before I arrived.

"Leave was obtained to examine the body, and the following appearances were observed. Upon laying open the abdomen, a large quantity of coagulated blood was discovered, covering the whole left side of the intestines. In exploring the source of this, several fissures were observed in the left lobe of the liver, which were about two-thirds of an inch in length, whence the blood had undoubtedly flowed, for they were found to lead to a cavity in the substance of the lobe of about the size of a pigeon's egg, and full of blood. The peritoneum, on the surface of that part of the liver which was near one of the fissures, was raised from the liver like a blister, full of coagulated blood. These appearances were on the lower surface of the lobe, but on the upper surface of the same lobe there was one fissure, round which was a similar collection of blood between the peritoneum and the substance of the liver, and it led to a small bloody cavity near the surface of the liver.

"There was no external livor, or other mark of injury either on the adjacent parietes, or on the spleen or intestines.

"It seems most probable therefore, that the rupture and consequent haemorrhage were owing to the weak structure of the liver, which corresponded with the general weakness of this young person's frame.

"It would appear that it is this weakness, proceeding from a too great tenuity of the coats of the vessels, that chiefly constitutes the scrofulous habit, of which the principal symptoms seem referrible to a rupture, of the smaller series of vessels either circulatory or lymphatic, and the consequent effusion either of red blood or colourless fluids, occasioning sometimes haemorrhages, but more frequently interstitial or glandular deposits. The fine skin and silky hair observable in such habits are farther in proof of this.

"As far as my reading goes, I have not met with any morbid affection of the liver similar to that above described, or have I ever seen or heard of such a case, which has made me think that it might deserve a place in some register of facts. It has indeed been alleged, that there is not much utility in recording extraordinary and anomalous cases, as they are seldom the objects of practice. But if there is any justice in this remark, it applies rather to unusual combinations of symptoms, than to morbid appearances detected by dissection; for as the number of bodies that are inspected is comparatively small, there is reason to presume, that, in the numerous others which are not examined, there may be many among them similarly affected."
The third paper contains an elaborate
Account of the Croup, as it appeared in the Town and Neighbourhood of Cheham, in Buckinghamshire, in the Years 1793 and 1794. By Henry Rumsey, Surgeon at Cheham.

In this account the author sees reason for admitting the existence of spasmodic croup as well as inflammatory; and he says,

"It appears to me that the croup is an inflammation of its own kind. If it confined in common inflammation, we might expect to find the same appearances (that is, the same kind of concretion on the surface of the trachea) every day, as its mucous membrane is so frequently the subject of inflammation attended with an increased secretion. The matter, however, of which this substance is formed, possesses different properties from those of the mucous which is thrown out upon the membrane of the nose, or of the trachea in common catarrhal affections.

"I think it probable, that the film which we find in the croup is not formed by a secretion from the mucous glands, but is an exudation from the exhalant arteries. Upon this principle we can more easily account for such film not being found in common catarrhal affections, in which the mucous glands are perhaps more the seat of the disease. It is, therefore, analogous to the inflammatory exudation in the inflammation of other internal membranes first described by the late Dr. Hunter.

"The croup has been sometimes thought infectious, but I have not been able to form a decided opinion upon this point. Some circumstances render it probable, as two and sometimes three children in the same family have been seized with it. But on the other hand, I have at different times seen two or three in a family escape, while one or two of the others have died of it, without any pains being taken to keep those who were in health from the sick. When a disease is epidemic, it is sometimes difficult to determine whether it be communicated by infection, or whether several people have the disease in consequence of their being exposed to the same exciting cause. It is rather remarkable, that although there were between twenty and thirty children in our workhouse, only one had the disease."

In the treatment the author thinks that calomel, in alterative doses, as recommended by Dr. Rush, proved a useful remedy.

An Account of two Cases, shewing the Existence of the Small-Pox and the Measles in the same Person at the same Time. By P. Rus sel, M. D. F. R. S.

"The Measles and the Small-pox were epidemical at Aleppo, in the year 1765. They both made their appearance about the same time in December of the preceding year, and gradually increased through January, February, and part of March. The Measles disappeared in April, while the Small-Pox lingered till the summer solstice.

"Till the month of March, both diseases were, in general, of a favourable kind. The eruption in the Measles commonly hap pened
pened on the evening of the third, or morning of the fourth day. The eruptions were first visible on the face; and began to fade every where on the sixth or seventh day, but seldom disappeared entirely sooner than the tenth. They were rather more prominent than those which I had observed in Europe, and the branny skurf left on the skin was considerably less: in other respects there was no material variation from Sydenham’s Accurate Description of the Measles, epidemic at London in the Year 1670.

"After the beginning of March, the disease became more formidable. The eyes were more inflamed, the coryza, the cough, and the febrile symptoms were in a greater degree than in the former months. The eruption appeared irregularly from the second to the seventh day of the fever. The eruptions often appeared on the breast before they were seen on the face; they were of a fainter colour, and the branny skurf was, in general, less, A vomiting and diarrhœa were common symptoms from the beginning; the latter continued throughout the disease; the former usually ceased as soon as the eruption was complete: but very young subjects continued to be harrassed by retchings, excited by the irritation of sneezing or coughing.—About the height of the disease, the fick were subject to short exacerbations of the fever, accompanied with difficulty of breathing, and stitches in the chest, which recurred several times in the twenty-four hours. On the whole, the Measles, after the month of February, approached nearer to the anomalous species described by Sydenham under the year 1674.

"From the end of February, the Small-pox, which hitherto had been of a mild distinct kind, became irregular and much more fatal. The pustules were confluent on the face; on other parts distinct, but generally flat, and indented at the top. In many cases they suppurated imperfectly; in others, they remained dry or husky: and some instances occurred of their turning black about the seventh day. A diarrhœa and tenesmus frequently attended from the beginning to the end.

"Though a large proportion of the infected still recovered, they continued long in a sickly state. Children were not only reduced by the diarrhœa, but were often attacked with the hooping-cough, or with erratic fevers, both being at that time epidemic in the city. In the more malignant kind of Small-pox, many died between the seventh and ninth day; some struggled to the eleventh; very few recovered.

"When the Small-pox and the Measles prevailed in the same season, many of the children suffered both diseases in succession, as usual. The Measles were rarely observed to succeed the Smallpox in less than twenty days, reckoning from the eruption. The Small-pox commonly succeeded the Measles somewhat earlier in the third week; but several cases were met with, in which the pustules of the Small-pox were discovered on the face, before the total disappearance of the Measles on the limbs; that is, on the eleventh or twelfth day.

"It
It has already been remarked, that few of the infected in either disease died before the month of March. But from that time the mortality in the Small-Pox was considerable; as those who had jilt before suffered from the Measles, and were reduced by the diarrhoea to a state unfavourable for the reception of a fatiguing distemper, generally perished; unless the supervening Small-pox was of a mild kind. The danger appeared to be rather less where a bad kind of Measles succeeded the Small-pox.

The reciprocal influence of the two diseases in the same subject was carefully attended to in above three hundred cases; and so little did the quality of the first disease seem to influence that of the second, that a mild, distinct Small-pox was often observed to follow the worst kind of Measles, and vice versa.

In the month of March, an instance occurred where both diseases were conjoined in the same patient. The subject was a female child two years old, of a pale, delicate complexion. The redness of the eyes, the coryza, and the cough which accompanied the fever, led me to expect the Measles. On the fourth day, the eruptions of the Measles were visible on the face, the neck, and the back; but at the same time a few eruptions of a different kind were intermixed on the face and neck, which, if they had been the sole eruption, I should without hesitation have declared to be the Small-pox. The progress of the pustules on the fifth proved them to be variolous. Both eruptions were of a favourable kind, and distinctly pursued their regular course. On the eighth day, the Measles were fading fast, while the variolous pustules on the face were near their height. The pustules were not numerous, were very distinct, and ripened perfectly. The cough continued to be a troublesome symptom, especially in the second week. A diarrhoea supervened about the fourteenth day, and contributed to render the child's recovery very slow.

In the month of April I met with a similar case. A healthy boy, three years old, was attacked with the usual symptoms of the eruptive fevers, at that time epidemic. The cough rather seemed to indicate the Measles. On the third day, the eruptions of the Small-pox and Measles made their appearance together. The variolous pustules were of the small, round kind, and came to perfect maturity; but were more numerous than in the former case. The Measles were of a fainter colour, and left behind them still lefs of the branny scurf, agreeing in both circumstances with the disease then prevalent.

On the fifth day of the fever, a diarrhoea and tenesmus were joined to the harassing cough, and reduced the patient so low in the second week, that his life was despaired of. The flux, however, leaving him towards the end of the month, he recovered.
comparison, the peculiar differences which mark the Small-pox and Cow-pox;" and he affirms that the statement is "in every particular, confirmed by very extensive experience."

After the comparison of the advantages which are to be derived from the substitution of the Vaccine Diseafe for the Small-pox, the author observes, "It is perfectly consistent with my present design, briefly to notice the most popular objections which have been urged against the introduction of Cow-pox.

"It has been called a beastial humour, and by a fallacious association of ideas, it is supposed to introduce an unnatural disease into the constitution.

"If this very weak and futile objection were worthy of reply, we might observe, that the cow is of all others the most healthy and the most cleanly of our domestic animals, and might also remark, that no females are so healthy as our dairy maids, whose morning and evening hours are spent amongst the cows; and we should not forget that eminent physicians recommend invalids to avail themselves of the salubrious effects of the breath of the heifer. How void of foundation then must be the objection to the infection of an atom of matter taken from the teat of the cow, once in the life only, when every perfon is in the daily habit of introducing into his stomach various parts of the same animal. The human stomach revolts not at beef, butter, cheese, and cream; yet every one, acquainted with the animal economy, must know, that these aliments are quickly mingled with the constitution.

"Another grand objection (which indeed is the only one that strikes at the foundation of our theory) is, that persons are liable to be affected with small-pox after having been inoculated with the Cow-pox.

"A very extensive practice, and an equally extensive communication of the experience of medical friends of the first reputation, would almost warrant a short, abrupt answer to this question; an answer conveyed in terms unconceientiated to the feelings of the present age. After this objection, which has been refuted as often as it has been urged, a laconic reply, conveyed in no polite language, would by no means be improper, as it would harmonize with the general mode of such objections; and by all laws, the answer ought to be of the colour of the question; but what is not owing to cavilling individuals, is a just debt due to a candid and judicious public.

"Every case that has been brought forward to undermine the theory we defend, we can prove to a demonstration was not one of the genuine kind. There are three diseases which have indiscriminately been termed Cow-pox, only one of which is the real preventive of small-pox. In the spring season particularly, cows are frequently sent to market for sale: the farmer omits to milk them in the morning, previous to their setting out, that their udders may appear full, and the animals on that account become more valuable. The frequent consequence is, that inflammation ensues, which terminates in eruptions on the teats and udder, and affects the
the milker with a loathsome disease on the hands, arms, and shoulders. The forehead sometimes does not escape, from the circumstance of the servant's leaning against the udder in milking. This disease may affect the same person several times, but it will never prove a preventive for Small-pox: a case of this kind occurs in the city of Bristol; a Mr. Jacobs, attorney at law, was extenstively affected twice with this disease (which, from his total ignorance of real Cow-pox, he has called by that name,) but it did not prevent his being afflicted with a subsequent severe Small-pox.

**Systeme Methodique de Nomenclature, &c.—** A Methodical System of Nomenclature and Classification of the Muscles of the Human Body, with Descriptive Tables, shewing their Old and New Names, Situations, Attachments, Direction, Composition, Figure, Connexion, and their Uses: To which is added, a Dictionary, containing the Synonyms of the Muscles. By C. L. Dumas, Professor of Anatomy and Physiology, &c. &c. Montpelier. 4to. 200 pp.

It is almost universally allowed that the anatomical terms which are at present in general use, are very imperfect, and by no means correspond with the numerous and useful discoveries in this science; an attempt to correct these defects will not now be considered so daring an innovation as it might have been formerly. Mons. Dumas, as professor of anatomy, was constantly remarking the difficulty of teaching this science from the crowd of absurd names given to various parts; and has undertaken in this work, the very arduous and useful task of rectifying them; and though he may not have fully answered our expectations, yet we think a translation of this work, with some alterations that would occur on a careful perusal, would be a very acceptable present to the students of anatomy of this country.

In the third chapter, the author considers some of the defects of anatomical language in general, and the mode of correcting it; and we translate the following as a specimen of his manner of treating the subject.

"A flight examination of the most common anatomical terms will be sufficient to shew the incorrectness and impropriety of a great number of them. There are some which are strictly arbitrary, and others which have no determined signification, and which any anatomist may change at pleasure. Under this class may be ranged all those denominations drawn from numerical orders, &c. which express neither situation, form, figure, nor connexion, but only the number of parts, which does not define any thing anatomically. Of course, we reject the names of first, second, and third phalanx, &c. terms given to bones which have no agreement or relative size. Vesalius's terms of first, second, third, fourth, fifth, sixth, &c. muscles of the arm; Columbus's first, second, and third muscles of the triceps; Winslow's first, second, and third adductors of the thigh; Numb. XVII.
and first and second external radial; and similar names given to muscles which differ in situation, attachment, and figure, must at once appear ridiculous.

"If anatomical terms have sometimes a vague and arbitrary signification, there are several that have no meaning at all. What sense can be annexed to blind hole, offa innominata, accessory muscle, sublime muscle, humble muscle, profound muscle, pudendal artery, &c. Turks saddle, par vagum, recurrent nervation, testes & vulva cerebri? How is it possible to associate such ridiculous expressions with any true and clear ideas of anatomy?"

"There are other names perhaps less absurd, although not more regular, which actually tell us what they do not mean—such are the names of vena cava, which is not the only vein that is hollow, and ductus arteriosus to distinguish a duct, which is actually ligamentous in the adult.—Arbor vitae, to characterize the ramifications which the internal surface of the cerebellum presents when cut vertically, and in which nature has not exclusively placed the seat of life, &c.

"The frequent use of terms in an absolute sense, which are only relative, is an essential defect in anatomical language. The adjectives, great, little, vast, thin, superior, inferior, short, long, right, left, are examples of this impropriety. When we talk of the great and little wings of the sphenoid bone, the great and little condyles of the humerus, the great and little trochanters of the thigh, the great and little angle of the eye, and the great and little bones of the tarsus, it is impossible to comprehend them. The epithets of great bone, grand artery, great and little saphena, great and little sympathetic, great and little meferaic, can never be consonant to a proper nomenclature, and ought to be abolished, since great, little, long, short, &c. are not essential properties, but only qualities relative to a part, and can only serve in the description of one part."

It would occupy more room than we can possibly allow in our journal to follow the author in his censures on all the absurd names that are in general use, as well as the idle vanity of denominating parts after the discoverers of them; who, the author justly observes, have no occasion for such auxiliaries to render their names immortal; not to mention the possibility of attributing a discovery to one person, when it actually belongs to another.

The author’s plan is to divide the human body into forty-seven different regions, all of which have particular names, and under which all the muscles may be ranged in a natural order, and immediately found as indicated by their proper heads and classes; and he thinks this method will facilitate both the study and investigation of anatomy, by assembling together what ought to be united, and separating what ought to be divided, as putting each muscle in its proper place, and circumscribing its limits; and, although he says the same idea has been adopted by Chauffier, he thinks his own an improvement upon it.
To illustrate his mode, the author has given us tables of the muscles, arranged under distinct columns according to their regions, with their old and new names, situation, first attachments, fixed points, direction, last attachments, points of inflection, composition and figure, connexion, and uses. And at the end of the work he has added an useful dictionary of synonyms of all the muscles of the human body from the best authors.

Nordijhes Archiv. i.e. Northern Archives of Natural and Medical Science; or, Magazine for Medical and Natural Science of the North. Edited by Prof. Pfaff, of Kiel, and Dr. Scheel, of Copenhagen. First Volume, first Number, 1799. pp. 192, 8vo. Price 16 gr. or about 2s. 6d. Copenhagen, Brummer.

The Editors of this new periodical publication propose to collect all contributions relating to natural and medical science, by which both are, as well in general as in their single parts, illustrated, enlarged, and corrected, and the practical application of them, for the preservation of health, and cure of diseases, really improved; but merely as far as this is owing to the industry and genius of northern (Swed. and Danish, &c.) physicians, surgeons, and naturalists. We shall be enabled, by this useful publication, to get acquainted with the state and progress of medicine in the North, of which we have had hitherto but little knowledge; and the well known talents of the Editors, and the interesting contents of the first number, give us reason to hope, that this undertaking will answer their views, and satisfy the expectations of the learned. We find here, amongst the Original Papers, 1. New Experiments on Respiration and its Use, by Prof. Abilgaard, with Remarks of Prof. Pfaff. — These experiments are directly opposite to the generally adopted doctrine of respiration, and Mr. Abilgaard attempts nothing less than to prove by them, that very little air, or none at all, enters into the lungs during inspiration; against which Prof. Pfaff defends in his remarks the general opinion. 2. Dissection of a drowned horse, by J. Kuhn, with some physiological remarks of Mr. Herbold and Rahn. — The object of this paper is chiefly concerning the air bladders that are found in large drowned animals. 3. Experiments on Galvanism, are contributions to Mr. Humboldt's work on the same subject. 4. Contributions to the History of Larvated and contagious Intermittent Fevers, contain some interesting observations. 5. On Small-pox Inoculation, by Prof. Pfaff, where he relates some observations made in inoculating a great number of children in several villages at once. 6. Description of a hooked forceps, and a perforator, with a breath, by Dr. Scheel. — Short reports and extracts from letters, include a short account of the mineral waters of Sweden, by Hedin, &c. Literature of Northern Medicine and Natural History, A review of some dissertations of Kiel and Copenhagen, and of several pamphlets relating a dysentery prevailing in the neighbourhood of Kiel.
Encyclopedia, i.e. Encyclopedia of the whole Chemistr, composed by
F. Hildebrandt, Prof. at Erlangen. First Vol. Theory.
First Number, 1799. pp. 219. Price 1 gr. or about 2s. Erlangen, Walther.

We cannot but approve the excellent plan which the author has
adopted here, in proposing the elements of chemistry; and we are
fully convinced that it is perfectly calculated to satisfy the requisites
which the vast progress of that science entitles us to expect from a
Philosophical System of Chemistry. Mr. Hildebrandt intends to
include the whole chemistry in a systematical, and, as far as possi-
ble, in a mathematical order; with such a combination of theory
and practice, that it may prove a very useful manual, not only for
the philosophic and professional chemist, but also for a common
reader, and for the use of life. With respect to this, the present
work is to comprehend as well all parts of applied as of pure
chemistry, to the former of which a proper section is to be de-
voted. The theoretical part is to precede, to which the practical
will follow, in such a manner that its rules may be derived from the
theory, and the results in the different operations explained by it.
The whole is written with as much conciseness as possible, and the
paragraphs are therefore but aphoristic, and the quotations but few.

How far, however, the author has fulfilled this difficult and in-
tricate task, which he has planned to execute, we shall not be able
to judge till more numbers have made their appearance. In the
present number we find, according to the plan, the theory of the
different elements in general, of heat, light, oxygen, azote, at-
mospheric air, of hydrogen, and of water.

J. Van Heckeren, M. D. de Osteo genesi praeternaturali, cum Tabula
aenea; 40. pp. 125. Lugduni, Batavor. 1797. Price 2 s. x. 6 gr. or about 8s.

The Author of this learned Dissertation treats, first, of the mor-
bific ossification which takes place in the preternatural swelling
of the bones themselves, and afterwards of the ossification in the car-
tilage, in the membranes, and other soft parts of the body. From
his inquiries and strict observations of the procses which Nature
follows in forming such bony substances, it appears, Naturam in
osteogenesi praeternaturali, habita partium, quibus contingit ratione
non minus ac in aliis aberrationibus constantes sequi leges atque
wertum in agendi modo ordinem semper serrare.

In the accurate explanation of these laws the Author shows with
much acuteness, how constant they really are, notwithstanding the
appearance of irregularity with which the morbid accumulation of
bony matter seems to issue; and it appears that Nature acts here,
likewise, according to established organic regulations; and thus,
what has been otherwise called a concrementum inorganicum,
ought properly to be considered as a regular production of Nature.
The Author then proceeds to discuss, copiously, upon the exuber-
ance of callus; and having examined the late opinions of the non-
existence of callus, he gives his own opinion, which he illustrates by
Callus luxurians is defined as producing luxuriance, by conveying firmitude to the totality of majuscule quantity. In an accurate survey of a bone, where luxuriant callus has been formed, it is apparent that plastic Nature never performs any thing superfluous, does not produce an exuberance and deformity of callus from mere luxuriance, but that it is always occasioned by certain external and internal causes, by which the formative act of Nature is disturbed and rendered irregular; how they act and influence upon the formation of the callus is amply explained by the Author.

Critical Survey of the Latest Theories on Difficult Dentition in Children.

(Parly extracted from the Journal of Invention, Theories, &c. in German. Numb. XXXI. 1800.)

Dentition has always been considered as a matter of great importance in diseases of children, and all the different and sometimes dangerous affections incident to the infantile age at the time they are cutting their teeth, have hitherto been supposed by almost every practitioner to originate from the irritation of the gums by teeth breaking through; and the appellation of dentition difficiles comprehends a series of symptoms, that, however they may differ in their external appearance, are derived from the same source. A swelling and inflammation of the gums, with a great salivaion and violent pain, and even spontaneous hydrophobia, a collection of pituitous matter in the breast, a laborious breathing, coughs, or continual vomition of bilious matter, vehement diarrhoeas, convulsions, and other spasmodic affections; fevers with acute exanthemeata, a suppression, or a superabundant excretion of urine, or a preternatural sharpness of it; an inflammation of the urethra and prepuce, with a kind of gonorrhoea; all these are mentioned by medical writers as immediate symptoms of teething, however increased and changed by other concomitant causes, as colds, small pox, worms, &c.

Such was the prevailing opinion of dentition, and the symptoms that sometimes attend it, till of late it has been made a matter of inquiry and discussion. Three of the most respectable authors and physicians of Germany, finding great difficulties in explaining those symptoms according to the opinion which was generally adopted, made an attempt to estabillish new theories on dentition, by which also the practice in those affections is greatly influenced. Although they agree, that the mere irritation of the gingiva cannot be allowed to be the immediate cause of these symptoms, yet they differ very much in the explanation and theory they respectively give of their nature and origin.

It is certainly undeniable that the idea of difficult dentition has been too far extended; but whether, on the other side, it ought to be considered of no immediate influence at all, is still a matter of dispute, as will appear from the observations annexed. It is proper now,
now, however, to proceed to give a concise account of each theory, of which we shall first relate,

I. Dr. Hecker's Theory, (contained in his Magazine for Pathological Anatomy and Physiology. Numb. I.)

The common opinion of the act of teething in children is subject to some difficulties, as it cannot be well explained, how it is possible a part, as the gums, not possessed of much sensibility and irritability, only by being irritated from the teeth cutting through, should produce such violent symptoms, as are observed sometimes during the period of first dentition. Another cause ought, therefore, to be sought for, that will prove more satisfactory in explaining, and more useful in directing a proper practice and cure of those symptoms, to which so many children fall a sacrifice.

It is a general law founded upon facts and experience, that as soon as the organs of secretion are diseased or affected in a morbid manner, they secrete such humours as are also morbid and pernicious. Thus, an irritation of the liver will produce a sharp and corroded gall; passions often render the milk venomous; and the mild salivary of an irritated and angry animal becomes very malignant and poisonous. Now, in a child that is cutting teeth, many circumstances take place, which are sufficient to turn the saliva into a very powerful, malignant, and even deadly poison. We observe a great collection of saliva and an irritation in the mouth of a teething child; it suffers a great deal of pain; restless and sleepless, it is continually crying, irritated, and in a degree of passion. This, already, may lead us to conjecture, that the saliva acquires such a malignity as to be able to cause many and very dangerous symptoms of difficult dentition.

It will, however, be still further proved by the following arguments: That a corruption and acrimony of the saliva, almost similar to that in the canine madness, is the principal cause from which all the most dangerous symptoms of dentition are to be derived.

1. Many symptoms of dentition admit of a more natural and easier explanation from this saliva than from the irritation only, viz. the coughs, laborious breathing, the collection of pituitous matter in the breast, suffocation, &c.; swallowing it causes vomiting and diarrhoea. When it possesses a high degree of acrimony, or when its excretion is by any means obstructed, it produces insensible and irritable constitutions, hydrophobia, locked jaw, epileptic fits, &c. The acrimony being imparted to the humours, gives rise to fevers and exanthemata. The inflammatory and gonorrhoic affections of the genitals are owing to acrid saliva having thrown itself upon the urinary system; a complication of dysentery and dentition is consequently very dangerous, because the bowels are thus likely to be doubly affected.

2. Dentition has been observed to be slight and easy whenever the salivation was considerable, or salival humours evacuated by other emunctories of the body.

3. There is a great similarity between the symptoms of difficult dentition
dentition and those of real hydrophobia, apparent from the impediment in swallowing, and other spasmodic affections.

4. Several children, who died of difficult dentition, had bloody stools, attended with teneffmus, as in dysenter. Upon dissecting the body, erosions and inflammations were found in the throat, stomach, and intestines, which were most probably caused by the acrid saliva; something similar has been noticed in the stomach of persons who have died of hydrophobia.

5. The cure consists in diminishing the irritation in the mouth, in removing the inflammation of the gums, of the salival glands, and the tonsils. To evacuate the sharp saliva, and to render it less noxious, are indications to which we are led by Nature itself. The most difficult dentition becomes less dangerous when there is much salivation, vomition, and moderate diarrhea.

The principal remedy is the fixed caustic alkali, or the volatile alkali, which has been already recommended by Fred. Hoffmann. When this is given early enough, before the nervous system is too much affected, or before too vehement spasmodic or even apoplectic symptoms have arisen, it certainly is able to save the life of many children. It moreover, in general, is a very useful remedy, whenever the organs for the secretion of lymphatic humours being irritated and inflamed, secrete morbid fluids; for instance, in gonorrhoea, in some cases of dysenter, catarrhous inflammations of the throat and breast, hydrophobia, &c. Blister applied behind the ears are of great service. The incision of the gums can only serve to mitigate the violent inflammation, but does by no means promote the cutting of the teeth. Opium should be avoided, or used at least with great caution, as apoplectic fits, of which many children die in dentition, are frequently brought on by it. Extrafum hyosciami may be given instead of it; warm baths have likewise great effect in removing the spasms and pains, and in promoting salutary excretions. Emetics and cathartics are also sometimes very useful.

II. Dr. Brandis's Theory.

The intelligent Dr. Brandis, of Brunswick, known by several excellent publications, and Translator of Darwin's Zoonomia, advances his opinion about the nature and origin of the dangerous symptoms sometimes observable at the time of first dentition, in his book on Metaaffases, 1798, in German. Although he agrees with Armstrong and Hecker, that they are not to be derived only from the irritation of the nerves of the teeth, yet he rejects their theories, and rather thinks, that a suppression of salival secretion has the principal share in producing those symptoms. The secretion of saliva is much increased by the topical irritation in the mouth, and becomes very necessary to the constitution of the child. When the topical irritation is too vehement, in a difficult dentition, it extends to the salival glands, and causes a suppression of the secretion of saliva. It may be observed, therefore, that the mouth and lips become dry and cold, in bad cases; meanwhile, there is a great degree
degree of febrile heat in other parts of the body, which is a dia-
gnostic sign of this dangerous disease.

When the suppressecl action of the salival glands is replaced by
that of the pancreas, a diarrhea comes on, which, as it generally
continues as long as the difficult dentition is accompanied by those
symptoms, contributes very much to diminish the violence of them,
and of the concomitant fever. But, on the contrary, when this
does not take place, nervous symptoms, convulsions, and a nervous
fever arise, which having a great similarity with Hydrocephalus
Internus, is very well described by Armstrong under the name of
hectic fever. That these nervous symptoms cannot be ascribed to
the nervous irritation arising from the teeth cutting through, may
be farther proved by the following considerations:

1. Nervous symptoms, arising from a re-action of the fenforium
caused by the pain, are never removed by any material excretion,
as this manifestly happens in difficult dentition by salivation and a
diarrhea of watery humours.

2. All anodynes and antispasmodic remedies, opiates particular-
ly, which in convulsions proceeding from pain, prove so very effi-
cacious, are without any avail here, of which circumstance Dr. B.
had frequent experience.

3. The incision of the gums ought to remove the causes of the
disease at once, according to the theory generally believed; but in
four cafes, where he saw it used, it was not only of no immediate
utility, but in some instances, by additional irritation, it increased
the nervous symptoms. A healthy child, fifteen months old, hav-
ing suffered a slight degree of cold, was suddenly seized with all
the symptoms of difficult dentition. Emetics, mercurial purgatives,
fomentations of the mouth, &c. were applied in vain. It lay
femfeles, with its mouth open, and cold; the pulse was hardly per-
ceptible, and vehement convulsions came on from time to time.
The gums were cut in on both fides to the teeth themselves, after
which it seemingly recovered a little; but soon after, the mouth
and the lips remaining dry, pale, and the cheeks cold, the fever
and convulsions returned; and though the operation was repeated,
and ointments rubbed in, outside and inside, it died the next day.
The gums were found divided by the operation, and the teeth free
and visible, but no inflammation could be traced on the margin of
the incised gums. The operation should have certainly saved the
child, if the disease had been dependent from the cutting of the
teeth, and a salivation would have had that effect.

In examining those theories, the arguments should first be con-
dered, by which they have attempted to prove that the symptoms
derived from difficult dentition are not owing to the irritation of
the gums, on account of their being less sensible, and not provided
with nerves, as to be able to cause those symptoms; that the inci-
son of the gums is of no utility, and, consequently, that the nature
of the symptoms themselves is by no means correspondent with the
quality of the cause they are supposed to be occasioned by. Al-
though the theories just proposed are partly grounded upon those
considerations,
considerations, yet it may be proper to defer reviewing them till we relate Dr. Wichmann's Theory, as it is particularly urged by that gentleman.

Both Theories are certainly very ingenious and plausible, several doubts, however, may be raised against them, to which they seem to be exposed. In the first place, Dr. Brandis objects to Dr. Hecker's opinion, that, as the symptoms of difficult dentition do not arise before the salivation is entirely suppressed, and consequently before the secretion of any saliva is stopped, they cannot owe their origin to its acrimony, of which quality he never could perceive any signs in a teething child. But should not the existence and action of such an acrid humour be proved by the erosions and inflamations that have been found in the throat, stomach, and intestines of children dying in a high degree of difficult dentition? However, even when this is allowed, it may be suggested, that it would be more proper, and agree better with our improved knowledge of animal economy, to derive primarily the morbid secretion of the saliva, and the symptoms of difficult dentition, from the same proximate cause which consists in the nervous irritation, and to consider both as the congenial effects of it, and not the morbid secretion of saliva as the original cause of those symptoms. It is moreover obvious to remark, in general, that the idea of an acrimony wandering through the body, and causing diseases, is by no means evident, but built upon hypothetical principles.

The opinion of Dr. Brandis is founded upon his theory of metaftasés, which he has propofed in the work above mentioned. According to this, the idea of a metaftasés ought to be thus conceived: "When certain actions in any organ, or system of organs, cease, or are by any means diminished, they must be replaced by another action in another organ or system of organs of the body, dependent from the former action. The first may be called the original; the second, the vicegerent action." In dentition, now, the secretion of saliva is the original action of the salival system, caused by the topical irritation in the mouth, which in a teething child is become necessary to its constitution. If that action happens to be stopped, a vicegerent action is excited in another organ; and if this takes place in the nervous system, all those dangerous symptoms appear which are to be attributed to difficult dentition. It is, however, not requisite, and would lead us too far, to enter into the particulars of this ingenious theory; it may suffice to observe, that the suppression of salival secretion might be more naturally considered as the effect of nervous irritation, which by its violence, at the same time produces the other symptoms of difficult dentition. This explanation is suitable to a known law of the animal economy, according to which, secretions are increased by a moderate degree of irritation, and suppressed whenever it becomes too vehement. When salivation, therefore, is not suppressed, but rather increased, and the symptoms without danger, the irritation of the nervous system is moderate, which being relatively vehement, must be looked upon as the common cause of both.
the suppression of saliva as well as of the violence of the symptoms. Salivation, however, may be of some service in denunciation, by rendering the gums tender, and more easily to be cut through.

Anodynes and narcotics, whose efficacy is denied here by Dr. B. have generally been found to be very useful by other eminent practitioners; and even Dr. Hecker recommends the Extraetum Hyoscyami, though he ventures not to give opiates, which, however, in some instances, may prove likewise very useful.

[To be continued.]

Almanack oder Taschenbuch; i. e. Almanack or Pocket-Book, for Chemists and Apothecaries, for the Year 1800. Weimar. 8vo. Price 16 gr. or about 2s. 6d.

The Editor of this useful publication, which for many years has maintained its credit with the public, is Professor Götting, of Jena, whose great merits in chemistry are well known, and justly respected. It consists of a common Almanack, where, instead of the saints, the names of celebrated chemists are inserted; to which is added an account of those pharmaceutical operations that are to be performed in each month. The present volume gives a continuation of the revival of operations and experiments begun in the Almanack of last year, for the purpose of accommodating the foregoing volumes to the present state of chemistry; some new experiments of the author are likewise subjoined. The present Almanack reviews those of 1782—85. The whole is concluded with accurate reviews of new chemical and pharmaceutical publications.