

blister to the third? As this question may have occurred to others of your readers, I may as well, in reply, state that I had no opportunity of using any discretion from that indication, as the blisters were applied upon all simultaneously.

CONTINENTAL TREATMENT OF NEURALGIA.

DR. SCHLEISER, of Peitz, has prescribed, with success, to patients with abdominal neuralgia, but whose circumstances would not permit of their visiting a watering-place, the use of an artificial mineral water, resembling that of Eger, in Bohemia, and made as follows:—R. *Filtered spring-water*, a pint; *diluted sulphuric acid*, two drachms and a half; *hydrochloric acid*, twenty drops. Mix, and add *bicarbonate of soda*, forty-five grains. The bottles are then to be sealed up without delay, and kept cool; one or two pints may be drunk daily. In hepatic neuralgia Dr. Schleiser depends much on the effects of belladonna; in cases where great irritability of the stomach is present, he finds nitrate of silver suitable, combined with morphia.—*Rust's Magazin*.

Morphia has been an ordinary remedy for neuralgia, the cure of which it may, in certain cases, effect; but a French practitioner, M. Rougier, has advised the adoption of an ingenious method, which he says will prove the completeness and permanence of the cure. After the apparent removal of the disease by the morphia, he administers successive small doses of strychnia, gradually increasing the amount of the doses and abridging the intervals between them. Now, if the cure have been complete, the tremors and other characteristic effects of the strychnia go on diminishing in intensity from the first, notwithstanding the increasing strength and frequency of the doses; but if otherwise a contrary result happens, and the effects of the strychnia increase in intensity.—*L'Experience*.

ADVANTAGE OF SYSTEM IN MEDICAL INQUIRIES.

"I ADVISE a systematic arrangement in each case; observe the state of the pulse and skin; feel the head (in insane patients), whether it is hot all over, or in one part only; whether the extremities are cold; whether the tongue is loaded and dry: whether the bowels are open, the urine free, and if the patient be a female, whether the catamenia are regular. Next observe the breathing and the action of the heart, pass your hand over the right hypochondrium, and feel whether the liver be enlarged, or whether the abdomen be distended with flatus, and whether there be tenderness about the precordia. Examine also the beating of the carotids and the temporal arteries."—Dr. Sutherland.

No. 1042.

THEORY OF GENERATION.

To the Editor of THE LANCET.

SIR,—My attention having been drawn to the strong analogy which subsists between the generative organs and function in the two great tribes of organised beings, I determined to make the theory of generation the subject of a Thesis presented at the M.D. examination of 1841, in the University of London. Circumstances having prevented the publication of the essay, I transmit you the conclusions deduced from the whole of the materials I could collect during a diligent investigation of the subject. I am, Sir, your obedient servant,

PH. B. AYRES, M.D.

Thame, Aug. 12, 1843.

1. That the same general laws of reproduction obtain in all organised beings.

2. That the laws are few and simple, although the organs and process of generation are very much modified in different classes.

3. That the process of generation is more simple in a direct ratio to the simplicity of structure of the adult being; more complex as that being approaches the highest development of organisation.

4. That reproduction is in no case spontaneous, since we find that all organised beings possess direct means of reproducing their kind.

5. Reproduction may be defined as a series of actions instituted in the bodies of one or more individuals of the same or allied species, either of the same or different sexes, by which a new individual is produced.

6. That there are four modes of reproduction,—fissipation, gemmulation, ovipation, and vivipation.

7. Fissipation may be defined as the spontaneous or accidental division of an organised being into two or more parts, each of which becomes a new and perfect being, resembling in every respect that from which it was derived.

8. Gemmulation is the separation of the minute portion of an organised being, endowed with distinct vitality, and producing a new individual by simple growth and development of its substance, and produced without the agency of sexes.

9. Ovulation is the formation and separation of a sac composed of one or more membranes, and filled with nutritious matter, from one organ (female) for the reception and nutrition of a germ (or gemmule), separated from another organ (male), existing in the same or different individuals.

10. When the male and female organs are contained in the same individual, and are capable of mutual impregnation, the individual is said to be hermaphrodite; when both organs are included in the same indi-

vidual, but require the mutual impregnation of two individuals, they are said to be androgynous; when the male and female organs exist in separate individuals they are diœcious.

11. When the ovum is excluded from the ovary and oviducts before the embryo is mature, and a period of time elapses between the exclusion of the ovum and the escape of the young, the parent, animal or plant, is said to be truly oviparous.

12. When the ovum is hatched before exclusion, but without becoming again attached to the parents, animal or plant, the latter are said to be ovoviviparous.

13. Vivipation occurs when the ovum, after being separated from the ovary, becomes again attached to the maternal organs, and continues to draw its nourishment from them until it is ready to be hatched. This form of generation obtains only in one class of animals (mammalia), and is unknown in plants.

14. Two of these modes of reproduction may occur in the same species, and the whole of them (except vivipation) in the same class. Ex. Polypiphera.

15. Fissipation, being the simple division of an organised being, requires no organs of reproduction.

16. Gemmulation may either take place throughout the whole of the animal (Poriphera) or plant (Nostoc), or it may be confined to some particular part or organ.

17. That when organs exist for the production of gemmules they are analogous to each other in the two great classes of organised beings, and strikingly so in the gemmulative sacs of vaginiform polypiphera and in mosses.

18. That the gemmules of animals are equivalent to the sporules of plants in function and development.

19. That the same general law is followed in the formation of the generative organs of oviparous animals and plants.

20. The reproductive organs of animals are essentially tubular in structure.

21. The tubular structure of the male organs subsists throughout all the classes of animals up to man.

22. The tubular structure of the female organs of animals is continued in a very distinct form up to batrachian reptiles.

23. The calyces of chelonian reptiles and birds, and the ovarian vesicles of mammalia, are, in all probability, the remnants of the tubular structure of the inferior classes.

24. The same essential uniformity of structure obtains throughout all ovuliferous plants.

25. The ovules of animals and plants are the analogues of each other.

26. The ovary of the plant is the analogue of the ovary of the animal.

27. The style and stigma are to the plant

what the vagina and vulva are to the animal.

28. The anther is analogous to the testicle.

29. The contents of the pollen-cases are equivalent to the male semen of animals.

30. The pollen-cases may be compared to the elastic filaments of Needham, enclosing the spermatozoa of cephalopods.

31. The male and female organs are so analogous to each other that the one may be converted into the other in structure if not in function, as in the osseous fishes and in some monstrous plants, where the ovary reverts to the state of stamen.

32. That the male semen of animals and plants consists of a fluid holding in suspension corpuscles endowed with spontaneous motility.

33. A most perfect analogy, both in structure and function, subsists between the spermatozoa of animals and the spermatie granules of plants.

34. The ovules of the female organs, both of animals and plants, require the action of the male fluid or semen, to render them fertile.

35. The contact of the male semen with the ovule is essentially necessary to the production of the embryo.

36. That the ovule is fecundated by the direct action of the male semen in gymnospermoses exoques, as cycadræ and coniferæ, where the ovule is naked, and in batrachian reptiles and fishes, where the ovules are excluded before impregnation.

37. In other cases the impregnation of the ovule occurs within the organs of the parent, as in all angiospermous plants and most animals; in these cases means are provided to convey the semen to the ovules.

38. That the spermatie granules and spermatozoa form the active part of the semen.

39. That the embryo does not pre-exist in the ovule.

40. That the spermatie granules and spermatozoa are the germs of the future being.

41. That there exists a very strong analogy between the gemmules and spermatozoa of animals and the sporules and spermatie granules of plants.

42. That the seminal animalcule of animals penetrates to the surface of the vitelline membrane, spreads out upon it in the same manner as the gemmules of poriphera on the surfaces of submarine bodies, to which they attach themselves, and thus become united to the ovule, forming the cushion-like eminence observed on impregnated ovules, this being the first rudiment of the embryo.

44. That the nucleus (afterwards albumen) of the ovules of plants may be considered equivalent to the vitellus of the ovules of animals, the primine and secundine to the external investments of the ova.

45. That the resemblance of hybrids to the mother does not at all militate against the opinion that the spermatozoa and spermatie

granules are the rudiments of the embryo, since such resemblance may be easily accounted for by the difference of nutrition.

46. That external causes may produce varieties which may be perpetuated by reproduction.

47. That the impregnation of the ovule in mammalia usually takes place in the Fallopian tubes some time after copulation.

48. Superfoetation may occur both in animals and plants, producing different varieties of young.

49. That facts are wanting to establish the resemblance of the young to either of the parents.

50. That the circumstance related in "Mayo's Physiology," second edition, page 489, cannot be accounted for by any theory, and that it requires verification.

CHOREA CURED BY MISTAKE.

DR. HILDRETH, of Zanesville, Ohio, states that he was informed by a medical friend of undoubted veracity, that he once knew a case of chorea cured in four or five days by mistake. The patient was a mulatto girl, seventeen years of age. Her physician had great confidence in the powers of arsenic in this affection; he therefore prescribed ten drops of Fowler's solution to be taken three times a day. The patient, thinking this dose too small to do any good, took twenty or thirty drops instead of ten. As a matter of course, she was completely poisoned in a very short time, and was obliged to take the proper antidotes for arsenic to save life. On recovering, however, from the effects of the poison, she was found to be permanently free from all signs of chorea. Dr. Hildreth relies upon large doses of quinine, from fifteen to thirty grains in the course of the day, given so as to produce occasional, but not constant, *tinnitus aurium*, that is to say, pushed so far as to threaten incipient *quininism*. (See ante p. 626) If there be evidence of cerebral congestion, or fullness of the vascular system, it should not be given without preparation; the secretion of the stomach and bowels should be rendered healthy, and if anemia be present, it should be combatted at first by chalybeates.—*The Chemist*.

COLOURING PROPERTIES OF ALOETIC ACID.

—M. Barresville has remarked that this substance melted with common resin gives to it a most intense blue colour. He has not yet been able to extract from the combination this colouring matter, but he has remarked that the resin thus tinted readily dissolves in alcohol and essences, and unites with fatty substances, which bodies it may, accordingly, be employed to colour. A few grains of crude aloëtic acid melted with four or five drachms of resin are sufficient to colour a pound of fat.—*The Chemist*.

THE LANCET.

London, Saturday, August 19, 1843.

IN these days of homœopathy and hydro-pathy, and other humbug devices with names pretending to be Greek, we should regard with suspicion every innovation in medical doctrine or practice which appears in an hellenic garb—a suspicion that is engendered, naturally enough, by the probability that alleged discoveries which are announced in dead languages will turn out to be only new contrivances of quacks to gull the inexhaustibly gullible public. There is, however, one new practice, raised under a Greek flag, namely, *hemospasia*, which has for some time deservedly attracted attention in France, and which does not appear to belong to the category of humbugs. Hemospasia forms the subject of an article in the "Gazette Médicale" of the 22nd of July last, in which journal it has before been noticed, and seems to us to be worthy of serious consideration. It has, moreover, some relation to the *conversazione* of "old friends with new faces," at which we have latterly entertained our readers. We shall here, therefore, introduce it to their notice.

This practice, the name of which is derived from *ἀίμα*, *blood*, and *σπᾶω*, *I draw*, or *attract*, consists in effecting revulsion by forming a vacuum over a considerable extent of the surface of the body—of one or two limbs—or even one half of the body. The practice has been introduced by M. JUNOD, who has invented particular apparatus adapted for the purpose, and to whom one of the Montyon prizes has been assigned by the Academy of Sciences for this improvement in therapeutics. The Academy has expressed, in two different memoirs, a highly favourable opinion of M. JUNOD's views and practice, which are alleged to have been tested in the Parisian hospitals with the most satisfactory results.

Having not yet seen the work published