A LIST

OF THE

ORIGINAL MEMOIRS

OF

S. WEIR MITCHELL, M.D.,

PHILADELPHIA;

Member of the National Academy of Sciences of the United States of America; Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society; Member of the Philadelphia Academy of Natural Sciences, and Vice-Director of the Biological Department of the A. N. S.; Associate Fellow of the American Academy of Arts and Sciences, Boston; Corresponding Member of the Boston Natural History Society; Honorary Corresponding Member of the British Medical Association; Senior Vice-President of the Pathological Society of Philadelphia, etc.;

Formerly one of the Surgeons in charge of the U. S. A. Hospital for Injuries and Diseases of the Nervous System.

PHILADELPHIA:

J. B. LIPPINCOTT & CO.

1868.

A LIST

OF

ORIGINAL PAPERS

OF

S. WEIR MITCHELL, M.D.

---

1. On the Various Forms of Uric Acid Crystals and on the Mode of their Formation. American Journal of the Medical Sciences, 1852, p. 121—pp. 4.
2. The Relations of the Pulse to Conditions of Fixed or Extreme Inspiration and Expiration. Am. Journ. of the Med. Sciences, 1854, p. 387—pp. 12.
3. Bibliographical Notices of American Memoirs upon Physiological Subjects. North American Medico-Chirurgical Review, Jan. 1858—pp. 30.
4. Observations on the Blood Crystals of the Sturgeon, Acipenser Brevirostrum. Proceedings of the Biological Department of the Academy of Natural Sciences, Philadelphia, March, 1858—pp. 2, with colored plates.
5. On the Inhalation of Cinchonia and its Salts—pointing out the Volatility of these Agents, with reference to the Possibility of Treating Malarial Fevers by Breathing their Vapors. Proceedings of the Biological Department of the Acad. of Nat. Sciences, Philadelphia, Dec. 1858—pp. 2.
6. Notes upon the Effects of Alcohol, Glycerine, Water, Gum Ammonia, and the Vacuum upon the Excised Hearts of the Frog, Turtle, and Sturgeon. Proc. Biol. Dep't. Acad. Nat. Sciences, Philadel-

phia, Dec. 1858. Am. Journ. of Med. Sciences, April, 1859—pp. 6. Explaining how the vacuum acts mechanically as well as otherwise to embarrass the movements of the heart, and demonstrating the fact that when one stimulus has failed to excite the heart, another may still effect this end.

7. Experimental Researches relative to Corroval and Vao, two new varieties of Woorara, the South American Arrow Poison. By Wm. A. Hammond, M.D., and S. Weir Mitchell, M.D. Biol. Dept. Acad. Nat. Sciences, May 16, 1859, Am. Journ. Med. Sciences, July, 1859—pp. 48, with wood-cuts. An experimental inquiry into the effects of two new poisons, showing that they act by directly paralyzing the muscular tissues of the heart.
8. An Experimental Examination of the Toxicological Effects of Sassy Bark, an Ordeal Poison from Liberia, West Africa. By S. Weir Mitchell, M.D., and Wm. A. Hammond, M.D. Biol. Dept. Acad. Nat. Sciences, Philadelphia, June 29, 1859. Charleston Med. Journal and Review, Nov. 1859—pp. 20. Showing that this agent is narcotic, emetic, and astringent.
9. On the Production of Cataract in Frogs by the Administration of Saccharine Substances. Biol. Dept. Acad. Nat. Sciences, Oct. 3, 1859. Am. Journ. Med. Sciences, Jan. 1860—pp. 5. Experiments showing that alterations of the specific gravity of the fluids of the body may occasion opacity of the crystalline humor, and pointing out this as a possible explanation of diabetic cataract.
10. On the Physical and Chemical Characteristics of Corroval and Vao, two recently discovered varieties of Woorara, and on a New Alkaloid, constituting their active principle. By Wm. A. Hammond, M.D., and S. Weir Mitchell, M.D.—pp. 10. Proc. Acad. Nat. Sciences, Biol. Dept., April, 1860.

11. Researches upon the Venom of the Rattlesnake, with an Investigation of the Anatomy and Physiology of the Organs Concerned. Smithsonian Contributions to Knowledge. Accepted for publication July, 1860. Quarto. pp. 150. Wood-cuts, with full Bibliography and an Enumeration of Genera and Species, by E. D. Cope. This paper is too long for analysis. It contains a complete examination of the anatomy and physiology of the vemon-apparatus, analyses of venom, and a study of its effects on plants and animals, including man, with a summary of all the reported cases of human poisoning by venom and notices of the various antidotes supposed to have value.
12. On the Treatment of Rattlesnake Bites, with Experimental Criticisms upon the Various Remedies now in Use. North American Med.-Chir. Review, March, 1861—pp. 45. Experiments showing the uselessness of reputed antidotes, and indicating the rational means of treating these accidents.
13. Sur la Résistance aux Effets du Curare Offerte par la Tortue connue sur la nom de Snapping-Turtle (Chelonura Serpentina). Journ. de la Physiologie de l'Homme et des Animaux, tome v. p. 109. Paris, 1862. Describing the extraordinary difficulty in destroying the turtle, and offering a partial explanation of this fact.
14. Experiments and Observations upon the Circulation in the Chelonura Serpentina (Snapping-Turtle), with Especial Reference to the Pressure of the Blood in the Arteries and Veins. Memoirs of the American Philosophical Society, vol. xii. N. S. Pt. 1, p. 219, April, 1862. Quarto. pp. 14. Experiments with the cardiometer, showing the arterial pressure to be one-third that of mammals, and the individual heart-beats to vary but little in power from that of mammals of like weight. So

that in the turtle either the amount of blood is less or, as is shown, the capillary resistance is inferior and the veins very capacious.

The true type of Chelonian respiration is here pointed out and first distinctly described as being like that of the mammal.

15. Researches on the Anatomy and Physiology of Respiration in the Chelonia. By S. Weir Mitchell, M.D., and Geo. R. Morehouse, M.D. Smithsonian Contributions to Knowledge. Accepted for publication March, 1863. Quarto. pp. 42. With wood-cuts. Pointing out the fact that the type of respiration in turtles is akin to that of mammals rather than to that of batrachians, as had been previously held, and also describing, for the first time, the existence of a chiasm between the laryngeal nerves of the two sides.

16. Reflex Paralysis, being Circular No. 6 of Surgeon-General's Office, March 10th, 1864. By S. Weir Mitchell, M.D., Geo. R. Morehouse, M.D., and Wm. W. Keen, Jr., M.D. In this paper a novel theory of "Shock" from Nerve Injuries is set forth, and cases related where a ball wound of one limb caused paralysis of remote parts of the body.

17. Gunshot Wounds and other Injuries of Nerves. By S. Weir Mitchell, M.D., Geo. R. Morehouse, M.D., and Wm. W. Keen, Jr., M.D., in charge of U. S. A. Wards for Diseases and Injuries of the Nervous System, Turner's Lane Hospital, Philadelphia.—Oct. pp. 164. J. B. Lippincott & Co., Philadelphia. 1864. This volume describes at length all the primary and secondary results of nerve wounds, and especially many hitherto undescribed lesions of nutrition, as well as a novel form of burning pain previously unknown—as a consequence of gunshot wounds. There are also full details of treatment and a report of thirty-one cases of nerve lesions.

18. On Malingering, especially in regard to Simulation of Diseases of the Nervous System. By Wm. W. Keen, Jr., M.D., S. Weir Mitchell, M.D., and Geo. R. Morehouse, M.D., in charge of U. S. A. Hospital Wards for Diseases and Injuries of the Nervous System, Turner's Lane Hospital, Philadelphia. Am. Journ. Med. Sci., Oct. 1864—pp. 28. Describing many new points in connection with these cases, and indicating several entirely novel means of testing the reality of Epileptic fits.
19. An Inquiry into the Correctness of the belief that Prof. Bibron was the Inventor of the Antidote which bears his name. Am. Journ. Med. Sci., Oct. 1864—pp. 3.
20. Arsenical Albuminuria. Read before the Pathological Society of Philadelphia, Jan. 8th, 1862. New York Med. Journ., June, 1865—pp. 6. Report of cases proving that arsenic may occasion an albuminous state of urine as well as the ordinary œdema.
21. On the Antagonism of Atropia and Morphia, founded upon observations and experiments made at the U. S. A. Hospital for Injuries and Diseases of the Nervous System, etc. By S. Weir Mitchell, M.D., Wm. W. Keen, Jr., M.D., and Geo. R. Morehouse, M.D.—pp. 10. Am. Journ. of Med. Sci., July, 1865. An examination of the power of Conia, Daturina, Atropia, and Morphia to destroy Neuralgic pain, and an experimental determination upon man of the ability of Morphia and Atropia to act as mutual antagonists in certain of their effects upon the human frame.
22. Paralysis from Peripheral Irritation. New York Med. Journ., Jan. 1866—pp. 67. A critical examination of the reported cases of Reflex Paralysis, with the addition of many new cases. Contains the continued histories of some of the cases reported in Circular No. 6, 1864.

23. On Retrogressive Motions in Birds produced by the application of Cold to the Cervical Spine, with remarks on the use of that agent as an aid in Physiological Investigations. Am. Journ. Med. Sci., Jan. 1867—pp. 15. Experiments showing that a form of convulsion analogous in many respects to Epilepsy may be caused by congestions of the Spinal Medulla, producible in a novel manner by the application of the ether or rhigolene spray. Also, observations on the temporary destruction of function by extreme cold in the great nerve centres as a means of studying their true offices.

24. On the Production of Reflex Spasms and Paralysis in Birds by the application of Cold to definite regions of the skin. Am. Journ. Med. Sci., Jan. 1868—pp. 7. Experiments proving that in birds cold applied to the skin causes precisely the same forms of convulsion as obtain when the correspondent portions of the spine are similarly treated.

25. Experimental contributions to the Toxicology of Rattlesnake Venom. New York Med. Journ., Jan. 1868—pp. 34. Experiments to show the dose of venom capable of destroying life. Also that venom is harmless when swallowed: first, because it is incapable of passing through mucous surfaces; second, because it undergoes some change during digestion which allows it to enter the blood as a harmless substance, or to escape from the canal in an innocent shape. That it acts directly on the capillary vessels so as to occasion their rupture, thus accounting for the bleeding from fang wounds, and for the subsequent escape of blood into the various tissues. That the rattlesnake cannot poison itself. That the sulphites and carbolic acid have no value as antidotes.