mentions "occupation for the mind of a comforting character, if possible, and cultivation of a religious conviction of the sanctity of life and the sin of self-inflicted death."

A few days ago, Dr. Germain Séé read a paper on the treatment of obesity. The method which he adopted for getting rid of superfluous flesh is simple, and does not involve so severe a regimen as that prescribed by the late Mr. Banting. Azotized food is, the doctor holds, the great cause of fat, and accordingly he insists on a sparing consumption of meat. Alcoholic beverages he proscribes altogether, but he allows the victims of corpulency as much tea as they can drink. This is the entire programme, and the professor is confident that it suffices.

G. O. M.

DOMESTIC CORRESPONDENCE

ARTIFICIAL ANÆSTHESIA.

TO THE EDITOR OF THE JOURNAL:

Dear Sir:—I am very much surprised to see the statement made by your London correspondent pass into your JOURNAL without comment in regard to the discovery of anæsthesia. He states as follows: "Dr. Simpson has the reputation of having been the discoverer of anæsthesia like Dr. Harvey, they were really the men who brought the discoveries practically into use, and pointed out to us clearly and truthfully the *modus operandi* of the circulation and anæsthesia."

The following are the facts in the case as to the "Discovery of the Art of Artificial Anæsthesia."

ANÆSTHETICS OF THE ANCIENTS.²

"The ancient Greeks, it is stated, possessed a plant called mandrake. It belonged to the same family of plants as the belladonna, or deadly nightshade. From the root of this plant was extracted, by means of wine, a narcotic which was employed by them as an anæsthetic. Lucius Apuleius, who lived about 160 A. D., and of whose works eleven editions were republished in the fourteenth and fifteenth centuries, says, 'that if a man has to have a limb mutilated, sawn, or burnt, he may take half an ounce of mandragora wine, and whilst he sleeps the member may be cut off without pain or sense.' Another fact was noticed by the ancients, that many volatile substances acted more promptly by inhalation than by the stomach, and this form of medication was employed in Greece, Rome, and Arabia. By their published works, the knowledge of these facts was extended to other parts of the world.

"In China, in ancient times, the word *ma-yo* meant not only Indian hemp, but anæsthetic medicine; other substances besides hemp entered into these benumbing recipes, such as the datura, a solanaceous plant, probably identical with the atropia mandragora; also aconite, hyoscyamus, etc. Some of these drugs form constituents of the formula said to be employed by kidnappers of children, and robbers,

and are therefore naturally forbidden in China, at the present time, to be sold or employed.

"The Indian hemp, under the name *bhang*, was extensively used by the Mohammedans and others in Central Asia. The most wonderful properties are ascribed to it. 'Taken in excess, the spirits and demons may be seen; it confers prophetic powers; it is sometimes taken by persons wishing to indulge in spiritualism, and it is used as an antidote to forgetfulness.' (Dudgeon).

"A strong impulse was given to the study and application of the 'different kinds of airs and gases' by the discovery of oxygen by Priestley and Scheele, in the middle of the last century, and numerous experiments were made by physicians with it. Another still more practical result was obtained by Sir Humphrey Davy, and published in 1800. 'That nitrous oxide appears capable of destroying physical pain, and may be used with advantage during surgical operations.' This valuable and practical suggestion remained without fruit for a long time, and the surgeons, physicians, and accoucheurs still employed alcohol, in some form, or opium and its salts, to deaden as far as possible the sensibility to pain during their various operations. It was not until 1844 that an effort was made in the United States to make Davy's discovery useful, by Dr. Wells, a dentist of Hartford, Connecticut, U. S., who made, December 11th, 1844, the first application of the nitrous oxide gas to relieve the pain of the extraction of a tooth. But the crowning result was obtained in 1846 by Dr. Morton in the Massachusetts General Hospital, where it was demonstrated successfully that the inhalation of 'ether' was capable of so deadening the sensibility of the nervous system, that any operation, no matter how painful, could be performed, and the patient not suffer from its effects. It was also proven that ether was a safe anæsthetic if in a proper case, and dose was administered by a competent individual; this was done first by the late Dr. John C. Warren,¹ of Boston, through whom it was introduced to the profession. It was not until 1847 that Dr. Simpson discovered chloroform to be a substitute for ether."²

The whole world owe the United States a debt of gratitude for the introduction and practical application of the two safest and most effectual anæsthetics, nitrous oxide, and ether. American men of science have done more than all others in the discovery and employment of anæsthetics, and should therefore receive the credit due to them.

LAURENCE TURNBULL, M.D.

Philadelphia, Oct. 26, 1885.

TUBELESS TRACHEOTOMY.

TO THE EDITOR OF THE JOURNAL:

Dear Sir:—During the past few years, at the meeting of the various medical societies, I have heard my friend, Dr. Byrd, make the statement that the method of treating a case of tracheotomy without a tube, or what has been called *tubeless tracheotomy*, was origi-

¹Journal American Medical Association, Oct. 24, 1885.

²Dr. L. Turnbull's Introduction to his first edition of his Manual of Anæsthesia, March, 1878.

¹The Advantages and Accidents of Artificial Anæsthesia, by Laurence Turnbull, M.D., Philadelphia, 1878, p. 208.

²Surgical observations with cases made by I. Mason Warren, M.D., page 614.

nated by Dr. Henry A. Martin, of Boston, and he repeats the statement in his remarks on "Tetanus," in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, of October 10, 1885, page 400.

Now conceding all that Dr. Byrd says of Dr. Martin as a distinguished surgeon, he did not originate, introduce, or suggest this method of tracheotomy; and I cannot think that Dr. Martin ever claimed it. Dr. Daniel Brainard was the surgeon who first made known and advocated this method, and it should be known as Brainard's operation for tracheotomy. In the *American Journal of the Medical Sciences*, vol. xxxviii, page 291, in an article entitled "Suggestions of Improvements in Tracheotomy, by Daniel Brainard, M.D., of Chicago," will be found a complete description of this method; and in the *Chicago Medical Journal*, for 1859, page 134, after reporting a case operated on in this way, he goes on to say:

"The suggestions which I have to offer in regard to tracheotomy, relate to the means of preventing hæmorrhage, to keeping the opening made by the operation pervious without resorting to a tube, and at the same time controlling the entrance of cold air abruptly into the lungs. . . . In order to prevent hæmorrhage I proceed in the following manner: Having incised the skin and fascia by successive and careful incisions, I press the sterno hyoid, and sterno thyroid muscles to each side with the fingers, and thus expose the thyroid body. This effected, I pass under the isthmus a director curved, or an aneurismal needle. This is followed by a common suture needle, which may be passed with the blunt end foremost, armed with two very strong ligatures. A ligature is then tied very firmly on each side, and the isthmus of the thyroid body divided between them. A little dissection with a blunt instrument denudes the trachea to the required extent, and an opening can be made without danger of a drop of blood being drawn into it.

"The ligatures which have been thus secured, serve the purpose of fixing the trachea, if desirable, and they may be tied behind the neck so as to raise it forward, and keep the wound open. I never open the trachea until the hæmorrhage is stopped, and a large surface of it has been quite denuded." 2. *'Keeping the opening in the trachea pervious without resorting to a tube.'*—The objections to a tube are twofold: 1st, When the operation is performed for the extraction of a foreign body, it prevents its exit; and it is desirable to leave this opening in such a state that the foreign substance may escape whenever it becomes loosened from its situation in the bronchia. 2d, In tracheotomy for croup, the prolonged sojourn of the tube has been considered, by the most eminent surgeons, as a cause of the pneumonias, which so frequently are the cause of death.

"The necessity for using the tube I avoid by the following means: Having denuded the trachea, insert a small suture needle, armed with a ligature, beneath two of its rings. Withdraw the needle, and drawing gently upon the thread, make a semi-circular incision on one side, so as to form a valve, readily opened by drawing upon the thread. The opening thus formed can be kept patent, or be allowed to close at will."

It will thus be seen that what Dr. Byrd claims for Dr. Martin should be credited to Dr. Brainard—a man who possessed a powerful and commanding intellect, who was a great and original genius in surgery, and who made many improvements and suggestions for the advancement of his favorite branch. Prof. Gross expressed his estimate of the man when he said: "There are three great surgeons now living, and of the three Brainard is not the least."

Just now we frequently read in extracts from foreign journals about Martin's method of treating spina bifida with iodine injections, a plan originated and successfully used by Brainard thirty-five years ago, and the work of the Western surgeon is entirely ignored. *Honor to whom honor is due.*

MADISON REECE, M.D.

Abingdon, Ill., Oct. 15th, 1885.

BOOK REVIEWS.

1. SITZUNGSBERICHTE DER PHYSIKALISCH-MEDICINISCHEN GESELLSCHAFT ZU WÜRZBURG. 8vo., pp. 164. Jahrgang, 1884.

2. VERHANDLUNGEN DER PHYSIKALISCH-MEDICINISCHEN GESELLSCHAFT ZU WÜRZBURG. Herausgegeben von der Redactions-Commission der Gesellschaft, DR. JOHANNES GAD, PROF. DR. W. REUBOLD, DR. KONRAD RIEGER. Neue Folge, XVIII Band. 8vo., pp. 321. Würzburg.

PROCEEDINGS OF THE PHYSICO-MEDICAL SOCIETY OF WÜRZBURG. Würzburg: Stabel's University Press.

We feel somewhat disposed to quarrel with the Publication Committee of the Würzburg Society for delaying the publication of these proceedings of 1884 until the middle of the present year. Some of the papers and discussions are quite valuable, and all are more or less interesting; and there seems to be no good reason why they—the medical papers, at least—should not have been before the profession some time ago.

1. The first paper in this volume is an interesting contribution to the subject of "Contortionists," by Hans Virchow. And why the author should have gone out of his way to use such a word as *Schlangenhenschen* for *Contortionists* passes all understanding, especially as two highly educated Germans declared, on seeing the title, that it meant "Snake-charmers." Be this as it may, the paper is an interesting contribution to the anatomy of contortionists.

Dr. H. Maas contributes three papers to this volume, the first concerning *Plastic Operations in the Treatment of Ulcers*; pediculated flaps being turned from the adjacent sound parts, but a piece of healthy skin is left between the ulcer and the place whence the flap is taken; a method which, on histological grounds, is recommended by Kölliker. His second paper is on the *Operations for the Cure of Ulcers of the Heel*. After mentioning the operations recommended and performed by Mickuliez, Billroth and Czerny, the last two being by using granulating skin-flaps, he refers to the operation recommended years