HISTORICAL MATERIALS

FOR THE

BIOGRAPHY

OF

W. T. G. MORTON, M. D.,

DISCOVERER OF ETHERIZATION,

With an Account of Anæsthesia,

COMPILED BY

BEN: PERLEY POORE.

A few copies of this compilation have been published, for such revisions, additions or alterations as Dr. Morton's friends may seem fit. The re-publication of any portion or of all of it, should a copy find its way into public hands, (which is not intended,) is positively forbidden.

No. .

WASHINGTON:
G. S. GIDEON, PRINTER.
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CHAPTER I.

William T. G. Morton was born at Charlton, Worcester county, Massachusetts, on the ninth day of August, 1819. His family has always occupied a prominent place in the chronicles of New England; and in reading the biographical notices of the first Mortons who came from the Old World, to aid in founding a republic upon our rock-bound coast, we find displayed the same unflinching spirit, the same masterly comprehension of facts, and the same natural mental endowments which characterize the subject of this biography.

Robert Morton, (the great-great-grandfather of William T. G.,) married Charity Lawton, the daughter of a Presbyterian clergyman. He was a resident of Massachusetts, but became a large landed proprietor in East New Jersey. Deeds show that his possessions embraced several thousand acres, one large tract including the present site of Elizabethtown, but he found it impossible to eject settlers, who had appropriated much of it without authority. He brought one suit, which he lost, because (as it afterwards appeared) two of the judges and a portion of the jurors were also residents on his claim. They offered to resign a large farm to him if he would settle among them, but he was soon afterwards taken ill and died, leaving no heirs who chose to prosecute the claim.

Robert's grandson, Thomas Morton, (the grandfather of William T. G.,) was born in 1759. Volunteering, when a mere lad, in defence of the infant liberties of his country, he fought valiantly at Bunker Hill, and was an active champion of independence during the Revolution. But he did not live to enjoy the blessings for which he had contended. In 1793 a faithful negro servant broke his scythe, and requested his master, who was going past the blacksmith's in a sulkey, to take it with him to be repaired; he consented, but on passing out at the gate of the house the horse started, and as Mr. Morton leaped from the sulkey the scythe wounded him so fatally that he soon breathed his last.

James Morton, (the father of William T. G.,) married Rebecca, daughter of William Needham, who had erected the first framed dwelling-house in the town of Charlton. This is a beautiful rural village, nestled among the picturesque hills of central Massachusetts, and dotted by several fine expanses of water. The inhabitants, at the time of young Morton's boyhood, were of that industrious middle class, among

whom liberty and virtue respire freely; their fathers had shared in the perils and the victories of the Revolutionary conflict; the community had grown up, as it were, with the Republic, and were not only enjoying the blessings of a free government, but were receiving a recompense for their labor—a comparative exemption from taxation—and a degree of social happiness unknown in other lands. Enlightenment, sobriety of judgment, and respect for the laws, are the great characteristics of these New England villages, and their sons are generally equally famed—at home or abroad—for public spirit, superior intelligence, and well cultivated intellects. It was a fine locality for the development of both bodily and mental powers, for that youthful training so necessary to enable a man to distinguish himself in the arena of intellectual life. "The character of the scenes in which we are brought up," says a prominent writer, "impress themselves upon our souls. As is the place, so is the man. The mind is a mirror before it becomes a home."

While James Morton wished to have his children brought up beneath their paternal roof, he took good care that the natural genius of his son should not be neglected; and in order to gratify the lad's thirst for knowledge he procured a domestic preceptor, and established a high school in his own house. There, young Morton's intellectual ability was soon manifest, and his vocation to intellectual pursuits was so unanimously recognised, that his father sent him afterwards to the high school at Oxford, and the excellent classical academies at Northfield and at Leicester.

Fortune, however, did not smile upon the young student's progress. When he was only fifteen years of age financial difficulties gathered around his father, and he was forced, by the pressure of circumstances, to take the lad from his books, and place him in a self-sustaining, although by no means congenial, position. Young Morton did not murmur, for he did not wish to be a burthen at home; but it was evident to all who knew him, that, although his grandfather and his father had been in mercantile pursuits, he was not destined to be a votary of commerce. Science was the morning dream of his mind, and, although clouds of disappointment were thus cast upon his intellectual career, it was not long ere the beams of his genius came bursting forth from the gloom of pecuniary darkness, like the sunlight first pouring from the edges of a retreating thunder-cloud.

Anxious that his son might acquire knowledge, if possible, while attending to the dutiess into which necessity thus forced him, Mr. Morton obtained a situation for his son in a large book-store at Boston, kept by Mr. James B. Dow. While there, the young man had ample opportunity to read the works of standard authors, and to form acquaintances with ladies and gentlemen of literary position, which have ever been kept up. The city of Boston is an admirable place for young men in commercial pursuits to acquire knowledge. There are libraries, lectures and reading-rooms, for those who crave for their leisure hours something more than mere amusement, and who thus make their lives

something far exalted above the practical drudgery of clerkship. Young Morton (although in mercantile pursuits) found time and opportunity to improve his mind, to cultivate his natural taste for science, to stimulate his attention to intellectual culture, and to foster those qualifications which gave a wide range to his future usefulness. He evidently looked forward, amid the temporary discouragements, to the time when he should be able to build a durable monument of fame upon the foundations which he so industriously laid in his mind. Necessity delayed this work, but its progress was none the less regular.

Even when young, Morton made an occasional visit to his paternal roof. He was a diligent student. It is curious to observe how, in the opening of his career, every circumstance seemed to have combined to foster and to develop the peculiar genius and the pertinacious industry of thought which afterwards was so prominently displayed. It would appear as if every fresh obstacle, every new disappointment, served only to strengthen the native vigor and powers of his extraordinary genius. The necessity for action which continually agitated his mind, undoubtedly engendered deep and original thoughts, with an energy of action seldom possessed by the alumni of venerable universities, where students are cramped by the musty eloquence of antiquated empiricism. His naturally strong impulses were controlled by patience, and his fiery nature was steadied by fortitude, while his soul, in its chosen companionship with nature, imbibed the pure inspirations of untrammelled thought. Even in his youth, he was ranked among that courageous class who "ask no favors and shrink from no responsibility."

At one time he had brighter hopes excited, by an attempt on the part of an administrator who had in charge a legacy left him, to appropriate it for the young legatee's education. This laudable disposition of the funds was found afterwards not to be in accordance with the terms of the bequest, which could not be paid until the heir had attained his majority, but in the mean time young Morton had entered Northfield academy and enjoyed an uninterrupted term of study. One of his fellow-students there informs us that he was indefatigable in his efforts, and that even when the other students would be enjoying themselves at their sports, young Morton would be climbing the hills or delving in the ravines in search of minerals. He thus formed quite a collection, which he arranged with such skill as to attract attention, and to elicit warm praises from the preceptor, Dr. Wellington. Years passed away after young Morton left the academy before preceptor and pupil again met, and the meeting (strange to say) was at the Massachusetts General Hospital, on the memorable sixteenth of October, 1846. The pupil was then an instructor; the preceptor was one of many, eminent and learned, who sought information.

It was at this period of young Morton's life that he displayed the first desire to become a surgeon. The infant of a relative was deformed with a hare-lip and cleft palate, which he expressed a great desire to cure, and declared that the day would come when he could do so—an assertion which his subsequent success in this peculiar branch of prac-

tice verified. The germ of his peculiar turn of mind, however, was almost smothered beneath obligatory occupations, though it lay ready to spring forth when opportunity should offer.

It is unnecessary to detail how for several years young Morton found himself compelled by stern necessity to follow the fortunes of his father. A professional and scientific career was evidently his ambition, but it was tedious work to be forced to plod through commercial drudgery to this goal of his hopes. With a consciousness of genius, and a desire to perfect his education, he drifted along upon the stream of business life like a deserted ship, with all sails set, her colors flying, but no pilot on board to take her into the port of her destination. Now and then (if we may judge from his letters) he had a vague intimation from his own heart that he would eventually claim a high place among the chosen votaries of science, but his expanding intellect would then become temporarily checked with commercial care. As might have been expected, he was at times duped by the designing, and entangled into unfortunate connections, but it was perhaps well for science and for suffering humanity that success did not crown his exertions. These wrecks of his business projects but stimulated him to "trim the midnight lamp," that he might enter into pursuits more congenial to his feelings. The love of science was the master passion of his soul, which kept all others in subordination wherever he went and in whatever he engaged.

Though not perhaps influenced in character by the unpropitious results of his mercantile experiences, his determined disregard of difficulties in subsequent life has given abundant evidence that the severe training of his youth endowed him with resolution, hardihood, and application. That seemed insurmountable in others, but nerved him to conquest. On arriving at the age of twenty-one, he was evidently fully animated by that indomitable spirit which overcomes all obstacles in life, with that industry and perseverance which are sure guarantees of success.

Fresh hopes were now awakened in young Morton's mind that he could pursue uninterruptedly a congenial course of studies, and he turned from the drudgeries of commercial life with the same delight which inspired Audubon, when he too shook off the trammels of business to give himself up to ornithological pursuits. Having now attained his majority, and thinking that he could rely upon the legacy before alluded to, he went to Baltimore, (the very "hot-bed" of that branch of medicine we find him practising in the early part of his professional career,) where he attended medical lectures, and devoted himself with a single-hearted assiduity to an arduous course of study. While thus engaged, his studies were interrupted by the discovery that the funds afforded by the legacy were quite insufficient to enable him to go through a regular medical course, although (as will be seen hereafter) he finally received his diploma from the Washington University of that city.

Visiting his paternal roof at the North, and fluctuating between his studies and business for a few months, he conceived the happy idea of

perfecting himself in one branch of medicine, the practice of which would furnish the means for attaining the other branches. He consequently availed himself of every opportunity which presented itself, to enjoy intercourse with such scientific gentlemen as could give him information upon that branch of medicine which he had selected. His honorable deportment, and his ever active sympathies, drew around him a circle of clustering hearts who have steadfastly clung to him on his upward road to fame, with here and there an exception.

Among those with whom Dr. Morton enjoyed professional intercourse, were three gentlemen who then professed to be highly pleased with him, but afterwards became so antagonistic—not only to him, but to each other—in his subsequent professional career, that we find ourself compelled to speak of them more at length than is consistent with the plan of this work. One of these professional and personal friends, at that time, was Dr. N. C. Keep, vice president of the American Society of Dental Surgeons, to whom Dr. Morton, by an especial arrangement, paid five hundred dollars for such instruction as he then desired, and who wrote, (in a subsequent communication to the above mentioned society,) "I am happy to state that, for the last three years, I have known him to be a very enterprising dentist—his mind ever active and seeking for improvement." "I have taken great pleasure in exchanging professional thoughts with him, and am desirous of promoting his honorable intentions." Afterwards, when this prediction was more than verified, and the whole scientific world was agitated by the discovery of Dr. Morton's active and industrious mind, Dr. Keep became his partner.

Another professional friend of Dr. Morton's, at this stage of his career, was Dr. Horace Wells, who had met him while on a professional visit at Mr. James Morton's beautiful residence, years previous, when that gentleman was giving his son that intellectual training of which we have spoken. When young Morton returned to the North, the acquaintance was renewed, and it resulted in an association of their names for the practice of dental surgery in Boston, (the capital of Dr. Morton's native State,) where Dr. Wells had previously been professionally located, though he had since gone to Hartford.

The first business announcement of these gentlemen was accompanied by a certificate of the value of a professional improvement introduced by them, from Dr. C. T. Jackson, a mutual friend. The following spring, in pursuance with Dr. Morton's desire (heretofore alluded to) to study the other branches of medicine, Dr. Jackson received him as an inmate of his family and as a student. In subsequently recommending Dr. Morton to the American Society of Dental Surgeons, he stated that he "entered his name with me as a student of medicine, March 20, 1844, and attended to practical anatomy, in the Massachusetts Medical College, during the winter of that year, where he dissected with diligence and zeal, and paid special attention to the anatomy of the head and throat—parts of human anatomy particularly important to the surgeon dentist. He also studied Bell's and

other standard works on anatomy, and attended the lectures of Drs. Warren, Hayward, and other professors. I would recommend him as a suitable person for admission as a dental surgeon. He is a skilful operator in dentistry, both in the surgical and mechanical departments, and has studied the chemical properties of the ingredients required for the manufacture of artificial teeth."

In 1843, Dr. Morton married Miss Elizabeth Whitman, a daughter of Edward Whitman, esq., of Farmington, Connecticut. But domestic felicity no more interrupted his studies than had the duties of his profession, and he was matriculated at the medical college attached to Harvard University, in November, 1844.

When in after-years an opponent of Dr. Morton's assailed his private character before a Congressional committee, declaring "in knowledge and intellect he is an ignoramus and an imbecile, not only not possessed of science, but mentally incapable of attaining it," the certificates of his attendance upon the lectures of the University disproved these slanderous charges most effectually. The report of the committee contains these certificates, which prove that he attended lectures on: *Anatomy and Surgery*, by Professor John C. Warren; *Principles of Surgery and Clinical Surgery*, by Professor George Hayward; *Materia Medica*, by Professor Jacob Bigelow; *Theory and Practice of Midwifery and Medical Jurisprudence*, by Professor Channing; *Theory and Practice of Physic*, by Professor Ware; and *Chemistry*, by Professor Webster. In addition to attendance on these lectures, during two years, he was a visitor at the Massachusetts General Hospital, and an attendant at the School of Practical Anatomy. This thorough course of studies (upon which Dr. Morton received his diploma at the Washington University) could not have been prosecuted had the student been "mentally incapable," nor (as the Congressional report justly observes) can the evidence of it be read without convincing every one that "he was in a situation highly favorable for the progress of his inquiries."

While attending these lectures, be it remembered, the young student was a practising dentist, in the enjoyment of a lucrative practice, dividing his time between his operating-room in Tremont Row, and the Medical School in Mason street. A skeleton was kept in his bridal chamber, and, (rising long before sunrise,) he used to prepare himself for the anatomical studies of the coming day. Often, late in the evening, he found that every table in the dissecting-room would be deserted, save that at which his busy knife sought out the mysteries of the human frame.

How little could his fellow-students have dreamed, as he joined them in their daily walk of observation through the wards of the General Hospital, often witnessing acute suffering, that within a comparatively few months he would demonstrate—in that very building, before their professors, and many of themselves—that he possessed a boon for suffering humanity that had for ages been sought in vain.

It will be remembered, that among the courses of lectures which he attended, was that of the afterwards noted Professor Webster, on chemistry. This was another important step in the preparation of his mind for his great discovery, and we find, from the evidence submitted to Congress, that among the scientific books which he purchased, was Pereira's "Materia Medica," which contains valuable information on chemistry and other sciences, including the effect of remedies, ether among the rest.

In 1845, Dr. Morton settled upon a family estate at West Needham, Massachusetts, adjoining the railroad from Boston to Worcester. It was at that time a pasture, but, under his careful and scientific management, it has since had a conspicuous place in the annals of improved Agriculture and Horticulture. The tract of land covered a natural basin, watered by a pure brook, and surrounded by an amphitheatre of forest-clad hills, dotted with suburban residences. On a swelling knoll which rises from the centre of this level, Dr. Morton erected a picturesque building in the English style of rural architecture, which has been famed as a model edifice, and as the seat of cordial hospitality. The prospect from every window of this cottage mansion is, of course, superb. In the foreground are the serpentine walks, rustic summer-houses, flower-beds, young trees, sparkling streams, extensive farm-buildings, and other appurtenances of the Doctor's homestead. Beyond, we see the village church, the farm-houses of the industrious yeomanry, and the other quiet beauties of a New England landscape, while an occasional train sweeps along the adjacent railway like a fiery dragon, a type of the nervous, go-ahead spirit of this utilitarian age.

This early history of Dr. Morton verifies a remark of the gifted Lamartine, in his biography of Bernard de Palissy: "There is a vague instinct which leads the child of genius, and the student who aims at perfection, to leave his native region, and to travel in early life. Each thinks, no doubt, that beyond his usual horizon there lies a new moral space, in which they shall discover things they knew not before. * * * But if there be an instinct which drives the youth from his home in his early youth, there is another instinct which draws him back when he has seen what he desires to see. Although man is a wandering creature, he has, nevertheless, like a tree, invisible fibres in his heart or memory which attach or recall him to his birthplace. These fibres are the recollections, the attachments, the regrets, and the remembrances which bind him to his family and his home." How applicable is this to the subject of our biography, whom we find, after his long journeys over distant States, now returning with delight to rural life in his native State. His parents settled near him, and their presence brought back reminiscences and habits of that domestic tranquillity which had embellished his early years. "The man who stands upon his own soil," says Edward Everett, who feels, by the laws of the land in which he lives, he is the rightful and exclusive owner of the land which he tills, is by the constitution of our nature, under a wholesome influence, not

easily imbibed from any other source. He feels, other things being equal, more strongly than another, the character of a man as the lord of an inanimate world. Of this great and wonderful sphere which is rolling through the heavens, a part is his—his from the centre to the sky. It is the space on which the generation moves in its round of duties, and he feels himself connected by a visible link with those who follow him, and to whom he is to transmit a home. These feelings flow out of the deepest fountains of the heart—life-springs of a fresh, healthy, and generous character."

CHAPTER II.

It was while thus occupied that Doctor Morton made that great discovery, which is unquestionably the noblest contribution which medical science has made to humanity within the present century; and with which, looking through all ages, no other except that of Jenner can take rank. Nor is there, in the eventful life of this benefactor of his race, any period that must have found him so distracted with hopes and with fears, so absorbed with generous and ardent wishes for the success of an idea which promised such glorious results. He was, (to quote from a report made to the House of Representatives of the thirty-second Congress,) "He was young and ardent—a surgeon dentist, with already a large business—and he was condemned to witness daily the excruciating pain occasioned by his more difficult operations, especially when nervous and sensitive females were the subjects. It is natural to suppose, that a humane desire to remove so much suffering, and especially a prospect of the enviable reputation and high fortune which should attend such a discovery, caused it to take full possession of his mind."

Yet no account of the circumstances which directed Dr. Morton's mind to the investigation, or of the progress of the discovery, until it had successfully passed the *experimentum crucis*, can equal that of the Doctor himself. It has, also, the high endorsement of the above-mentioned committee, who say that it is not only "simple and natural, but in every step corroborated by some marked circumstance, proved by the testimony of one or more disinterested witnesses. A narrative such as his, so supported, goes far to sustain the title which possession, undisputed for a time, would have given him. It was prepared by him, and presented to the Academy of Arts and Sciences at Paris, by M. Arago, in July, 1847. Notwithstanding its length, we have thought proper to insert it entire.

"MEMOIR."

"In the summer of 1844, being in the practice of dentistry, and desirous to improve myself in chemical and medical knowledge, I studied in the office of Dr. Charles T. Jackson, of Boston; and, in order to employ my time to the utmost advantage, I resided in his

family. One day, in casual conversation upon my profession of dentistry, I spoke of the operation of destroying the nerve of a tooth; and remarked that there was always doubt whether the tooth could be restored to usefulness, inasmuch as the arsenic produced an irritation and left a soreness often permanent. Dr. Jackson said, in a humorous manner, that I must try some of his toothache drops; and proceeded to tell me that, at a time when he practised medicine, he occasionally extracted teeth for particular patients; and that in one instance a patient who could not summon courage for the operation asked him to apply something to alleviate the pain. He applied ether, and with success, for a few days afterwards a friend of this patient called to obtain some of the 'toothache drops,' as he called them; but Dr. Jackson, not wishing to be troubled wiih dental business, told him he had none. Dr. Jackson then added, that as this ether might be applied with advantage to sensitive teeth, he would send me some. The conversation then turned upon the effect of ether upon the system; and he told me how the students at Cambridge used to inhale sulphuric ether from their handkerchiefs; and that it intoxicated them, making them reel and stagger. He gave no further intimation of the effect of ether, or of the manner of applying it. I may add, that Dr. Jackson has confirmed my account of this conversation in his own statement to Dr. Gould.

"In a few days after this conversation, Dr. Jackson sent me a bottle of chloric ether, highly rectified, as he had offered. At the same time he sent a bottle to two other dentists of high respectability in Boston. I made an experiment with this ether in destroying the sensibility of a valuable tooth of a patient, Miss ———, by direct application; telling her that the operation would be slow. I was obliged to apply it several times, but in the end the sensibility seemed to be removed; and the tooth is now, to my knowledge, in a useful condition.

"About this time, the wife and aunt of Dr. Jackson were under my treatment for dental purposes; and it was necessary to extract teeth in each case—the operation being painful, and the ladies showing an unusual degree of sensitiveness. The last named lady, in particular, before the extracting of each tooth, remained several hours in the operating chair, unable to summon courage to endure the operation, and begging to be mesmerized, or that I would give her something to make her insensible. Dr. Jackson was present, and made efforts to encourage the lady, but did not suggest any mode of producing insensibility. *His suggestions had not gone beyond the direct application of ether, in the same manner that laudanum and other narcotics have always been applied to sensitive teeth.*

"The successful application I had made of the ether in destroying the sensibility of a tooth, together with what Dr. Jackson told me of its effects when inhaled by the students at college, awakened my attention; and having free access to Dr. Jackson's books, I began to read on the subject of its effects upon the animal system. I became satisfied that there was nothing new or particularly dangerous in the inhaling of

ether—that it had long been the toy of professors and students; known as a powerful anti-spasmodic anodyne and narcotic, capable of intoxicating and stupefying, when taken in sufficient quantity. I found that even the apparatus for inhaling it was described in some treatises; but in most cases it was described as inhaled from a saturated sponge or handkerchief. Having some of the ether left which Dr. Jackson had sent me, I inhaled it from a handkerchief; but there was not enough to produce a greater effect than exhilaration, followed by headache.

"While investigating this subject I was taken quite ill, and it being the middle of summer, I was advised by my physician to go into the country. I took with me from Dr. Jackson's library, and obtained in other ways, several books treating on this and other subjects. I spent two months at the residence of my father-in-law, in Connecticut. While there I procured ether from the druggist's, and made experiments upon birds and other animals, endeavoring to get them under the effect of inhalation from it. These experiments produced no satisfactory result, and they being known among my friends, I was mortified and vexed, and bottled up the subjects, where they remain to this day.

"In the autumn I returned to Boston, and finding that my business, owing to its interruption, required my constant attention, I was not able to pursue the investigation at that time.

"In the course of the winter (1844–'5) Dr. Horace Wells, of Hartford, Conn., a dentist, and formerly my partner, came to Boston, and desired me to aid him in procuring an opportunity to administer the nitrous oxide gas, which he said he believed would destroy or greatly alleviate pain under surgical operations. I readily consented, and introduced him to Dr. George Hayward, an eminent surgeon, who offered to permit the experiment, but as the earliest operation was not to be performed under two or three days, we did not wait for it, but went to Dr. Warren, whom we found engaged with his class. He told us that his students were preparing to inhale it that evening, for sport, and offered to announce the proposal to them, and ask them to meet us at the college. In the evening Dr. Wells and myself went to the hall, and I took my instruments. Dr. Wells administered the gas, and extracted a tooth, but the patient screamed from pain, and the spectators laughed and hissed. The meeting broke up, and we were looked upon as having made ourselves very ridiculous. I saw nothing more of Dr. Wells, but he left my instruments at my office very early the next morning, and went directly home. In July, being again in Connecticut, I called on Dr. Wells, and we spent some time in adjusting our former partnership accounts. He had then given up dentistry, and was engaged in conducting an exhibition of birds, which he said insured him better health. I went with him to the office of Dr. Riggs, where I spoke of the gas, and asked them to give some to me; but Dr. Wells gave me to understand that he had abandoned the experiment, thinking it could have no practical value.

"In the autumn of 1845, I returned to my business, which had now become almost exclusively mechanical dentistry, or plate work, requiring me often to extract a great number of teeth at a time. Many of my patients suffered extremely, and some were obliged, as is the experience of every dentist, to postpone or abandon the supplying full sets of teeth. I had, therefore, everything to call my attention to the destroying or mitigating of pain under these operations, and great motive to induce me to follow up the subject. Finding that when closed up in a hollow tooth, and sealed with wax, ether would gradually destroy the sensibility of the part, I reasoned that perhaps when inhaled it might destroy or greatly alleviate sensibility to pain generally.

"In the spring of 1846, Thomas R. Spear came to study with me, and hearing me converse upon the subject, he said he had inhaled ether at the Lexington Academy, where he was educated, and described to me its effects. This increased my interest in the subject, and I determined, as soon as the pressure of the spring business was over, to devote myself to it. In the mean time I tried an experiment upon a water spaniel, inserting his head in a jar having sulphuric ether at the bottom. This was done in the presence of two persons at my house in West Needham, where I reside during the summer months. After breathing the vapor for some time, the dog completely wilted down in my hands. I then removed the jar. In about three minutes he aroused, yelled loudly, and sprung some ten feet into a pond of water.

"Immediately after this experiment, I waited on Dr. Granville G. Hayden, a young dentist, told him my purpose, and made an agreement with him to come to my office and take charge of my business, that I might devote myself more exclusively to this subject. The agreement was drawn by R. H. Dana, jr., esq., to whose letter in the appendix I take the liberty to refer the academy in this connection. As soon as Dr. Hayden became acquainted with my business, I began to devote myself to my experiments. I inhaled some chloric ether and morphine, the effect of which was drowsiness followed by lassitude and headache.

"Early in August I asked Dr. Hayden to procure me a four-ounce phial of sulphuric ether from Mr. Burnett, a druggist much relied upon by chemists. He did so, and I tried to induce him to take it. As he declined, I took half of it into the country to try again upon my dog. Just as I had got it ready, the dog sprang and threw over the jar. I felt vexed, and resolved to take it myself, and did so, the next day, at my office. I inhaled from my handkerchief all the ether that was left, but was not completely lost, yet thought myself so far insensible that I believed that a tooth could have been drawn with but little pain or consciousness. I was unwilling to send to Burnett's again for the same article, he being a near neighbor, and his young men well acquainted with mine, lest the knowledge of my experiments should get abroad. I accordingly sent a student, William P. Leavitt, to druggists in a different part of the city, Brewers, Stevens and Co., a firm

in excellent standing, with directions to get sulphuric ether. After some persuasion, I induced Spear, who had taken it at school, to inhale it. He did so, and became so far insensible as to drop the handkerchief, and seemed very drowsy and torpid. As this passed off he became excited and furious, so that he had to be held down in the chair; but this subsided, and on coming to he expressed himself delighted with his sensations. Leavitt then took it, with much the same effect. I was much discouraged by these attempts. The effects produced were not such as I sought for, nor were the young men effected in the same manner that I had been, and as I observed the dog to be. They were much more excited, and less insensible. Yet I cannot help remarking, in this connection, that had this sulphuric ether been pure and highly rectified, I should have demonstrated its effects then, instead of at the subsequent period in September. This ether has since been analyzed, as appears by the affidavits in the appendix, and found to contain a large portion of alcohol, sulphur acids, and other impurities.

"This experiment was early in August; and it being hot weather, and I being somewhat out of health, I went into the country, and abandoned the experiments until the middle of September. With the autumn and the restoration of health, my ambition led me to resume my experiments; and I mentioned to Dr. Hayden that I feared there was so much difference in the qualities of ether, that in so delicate a matter there would be great difficulty in bringing about any generally useful and reliable results.

"Thinking that a surer effect might be produced by inhaling the ether through some apparatus, I called repeatedly on Mr. Wightman, a philosophical instrument-maker, for the purpose of procuring or contriving an apparatus. While examining his bags for inhaling nitrous oxide gas, the thought struck me that I could put the ether into one of these, and by making an opening to be closed by a valve, for the admission of atmospheric air, could convert it into an inhaling apparatus. Upon second thought I had an impression that ether would dissolve India-rubber, and put the question to Mr. Wightman. He thought it would. I then put the same question as to oil silk. He said he did not know, but advised me to consult a chemist, and named Dr. Jackson. I took from Mr. Wightman a glass tunnel, purchased an India-rubber bag on my way, and returned to my office. I then sent Leavitt to Dr. Gay, a chemist, to ask the simple question whether ether would dissolve India-rubber. He returned, saying that Dr. Gay was not in. In the mean time I became satisfied that the bottle and glass I had were not large enough for my purposes, and, not wishing to go to unnecessary expense, I said to Dr. Hayden that I would borrow a gas-bag from Dr. Jackson's laboratory. He then suggested to me to ascertain from Dr. Jackson something as to the different qualities and preparations of ether, with which he said chemists were always familiar. I approved of the suggestion, but feared Dr. Jackson might guess what I was experimenting upon, and forestall me. I

went to Dr. Jackson's, therefore, to procure a gas-bag, also with the intention of ascertaining something more accurately as to the different preparations of ether, if I should find I could do so without setting him upon the same track of experiment with myself. I am aware that by this admission I may show myself not to have been possessed by the most disinterested spirit of philosophic enthusiasm, clear of all regard for personal rights or benefits; but it is enough for me to say that I felt I had made sacrifices and run risks for this object, that I believed myself to be close upon it, yet where another, with better opportunities for experimenting, availing himself of my hints and labors, might take the prize from my grasp.

"I asked Dr. Jackson for his gas-bag. He told me it was in his house. I went for it, and returned through the laboratory. He said, in a laughing manner, 'Well, Doctor, you seem to be all equipped, minus the gas.' I replied, in the same manner, that perhaps there would be no need of having any gas, if the person who took it could only be made to believe there was gas in it, and alluded to the story of the man who died from being made to believe that he was bleeding to death, there being in fact nothing but water trickled upon his leg; but I had no intention whatever of trying such a trick. He smiled, and said that was a good story, but added, in a graver manner, that I had better not attempt such an experiment, lest I should be set down as a greater humbug than Wells was with his nitrous oxide gas. Seeing that here was an opportunity to open the subject, I said in as careless a manner as I could assume, why cannot I give the ether gas? He said that I could do so, and spoke again of the students taking it at Cambridge. He said the patient would be dull and stupefied, that I could do what I pleased with him, that he would not be able to help himself. Finding the subject open, I made the inquiries I wished as to the different kinds and preparations of ether. He told me something about the preparations, and thinking that if he had any it would be of the purest kind, I asked him to let me see his. He did so, but remarked that it had been standing for some time, and told me that I could get some highly rectified at Burnett's. As I was passing out, Dr. Jackson followed me to the door, and told me that he could recommend something better than the gas-bag to administer the ether with, and gave me a flask with a glass tube inserted in it.

"I procured the ether from Burnett's, and, taking the tube and flask, shut myself up in my room, seated in the operating chair, and commenced inhaling. I found the ether so strong that it partially suffocated me, but produced a decided effect. I then saturated my handkerchief and inhaled it from that. I looked at my watch and soon lost consciousness. As I recovered, I felt a numbness in my limbs, with a sensation like nightmare, and would have given the world for some one to come and arouse me. I thought for a moment I should die in that state, and that the world would only pity or ridicule my folly. At length I felt a slight tingling of the blood in the end of my third finger, and made an effort to touch it with my thumb, but without suc-

cess. At a second effort, I touched it, but there seemed to be no sensation. I gradually raised my arm and pinched my thigh, but I could see that sensation was imperfect. I attempted to rise from my chair, but fell back. Gradually I regained power over my limbs and full consciousness. I immediately looked at my watch, and found that I had been insensible between seven and eight minutes.

"Delighted with the success of this experiment, I immediately announced the result to the persons employed in my establishment, and waited impatiently for some one upon whom I could make a fuller trial. Toward evening, a man, residing in Boston, whose certificate is in the appendix, came in, suffering great pain, and wishing to have a tooth extracted. He was afraid of the operation, and asked if he could be mesmerized. I told him I had something better, and saturating my handkerchief, gave it to him to inhale. He became unconscious almost immediately. It was dark, and Dr. Hayden held the lamp, while I extracted a firmly-rooted bicuspid tooth. There was not much alteration in the pulse, and no relaxation of the muscles. He recovered in a minute, and knew nothing of what had been done to him. He remained for some time talking about the experiment, and I took from him a certificate. This was on the 30th of September, 1846. This I consider to be the first demonstration of this new fact in science. I have heard of no one who can prove an earlier demonstration. If any one can do so, I yield to him the point of priority in time.

"I will make a single remark upon the subject of my interview with Dr. Jackson. It is not necessary to go into the question of the origin of all ideas. I am ready to acknowledge my indebtedness to men and to books for all my information upon this subject. I have got here a little and there a little. I learned from Dr. Jackson, in 1844, the effect of ether directly applied to a sensitive tooth, and proved, by experiment, that it would gradually render the nerve insensible. I learned from Dr. Jackson, also, in 1844, the effect of ether when inhaled by the students at college, which was corroborated by Spear's account, and by what I read. I knew of Dr. Well's attempt to apply nitrous oxide gas for destroying pain under surgical operations. I had great motives to destroy or alleviate pain under my operations, and endeavored to produce such a result by means of inhaling ether, inferring that if it would render a nerve insensible, directly applied, it might, when inhaled, destroy or greatly alleviate sensibility to pain generally. Had the ether that I tried on the 5th August been pure, I should have made the demonstration then. I further acknowledge that I was subsequently indebted to Dr. Jackson for valuable information as to the kinds and preparations of ether, and for the recommendation of the highly rectified from Burnett's as the most safe and efficient. But my obligation to him hath this extent, no further. All that he communicated to me I could have got from other well-informed chemists, or from some books. He did not put me upon the experiments; and when he recommended the highly rectified sulphuric ether, *the effect he anticipated was only that stupefaction which was not unknown, and he did not intimate in*

any degree a suspicion of that insensibility to pain which was demonstrated, and astonished the scientific world.

"As soon as the man whose tooth I extracted left my office, I consulted Dr. Hayden as to the best mode of bringing out the discovery. We agreed it was best to announce it to the surgeons at the hospital; but as some time would elapse before an operation, I thought it best to procure some assurance which would induce my patients to take it. I therefore called upon the man who had taken it, and found him perfectly well. Thence I went to Dr. Jackson, told him what I had done, and asked him to give me a certificate that it was harmless in its effects. This he positively refused to do. I then told him I should go to the principal surgeons and have the question thoroughly tried. *I then called on Dr. Warren, who promised me an early opportunity to try the experiment, and soon after I received the invitation inserted in the appendix.*

"In the mean time, I made several additional experiments in my office, with various success. I administered it to a boy, but it produced no other effect than sickness, with vomiting, and the boy was taken home in a coach, and pronounced by a physician to be poisoned. His friends were excited, and threatened proceedings against me. A notice of my successful experiment having, without my knowledge, got into the papers, several persons called, wishing to have it administered. I gave it to a lady, but it produced no other effect than drowsiness, and when breathed through the apparatus named by Dr. Jackson, it produced suffocation. I was obliged to abandon this mode, and obtaining from Mr. Wightman a conical glass tube, I inserted a saturated sponge in the larger end, and she breathed through that. In this way she seemed to be in an unnatural state, but continued talking, and refused to have the tooth extracted. I made her some trifling offer, to which she assented, and I drew the tooth, without any indication of pain on her part, not a muscle moving. Her pulse was at 90, her face much flushed, and after coming to she remained a long time excessively drowsy. From this experiment I became satisfied of what is now well proved, that consciousness will sometimes remain after insensibility to pain is removed.

"I afterwards gave it to a Miss L., a lady of about twenty-five. The effect upon her was rather alarming. She sprang up from the chair, leaped into the air, screamed, and was held down with difficulty. When she came to, she was unconscious of what had passed, but was willing to have it administered again, which I did with perfect success, extracting two molar teeth. After this, I tried several other experiments, some with more and some with less success, giving my principal attention to the perfecting of my modes of administering it.

"When the time drew near for the experiment at the hospital, I became exceedingly anxious, and gave all my time, day and night, hardly sleeping or eating, to the contriving of apparatus, and general investigation of the subject.

"I called on Dr. Gould, a physician who has paid much attention to chemistry, and told him my anxieties and difficulties. He sympathized with me, gave me his attention, and we sat up nearly all night making sketches of apparatus; he first suggesting to me an antidote in case of unfavorable effects, and the valvular system, instead of the one I then used. The operation was to be at 10 o'clock. I rose at daybreak, went to Mr. Chamberlain, an instrument-maker, and, by great urging, got the apparatus done just after ten o'clock, hurried to the hospital, and reached the room just as Dr. Warren was about to begin the operation; he having given up all hope of my coming. The detailed account of this operation will be found in Dr. Warren's communication. There was a full attendance; the interest excited was intense, with the most eager scrutiny of the patient. When the operation closed, the patient described his state, and Dr. Warren announced his belief that there had been insensibility to pain, my feelings may be better imagined than described.

"I was invited to administer it the next day, in an operation for a tumor performed by Dr. Haywood, and with perfect success.

"On the 23d October, I saw Dr. Jackson for the first time since the interview last described. I take my account of this interview from a memorandum made at the time, the accuracy of which is attested by two witnesses of the highest respectability who were present. He said he thought he would just look in, that he heard I was doing well with the ether, and learned from Mr. Eddy that I intended to take out a patent, and would make a good deal by it. I replied that it had been a cause of anxiety and expense to me, but that I thought I should now do well with it. He said he thought so too, and that he believed he must make me a professional charge for advice. I asked him why in this case, more than in any other case of his advice, arising out of our previous relations, as mentioned at the opening of this memoir. He said that his advice had been useful to me, that I should make a good deal out of the patent, and that I ought to make him a compensation. I told him I would do so if I made much by the patent, independent of what I gained in my business. He then said he should charge me $500. I told him that I would pay him that, if ten per cent. on the nett profits of the patent amounted to so much. He said he was perfectly satisfied with this arrangement, and so the interview ended. The next morning he told Mr. R. H. Eddy what had passed, and two or three days afterwards Mr. Eddy suggested to me that instead of paying Dr. Jackson a fee, I should interest him in the patent, and give him ten per cent. of the nett profits. Mr. Eddy made this suggestion out of friendship to Dr. Jackson, whom he wished to benefit. He added that the patent would thus have the benefit of Dr. Jackson's name and skill; that he would thus have a motive to give his attention to the preparation and the apparatus, and we should be able to keep in advance of the improvements that might be suggestd by others. He also said that if a suit was brought, and Dr. Jackson should be a witness, as he doubtless would be, the aid he had given me might be made

a handle of by persons impeaching the patent to invalidate my claim as the discoverer. At this time the dentists had organized a formidable opposition to the use of ether, and all the medical magazines in the Union, except Boston, were arrayed against it. I felt the need of all the aid I could get, and was conscious of a want of thorough scientific education myself. I was induced by these motives to accede to Mr. Eddy's request, but did not then understand that Dr. Jackson claimed to be a discoverer at all. But on this head I refer to the affidavits of the Messrs. Eddy.

"I continued administering the ether in my office, and early in November I applied to Dr. Haywood for leave to administer it in a case of amputation, which I learned was to take place at the hospital. Dr. H. J. Bigelow, in the mean time, had attended my experiments at my office, and taking a deep interest in the subject, prepared a memoir, which he read to the Boston Society for Medical Improvement, and subsequently to the American Academy of Arts and Sciences.

"The surgeons of the hospitals informed me that they thought it their duty to decline the use of the preparation until informed what it was. I immediately wrote to Dr. Warren, the senior surgeon, disclosing the whole matter. The operation took place on the 7th November. About half an hour beforehand, Dr. H. J. Bigelow called for me, and said he wished me to be on the spot, in case it should be determined to admit me. After remaining in the anteroom for some time, it was resolved by the surgeons to permit the experiment, and I administered the ether with perfect success. This was the first amputation. *I will also remark that Dr. Jackson was absent from the city at this time, and knew nothing of the operation.*

"On the 21st November, I administered the ether in an operation for a tumor, at the Bromfield House, in the presence of a number of medical gentlemen, among whom I noticed Dr. Jackson. *This was the first time he had seen it administered, and no one but myself had administered it in Boston or elsewhere, to my knowledge. In this instance, Dr. Jackson appeared merely as a spectator. On the 2d January, 1847, he did the first act indicating to the surgeons that he had any interest in the subject. On that day, he called at the hospital, with some oxygen gas, as an antidote for asphyxia, which he heard was produced by the ether. But before this time, the surgeons had satisfied themselves that asphyxia was not produced. With the single exception of an intimation to Dr. Warren, which was after its establishment at the hospital, and which appears in his communication, none of the surgeons, or other persons engaged in these experiments, had received any idea from Dr. Jackson himself, or from his conduct, that he was in any way connected with this discovery, responsible for the use of the preparation, entitled to the credit of its success, or liable to the odium of its failure.*

"If death or serious injury had occurred to any one, Dr. Jackson could not have been in the least degree implicated. It was not until danger was over, and success certain, until the discovery had arrested

the attention of the world, until the formidable opposition of the dentists and of all the medical magazines and societies in other places had become powerless, that Dr. Jackson began to involve himself in it, and that his claim to have anticipated the effects, and communicated them to me, was brought forward.

"On the 19th October, as soon as I felt confident of success, I addressed a note to my former partner, Dr. Wells, informing him of what I had done, and asking him to come to Boston, and assist me in bringing the discovery into use in dentistry. He replied by the letter in the appendix, of October 20, 1846. He came to Boston, saw several experiments in my office, expressed himself alarmed, said I should kill some one yet, and break myself up in my business. He left abruptly, but without intimating a claim to the discovery, although he could recognise the ether, and was freely told that it was ether. *I have also the authority of Dr. Warren and Dr. Haywood, for saying that no allusion was made by Dr. Wells to ether, to their knowledge, when he made his experiment in Boston, in* 1844–'5.

"I am aware that a communication to an institution whose objects are scientific, and not personal, gives me no right to argue the question of my own claim to a discovery, in opposition to the claims of others. I have endeavored to state no facts but such as fairly illustrate the history of this demonstration. If these have any bearing upon the claims of others, I am entitled to the benefit of the effect. But this memoir is not intended to present the whole of my comparative rights, as against the claims of Dr. Jackson or Dr. Wells. If a tribunal were opened for such a discussion, I would most cheerfully prepare for the hearing, and submit myself to the judgment of any enlightened umpire. I have proposed such a course to Dr. Jackson, who has declined it.

"In justice to myself, I should say, that I took out my patent early, before I realized how extensively useful the discovery would be; and beside the motive of profit and remuneration to myself, I was advised that it would be well to restrain so powerful an agent, which might be employed for the most nefarious purposes. I gave free rights to all charitable institutions, and offered to sell the right to surgeons and physicians for a very small price, such as no one could object to paying, and reasonably to dentists. I had little doubt that the proper authorities would take it out of private hands, if the public good required it, making the discoverer, who had risked reputation, and sacrificed time and money, such a compensation as justice required. But as the use has now become general, and almost necessary, I have long since abandoned the sale of rights, and the public use the ether freely; and I believe I am the only person in the world to whom this discovery has, so far, been a pecuniary loss.

"Most respectfully, your obedient servant,

"W. T. G. MORTON.

"Boston, (U. S. A.,) *July* 31, 1847."

CHAPTER III.

This unadorned narrative of Dr. Morton's studies, his difficulties, and the energy with which he triumphantly surmounted every obstacle until the success of his glorious discovery was established, is substantiated in every point by a mass of unimpeachable testimony. The reports of Congressional committees, the official publications of the Massachusetts General Hospital, of the American Medical Association, and of other eminent scientific institutions; the able papers on the subject drawn up by Doctors Warren, Bowditch, Bigelow, Haywood, Edwards, Price, and other distinguished members of the medical and surgical professions; the elaborate arguments of Messrs. Webster, Choate, Curtis, Dana, Carlisle, and other eminent lawyers; with volumes of affidavits, narratives, statements, and letters, all endorse every sentence of Dr. Morton's "unvarnished tale," and hallow it with the undeniable stamp of truth. Fortunate is it that the facts attendant on the discovery of so priceless a boon were inscribed on something more exact and more durable than mere human memory.

The testimony of many of the prominent champions of Dr. Morton's well-earned fame will be alluded to in the chronological order in which it appeared, but we will give here the prominent features of the evidence upon which the Massachusetts General Hospital founded its verdict. The first successful operation was performed by Dr. Morton at his own rooms on the evening of September 30, 1846, when he claims to have made "the first demonstration of this new fact in science!" Yet it was at the Hospital that the first public exhibition of this pain-destroying power was made, and where its effects were first witnessed by an admiring audience. This fact made the trustees of the Corporation a fitting tribunal for the subsequent investigation of the honor of discovery, for they possessed (to use the words of Daniel Webster) "every facility for ascertaining all the facts in the case." They knew Dr. Jackson, as a member of the medical faculty, and had but slight if any acquaintance with Dr. Morton, who was comparatively unknown to fame. Yet this board, composed of gentlemen whose names would do honor to any scientific institution, presently, after the discovery, near the time and at the place where it occurred, gave by an unanimous voice its honor to Dr. Morton.

The contemporary papers upon which this decisive verdict was given are worthy of a place in this biography, and supersede the necessity of thousands of pages, substantiating the simple fact which they so clearly prove, viz: that Dr. Morton, having verified his discovery, presented it to the world, proving that ether would produce insensibility to pain, and that it could be administered with safety. We first give a copy of the letter written by Dr. Haywood, at the request of Dr. Warren, inviting Dr. Morton to attend at the first of the above-named surgical operations, and administer to the patient:

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"DEAR SIR: I write at the request of Dr. J. C. Warren, to invite you to be present on Friday morning at 10 o'clock at the hospital, to administer to a patient who is then to be operated upon the preparation which you have invented to diminish the sensibility to pain.

Yours, respectfully,

C. F. HAYWOOD,

"*House Surgeon to the General Hospital, October 14th*, 1846.

"Dr. MORTON, *Tremont Row.*"

A graphic account of this initial operation is given in the deposition *in perpetuam* of Dr. A. A. Gould, before a commission appointed to receive testimony in 1852. Dr. Gould is well known as a gentleman of high scientific attainments, a member of the American Academy of Arts and Sciences, the American Philosophical Society, the Academy of Natural Sciences, of Philadelphia; the Boston Society of Natural History, and others on this continent, with the Imperial Mineralogical Society of St. Petersburg, and other foreign literary institutions. He was one of the first to whom Dr. Morton confided his discovery, and, learning that a public experiment was to be performed, was at the hospital to witness it. Dr. Warren, as he states in his testimony, "was about to commence the operation. He suddenly rose and turned to those present, and said that he had promised to allow Dr. Morton to give something which he thought would prevent pain, and he would wait. In about ten minutes Dr. Morton appeared. He administered the ether. All looked incredulous, especially as the man became at first exhilarated; but suddenly the anæsthetic effect took place. This ocasioned a start of surprise from all present. Dr. Morton coolly informed Dr. Warren that his patient was ready. The operation was performed, which was the removal of a tumor from the jaw. I recollect [stated Dr. Gould] one other incident. Previous to the operation, Dr. Warren, having waited ten or fifteen minutes, again turned to those present and said: 'As Dr. Morton has not arrived, I presume he is otherwise engaged;' apparently conveying the idea that Dr. Morton did not intend to appear. The remark of Dr. Warren brought out a great laugh. Dr. Warren then sat down to his patient. Just as he raised his knife Dr. Morton appeared."

The importance of this first public case of ethereal inhalation induces us to copy the record of it on the books of the Massachusetts General Hospital. A copy was procured by Dr. Warren, who thus endorsed its correctness:

"This case is remarkable in the annals of surgery. It was the first surgical operation performed under the influence of ether. Dr. Warren had been applied to by Dr. Morton, a dentist, with the request that he would try the inhalation of a fluid, which he said he had found to be effectual in preventing pain during operations on the teeth. Dr. Warren having satisfied himself that the breathing of the fluid would be harmless, agreed to employ it when an opportunity presented. None occurring in private practice within a day or two, he determined to use it on this patient.

"Before the operation began, some time was lost in waiting for Dr. Morton, and ultimately it was thought he would not appear. At length he arrived, and explained his detention by informing Dr. Warren that he had been occupied in preparing his apparatus, which consisted of a tube connected with a glass globe. This apparatus he then proceeded to apply, and after four or five minutes the patient appeared to be asleep, and the operation was performed as above described. To the surprise of Dr. Warren and the other gentlemen present, the patient did not shrink nor cry out; but during the insulation of the veins

he began to move his limbs and utter extraordinary expressions. These movements seemed to indicate the existence of pain, but after he had recovered his faculties he said he had experienced none, but only a sensation like that of scraping the part with a blunt instrument, and he ever after continued to say he had not felt any pain. The result of this operation led to the repetition of the use of ether in other cases, and in a few days its success was established, and its use resorted to in every considerable operation in the city of Boston and its vicinity."

The government of the Massachusetts General Hospital certainly manifested a liberality of spirit in thus permitting Dr. Morton to submit his discovery to the test of public experiment. Many such discoveries had failed—indeed it is seldom that one has ever thus appeared in the full glory of perfection at the first trial—and to be a party to the introduction of an unknown remedial agent is contrary to the almost undeviating laws of professional etiquette. Indeed, it is evident that nothing but the personal acquaintance of Dr. Warren and the other surgeons, with Dr. Morton, could have inspired them with sufficient confidence in him to warrant their introduction of his discovery. They did not know *it*, but they knew *him*, and it is clearly evident that his deportment, while attending the lectures of the institution, must have impressed them with a conviction that he was not only master of what he so confidently announced, but that he had that scientific knowledge which was a guarantee that no evil consequences would follow his experiments. The reputation of the institution, or of those gentlemen who sustained that reputation by their professional ability, would not have been perilled by admitting any one who did not enjoy their confidence, by possessing scientific and professional claims to their consideration. And they had an endorsing proof of Dr. Morton's claim to their attention, in personal deportment during the ordeal, thus carried on before those so recently his professors and his fellow students. Well did one of the officiating surgeons, Dr. Bigelow, remark, (in his testimony before the commission,) "that new experiments, and many of them, were to be made. Great probable danger was to be encountered and great responsibility assumed; even to the extent that, had Dr. Morton killed somebody with the new agent, of which Sir Benjamin Brodie, long after, said that 'it had killed Guinea pigs, and that the great question was, whether it was safe; he would very likely have been indicted for manslaughter, in rashly and ignorantly experimenting with an unknown agent.'"

An unknown agent! This veil of secresy, which was merely dropped around the discovery to keep it out of the hands of those who might abuse it, Dr. Morton promptly raised for all who were entitled to the benefit of his long researches, in order to give it the stamp of their reputation, and thus convince the world of its value. Luckily for suffering humanity, he was not disposed to act on the principle of concealment, in order to make terms for any recompense proportionate to the merit of his discovery, but, in the following correspondence with Dr. Warren, offered to communicate the precious information, that there need be no professional obstacle to its further verification:

BOSTON, *Nov. 6th*, 1846.

DEAR SIR: As it may sometimes be desirable that surgical operations should be performed at the Massachusetts General Hospital under the influence of the preparation employed by me for producing temporary insensibility to pain, you will allow me, through you, to offer to the hospital the free use of it for all the hospital operations. I should be pleased to give to the surgeons of the hospital any information, in addition to what they now possess, which they may think desirable in order to employ it with confidence. I will also instruct such persons as they may select, connected with the hospital, in the mode of employing it. This information, I must request, should be regarded as confidential, as I wish for ample time to make such modifications as experience may suggest in its exhibition. It is also my intention to have persons suitably instructed, who will go wherever desired, for a reasonable compensation, and administer it for private operations; thus enabling any surgeon to employ it in his private practice whenever he may have occasion. I think you will agree with me that this will be wiser until its merits are fuller established, than to put it into the hands of everybody, thereby bringing discredit upon the preparation by its injudicious employment. Should you wish me to administer at any of the operations to-morrow, I shall do so with pleasure; and should the above proposition be deemed worthy of being entertained, I shall be ready to make the arrangement as soon as informed of your wishes.

W. T. G. MORTON.

Dr. WARREN.

DEAR SIR: I beg leave to acknowledge the reception of your polite letter. I shall lose no time in laying it before the surgeons of the hospital.

I remain respectfully, yours,

J. C. WARREN.

Park Street, November 6th.

To complete the chain of evidence, we also insert two other notes written December 11th, 1846, one by Dr. Haywood, at the request of Dr. Warren; the other by Dr. Warren himself; both relative to an operation to be performed on the 12th; also, a certificate of Dr. Warren, of January 16th, 1847:

"SIR: I am requested by Dr. Warren to ask you, if convenient to yourself, to administer your preparation to a patient from whom a part of the upper jaw is to be removed. The operation will be done by Dr. Warren to-morrow at 11 a. m.

"Yours, &c., C. F. HAYWOOD,

"*M. G. Hospital, December* 11, 1846.

"Dr. MORTON, *Tremont Row.*"

"Dr. MORTON—*Dear Sir:* I inclose a note which I have just received from Dr. Brown. I think there would be a propriety in granting his request. There will be an operation at the hospital to-morrow at 11 o'clock, at which I shall be glad to have your aid, if perfectly convenient.

"Truly, yours, J. C. WARREN.

"2 *Park Street, December* 11."

"BOSTON, *January* 6, 1847.

"I hereby declare and certify, to the best of my knowledge and recollection, that I never heard of the use of sulphuric ether by inhalation as a means of preventing the pain of surgical operations, until it was suggested by Dr. Morton in the latter part of October, 1846.

"JOHN C. WARREN,

"*Professor of Anatomy and Surgery of the Massachusetts General Hospital.*"

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By these operations, performed by Dr. Morton, at his own rooms, at private houses, and at the public hospital, a profound impression was

made upon the public mind. All hailed with joy the perfect success of the ethereal vapor in annihilating pain, its evident safety, and the readiness of recovery from the anæsthetic state, which resembled the waking from a deep and quiet sleep. "The success of the discovery," as Dr. William H. Bissell remarks in his able report, "was established; Boston, its native city, was proud of its maternity, and it was about to be hailed in Europe, whither a power swifter than the winds was wafting it with wonder and applause. During all this time Dr. Morton alone claimed the discovery and conducted the experiments. He had staked everything dear in life, his hopes of fortune and fame, upon the discovery. He gave his labor by day and his thoughts by night to the perfecting of all that was incomplete in its application. And it was not until all was complete and completely verified, not until some time after the operation of the 2d January, (over three months from the first operation in Dr. Morton's office,) did any rival appear, and publicly claim the discovery, or even a participation in it."

The history of Dr. Morton's mind whilst he was meditating upon the probable issue of his investigations, and carrying them to their final accomplishment, must have been exactly parallel to that of Dr. Jenner while seeking how to avert the evils of smallpox, as narrated by Dr. John Brown. Like Jenner, "it required a mind possessed of all the firmness of purpose which he enjoyed to induce him to persevere in his pursuits." Like Jenner, "he seemed at times to feel that it might, in God's good providence, be his lot to stand between the living and the dead, and that through him [suffering] might be stayed. On the other side, the dread of disappointment and the probability of failing to accomplish his purpose restrained that eagerness which otherwise would have prompted him prematurely to publish the result of his inquiries, and thereby, probably, by conveying insufficient knowledge, blight forever his favorite hope." Like Jenner, he had not been favored with that collegiate education so often falsely made a requisite, and felt that "should anything untoward turn up in his experiments, he should be made, particularly by his medical brethren, the subject of ridicule—the mark for all to shoot at." Like Jenner, he "encountered numerous difficulties in carrying on the preliminary part of his inquiry;" "but resistance and difficulty only augmented his energy, and he resumed his labors with redoubled zeal." And he has stated, that his feelings while rambling about the pleasant solitudes around his residence at Needham were exactly those of Dr. Jenner when meditating in the meadows under the castle at Berkeley. Each "felt the prospect before him of becoming the instrument destined to take away from the world one of its greatest calamities, blended with the fond hope of enjoying independence, with domestic peace and happiness."

The parallel can be continued after the research of Dr. Morton had been crowned with success; for there are no inventions "which when made promised to have such an immediate and extensive influence

upon humanity—no discoveries elaborated by the patience, or skill, or science of man, ever calculated to produce such consequences as those which at this period centred in the hearts of Jenner" and of Morton. Each at that particular epoch "had it in his power to impart knowledge, the advantages of which might be rendered as manifest and palpable as they were universal." Each "felt a great struggle within him how to conduct himself." And it can be said of each that "in this, certainly one of the most trying emergencies that ever occurred in the life of any man, he was enabled to conduct himself with all the prudence, all the generosity and caution that befitted an individual to whom such high things were committed. He was not led away by selfish feelings; neither was he elated by pride nor vain-glory, nor hurried beyond propriety by over-eagerness and zeal."

What proof of this peculiar state of Dr. Morton's mind, corresponding with the magnitude of the occasion, yet unostentatious and unassuming, is to be found in the account of the first experiment at the General Hospital. The faculty and students, knowing that his discovery was to be tested, had assembled in full force, many of them doubtless expecting to witness another edition of failure to produce anæsthesia. The patient to whom the unknown narcotic anodyne was to be administered was, naturally, much excited; a large tumor was to be removed from his neck, and he dreaded the operation with great horror. Dr. Morton, detained at the apparatus-maker's, was tardy, but finally arrived, breathless, and radiant with hope. He applied the apparatus—the patient sank into a state of insensibility—and all watched, with breathless anxiety, the adroit hand of the venerable operator. "When the operation closed," says Dr. Morton, "the patient described his case, and Dr. Warren announced his belief that there had been insensibility to pain. My feelings may be better imagined than described."

The testimony of several of the eminent medical gentlemen who witnessed this public inaugural experiment, cannot but be of interest; showing, as it does, that Dr. Morton was thoroughly familiar with his new agent, and certain that it would be effectual, yet was neither arrogant nor forward. We extract it from their depositions, *in perpetuam*, taken in Boston, in 1852, by a commission specially appointed for that purpose, under the statutes of the commonwealth of Massachusetts.

Dr. John C. Warren stated that—"It was the first successful operation I ever witnessed under the effect of an anæsthetic agent, and the first of the kind I have known." The anæsthetic agent "was administered by Dr. Morton." And when asked: "Did you ever meet with any case of unsuccessful administration by Dr. Morton?" he replied, "No; the etherizations were more or less perfect in different cases. At first, we were very much puzzled with these variations in the effect of ether, but soon came to understand that they were only different degrees of anæsthesia."

Dr. J. Mason Warren, when asked how Dr. Morton administered the ether, "as regards care, skill, and success," replied: "He administered it very carefully, and judiciously, and effectively."

Dr. A. A. Gould's account of the first experiment is already given on a former page. When asked if Dr. Morton administered the ether "with reasonable skill, care, and success, or how otherwise," replied: "In every case in which I saw him administer it, he did it so."

Dr. S. D. Townsend, when similarly questioned, replied, that Dr. Morton's conduct "was very proper and cautious in the use of the ether." He "considered Dr. Morton as the only man who had anything to do with it."

"Dr. Morton conducted his experiments," testified Dr. Henry J. Bigelow, "in a methodical, straight-forward, routine manner, and successfully."

With these impressions of Dr. Morton and of his discovery, it is not strange that these eminent men at once became his champions, and that their colleagues were equally enthusiastic. Dr. O. W. Holmes, who is alike the favorite of science and of the Muses, thus vividly described its beneficent effects, in his introductory lecture, delivered before the Medical class of Harvard University, Nov. 3, 1847: "The knife is searching for disease—the pulleys are dragging back dislocated limbs—nature herself is working out the primal curse which doomed the tenderest of her creatures to the sharpest of her trials—but the fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deepest furrow in the knotted brow of agony has been smoothed forever."

Again, and for the last time here, we continue the parallel between Dr. Morton and Dr. Jenner. The friends of the latter, who met him at Rudhall in 1797, were like the surgeons of the Massachusetts General Hospital—"Deeply interested in the investigation, they listened to all the details with jealous ears; they sat in judgment on the work, and did honestly and kindly acquit them of their duty. Their judgment approved, their most benevolent feelings were gratified, and it only remained for them to applaud their friend, who then stood before them in a situation more truly interesting than they could express, and to urge him on his path by encouraging him in his purpose of opening, for the benefit of all, that stream of life and health which he had been permitted to discover.

"It was a special honor to have been associated with Jenner [or Morton] on such an occasion. The mind, in dwelling upon occurrences of this kind, naturally seeks for parallels in the histories of the lives of eminent men in other times. But the situation of Jenner [or Morton] scarcely admits of illustrations of this sort; he seemed to hold in his hand one of the 'gates of death,' and to him it seemed to be given to close it.

"When Columbus, by his judicious study of cosmography, anticipated the discovery of another hemisphere—when Newton beheld the hosts of heaven yielding up the secret of their movements to his patient and sublime researches—when Bacon, in the well-founded reliance on his almost superhuman powers, took a flight over the heads of men, and, with perfect confidence, looked forward to a far-distant age for the

blossom and the fruits of that intellectual seed which he had so abundantly scattered—the inward gratification derived from the consciousness that truth and wisdom were to be imparted through them to their fellow-mortals, and that the ultimate result would be felt in beneficial consequences to every class of society, doubtless imparted a joy and satisfaction to their souls of the most gratifying description."

"But if discoveries"—Jenner's biographer goes on to say, and we can well adopt his conclusion—"if discoveries are to be estimated by their power of ministering to the benefit of man, which, of all those that have most distinguished their authors, can be compared with that of which we are now treating?" Dr. Morton's name will ever stand inscribed in bold relief upon the temple of fame, and suffering humanity will "rise up and call him blessed."

CHAPTER IV.

Having traced the progress of Dr. Morton's discovery, it is necessary, in order to show its important value, to give a historical sketch of the unsuccessful attempts to annihilate pain, prepared for a report submitted to the thirty-second Congress by a select committee, of which Dr. W. H. Bissell, of Illinois, was chairman. Independent of the valuable historical information which is thus collaborated, this elucidation of the impotent infancy of "Anæsthesia" adds to Dr. Morton's fame, by conclusively showing that he was the first to secure the boon for which the ancients and the moderns have alike sought—a boon which, as the "last best gift to man," entitles him to the everlasting gratitude of the human race.

"Intense pain is regarded by mankind, generally, as so serious an evil that it would have been strange, indeed, if efforts had not been early made to diminish this species of suffering. The use of the juice of the poppy, henbane, mandragora, and other narcotic preparations, to effect this object by their deadening influence, may be traced back till it disappears in the darkness of a highly remote antiquity. Intoxicating vapors were also employed, by way of inhalation, to produce the same effects as drugs of this nature introduced into the stomach. This appears from the account given by Herodotus, of the practice of the Scythians, several centuries before Christ, of using the vapor of hemp seed as a means of drunkenness. The known means of stupefaction were very early resorted to, in order to counteract pain produced by artificial causes. In executions, under the horrible form of crucifixion, soporific mixtures were administered to alleviate the pangs of the victim. The draught of vinegar and gall, or myrrh, offered to the Saviour in his agony, was the ordinary tribute of human sympathy extorted from the bystander by the spectacle of intolerable anguish.

That some lethean anodyne might be found to assuage the torment of surgical operations as they were anciently performed, cauterizing

the cut surfaces, instead of tying the arteries, was not only a favorite notion, but it had been in some degree, however imperfect, reduced to practice. Pliny, the naturalist, who perished in the eruption of Vesuvius, which entombed the city of Herculaneum, in the year 79, bears distinct and decided testimony to this fact.

"It has a soporific power," says he in his description of the plant known as the mandragora or circeius—"it has a soporific power on the faculties of those who drink it. The ordinary potion is half a cup. It is drunk against serpents, and *before cuttings and puncturings*, lest they should be felt." (*Bibitur et contra serpentes, et ante sectiones, punctionesque, ne sentiantur.*)

When he comes to speak of the plant *eruca*, called by us the rocket, he informs us that its seeds, when drank, infused in wine, by criminals about to undergo the lash, produce a certain callousness or induration of feeling, (*duritiam quondam contra sensum induere.*)

Pliny also asserts that the stone *Memphitis*, powdered and applied in a liniment with vinegar, will stupefy parts to be cut or cauterized, "for it so paralyses the part that it feels no pain; *nec sentit cruciatum.*"

Dioscorides, a Greek physician of Cilicia, in Asia, who was born about the time of Pliny's death, and who wrote an extensive work on the materia medica, observes, in his chapter on mandragora—

1. "Some boil down the roots in wine to a third part, and preserve the juice thus procured, and give one cyathus of it in sleeplessness and severe pains, of whatever part; also, *to cause the insensibility*—to produce the anæsthesia, (*poiein anaisthesian*)—*of those who are to be cut or cauterized.*"

2. "There is prepared, also, besides the decoction, a wine from the bark of the root, three minæ being thrown into a cask of sweet wine; and of this, three cyathi are given *to those who are to be cut or cauterized as aforesaid*—for, being thrown into a deep sleep, *they do not perceive pain.*"

3. Speaking of another variety of mandragora, called *morion*, he observes, "medical men use it also for those who are to be cut or cauterized."

Dioscorides also describes the stone Memphitis, mentioned by Pliny, and says, that when it is powdered and applied to parts to be cut or cauterized, they are rendered, *without the slightest danger*, wholly insensible to pain. Matthiolus, the commentator on Dioscorides, confirms his statement of the virtues of mandragora, which is repeated by Dodoneus. "Wine, in which the roots of mandragora has been steeped," says this latter writer, "brings on sleep, and appeases all pains; so that it is given to those who are to be cut, sawed, or burned in any parts of their body, that they may not perceive pain."

The expressions used by Apuleius, of Madaura, who flourished about a century after Pliny, are still more remarkable than those already quoted from the older authors. He says, when treating of mandragora: "If any one is to have a member mutilated, burned, or sawed, (*mutilandum, comburendum, vel serrandum,*) let him drink

half an ounce with wine, and *let him sleep till the member is cut away, without any pain or sensation*, (*et tantum dormiet, quousque abscindatur membrum aliquo sine dolore et sensu.*")

It was not in Europe and in Western Asia alone that these early efforts to discover some letheon were made, and atttended with partial success. On the opposite side of the continent, the Chinese, who have anticipated the Europeans in so many important inventions—as in gunpowder, the mariner's compass, printing, lithography, paper money, and the use of coal—seem to have been quite as far in advance of the occidental world in medical science. They understood, ages before they were introduced into christendom, the use of substances containing iodine for the cure of the goitre; and employed spurred rye, ergot, to shorten dangerously prolonged labor in difficult accouchments. Among the therapeutic methods confirmed by the experience of thousands of years, the records of which they have preserved with religious veneration, the employment of an anæsthetic agent, to paralyze the nervous sensibility before performing surgical operations, is distinctly set forth. Among a considerable number of Chinese works on the pharmacopæia, medicine, and surgery, in the National Library at Paris, is one entitled *Kou-kin-i-tong*, or general collection of ancient and modern medicine, in fifty volumes quarto. Several hundred biographical notices of the most distinguished physicians in China are prefixed to this work. The following curious passages occur in the sketch of the biography of *Hoa-tho*, who flourished under the dynasty of *Wei*, between the years 220 and 230 of our era: " When he determined that it was necessary to employ acupuncture, he applied it in two or three places; and so with the *moxa*, if that was indicated by the nature of the affection to be treated. But if the disease resided in parts upon which the needle, the *moxa*, or liquid medicaments could not operate—for example, in the bones, or the marrow of the bones, in the stomach or the intestines—*he gave* the patient a preparation of hemp, (in the Chinese language *ma-yo*,) and after a few moments he became as insensible as if he had been drunk or dead. Then, as the case required, he performed operations, incisions, or amputations, and removed the cause of the malady; then he brought together and secured the tissues, and applied liniments. After a certain number of days the patient recovered, *without having experienced during the operation the slightest pain. Hoa-tho* has published, under the title of *Nei-tchao-thou*, anatomical plates, which exhibit the interior of the human body, which have come down to our times, and enjoy a great reputation."

It will be noticed that the agent employed by *Hoa-tho*, which he calls *ma-yo*, hemp medicine, and which is called in the annals of the later *Hans*, *mafo-san*, or hemp-essence powder, is the extract of the same plant mentioned by Herodotus, twenty-three centuries ago, the *canuabis Indica*, the *haschisch* of the Arabs, which is now extensively cultivated in Hindostan, for the purpose of manufacturing the substance called *Bhang*, to produce a peculiar species of intoxication, at first seductive and delicious, but followed in its habitual use by terrible effects upon the constitution.

Almost a thousand years after the date of the unmistakable phrases quoted from Apuleius, according to the testimony of William of Tyre, and other chroniclers of the wars for the rescue of the holy sepulchre, and the fascinating narrative of *Marco Polo*, a state of anæsthesia was induced for very different purposes. It became an instrument in the hands of bold and crafty imposters to perpetrate and extend the most terrible fanaticism that the world has ever seen.

The employment of anæsthetic agents in surgical operations was not forgotten or abandoned during the period when they were pressed into the appalling service just described. In the thirteenth century, anæsthesia was produced by inhalation of an anodyne vapor, in a mode oddly forestalling the practices of the present day, which is thus described in the following passage of the surgical treatise of Theodoric, who died in 1298. It is the receipt for the "spongia somnifera," as it is called in the rubric:

"The preparation of a scent for performing surgical operations, according to Master Hugo. It is made thus: Take of opium and the juice of unripe mulberry, of hyoscyamus, of the juice of the hemlock, of the juice of the leaves of the mandragora, of the juice of the woody ivy, of the juice of the forest mulberry, of the seeds of lettuce, of the seed of the burdock, which has large and round apples, and of the water hemlock, each one ounce; mix the whole of these together in a brazen vessel, and then in it place a new sponge, and let the whole boil, and as long as the sun on the dog-days, till it (the sponge) consumes it all, and let it be boiled away in it. As often as there is need of it, place this same sponge into warm water for one hour, and let it be applied to the nostrils till he who is to be operated on, *(qui incidendus est,)* has fallen asleep; and in this state let the operation be performed, *(et sic fiat chirurgia.)* When this is finished, in order to rouse him, place another dipped in vinegar, frequently to his nose, or let the juice of the roots of fenigreek be squirted into his nostrils. Presently he awakens."

A French physician, residing in the neighborhood of Toulouse, M. Dauriol, asserts that, in the year 1832, he employed a method analogous of that of Theodoric, and specifies five cases in which he succeeded in performing painless operations.

September 23, 1828, M. Girardin read a letter before the Academy of Medicine, addressed to his Majesty Charles X, by Mr. Hickman, a surgeon of London, in which this surgeon announces a means of performing the most delicate and most dangerous operations, without producing pain in the individuals submitted to them. This proceeding consists in suspending insensibility by the methodical introduction of certain gases into the lungs. Mr. Hickman had tested hisp roceedings by repeated experiments on animals.

Guy de Chauliac and Brunus are the only authors on medicine and surgery, besides Theodoric, who, during this period, allude to prophylactic agents to avert pain. It may be presumed, therefore, that their employment was not generally very successful. Probably bad effects,

such as congestion and asphyxia, and sometimes ending in death, followed their unskilful empiricism. J. Cannappe, the physician of Francis I., in his work printed at Lyons, in 1532, *Le Guidon pour les Barbiers et les Chirurgiens*, the Surgeon's and Barber's Guide, describes the method of Theodoric and his followers, as already given above, and adds: "*Les autres donnent opium à borie*, et fontmal, specialement s'il est jeune; et le aperçoivent, car ce est avec une grande bataille de vertu animale et naturelle. J'ai ouï qùilz encourent manie, et par consequent la mort."

Thus far had the superinduction of anæsthesia, as a preventive of pain, made its way into surgical practice in the middle ages; and even then it must have been most beneficial in its influence in diminishing the mass of human suffering. Down to the time when Ambrose Paré, in the sixteenth century, suggested the application of slender ligatures to bleeding arteries, to arrest the hemorrhage of surgical wounds, no other means were employed to stem the flow of blood after capital operations, than by scorching over the raw surface with a red hot iron, or plunging it into boiling pitch, or applying other strong potential cauteries. "The horrors of the patient, and his ungovernable cries, the hurry of the operators and assistants, the sparkling of the (heated) irons, and the hissing of the blood against them, must have made terrible scenes," says Mr. John Bell; "and surgery must, in those days, have been a horrible trade."

Haller, Deneux, and Blandin, report cases of operations performed upon patients, under the influence of alcoholic intoxication, in obstetric and other cases, without pain; and Richerand has suggested that this expedient should be employed in the management of dislocations difficult to be reduced. For obvious reasons it has not been adopted by the profession. Mesmerism, also, has been the subject of grave discussions, and of some extraordinary statements, in this connection; but, whatever may be thought of the individual cases certified by witnesses, it is not too much to say that it is not likely ever to become a remedy of general application.

Opium has in all ages been employed to assuage pain. Van Helmont calls it the specific gift of the Creator. Guy de Chauliac used it, and many surgeons have followed his example in their operations. Sassard, surgeon of the hospital *de la Charite*, strongly recommended this practice in the last century. But the irregular action of opium, the excitability which it sometimes occasions, its bad effects upon the digestive organs and the nervous system, and the length of time during which its influence remains, are decisive objections to this agent. Dr. Esdaille has recently experimented upon this subject at Calcutta, but the results are altogether unfavorable.

Van Frieten, Juvet, and Teden, have advised that mechanical compression should be employed to prevent pain in amputations, but this expedient proved but partially effectual, and has serious inconveniences which require it to be rejected without question.

The application of ice also will diminish pain under these circumstances. Baron Larry, after the battle of Eylau, found a remarkable insensibility in the wounded who suffered amputations, owing to the intense cold. The injury to the general health of the patient is not, however, compensated by the imperfect and uncertain success of this remedy.

After the great improvement brought about by the introduction of ligatures, the inducement to seek for a safe and effectual nepenthe, though still great, was vastly less than before. No practical advance deserving to be mentioned was made in this direction, until the great discovery of the available effects of sulphuric ether.

This substance had been kuown since the thirteenth century. Its formation was accurately described by Valerius Cordus in the sixteenth century. Frobenius first designated it ether, and published an account of it in the philosophical transactions in 1730.

Its use as a medical agent, first alluded to by Valerius Cordus, and mentioned by Hoffman, Cullen, Alston, Lewis, and Monroe, and other writers of the last century, has long been familiary known. The history of its use by inhalation commenced with the pamphlet published in 1795, by Richard Pearson; and several communications from the same Dr. Pearson are to be found in the work of Dr. Beddoes on Factitious Airs, published at Bristol, England, in 1796. The same work contains a letter from one of Dr. Thornton's patients, giving an account of his use of ether, by Dr. Thornton's advice, in a case of pectoral catarrh. He says, "it gave almost immediate relief both to the oppression *and pain* in the chest." On the second trial he inhaled two spoonsful, with "immediate relief as before, and I very soon after *fell asleep*." In 1815, Nysten, in the Dictionary of Medical Sciences, speaks of the inhalation of ether as familiarly known for *mitigating pains* in colic. For the last fifty years most therapeutic authors mention its use by inhalation in asthma, &c., as Doncan, Murray, Brande, Christison, Pereira, Thompson, Barbier, Wendt, Vogt, Sundelin, &c. Effects analogous to intoxication, when ether is inhaled, are stated by American authors, as Godman, (1822,) Mitchel, (1832,) Professor Samuel Jackson, (1833,) Wood & Bache, (1834,) Miller, (1846, and early in that year.)

Dr. John C. Warren, in his work on Etherization, says: "The general properties of ether have been known for more than a century, and the effect of its inhalation, in producing exhilaration and insensibility, has been understood for many years, not only by the scientific, but by young men in colleges and schools, and in the shop of the apothecary, who have frequently employed it for these purposes."

About a half a century since, Sir Humphrey Davy, who had acted as an assistant to Dr. Beddoes, in the commencement of his career, suggested the possibility that a pain-subduing gas might be inhaled, as follows: "As *nitrous oxide*, in its extensive operation, appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place;"

Researches on Nitrous Oxide, p. 556. Upon this hint, Dr. Horace Wells, of Hartford, Connecticut, in the autumn of the year 1844, experimented with *nitrous oxide gas,* in the extraction of teeth; but this gas being found on trial to be unavailable for the desired purposes, he abandoned his experiments in December, 1844, and tried none afterwards.

Late in the the autumn of 1844, Dr. E. E. Marcy, of Hartford, Conn., as appears from his own affidavit and that F. C. Goodrich, of Hartford, suggested to Dr. Wells to substitute sulphuric ether for nitrous oxide, and informed him of its known effects, and how to make it. Marcy "administered the vapor of rectified sulphuric ether in my[his] office to a young man; * * * and after he had been rendered insensible to pain, cut from his head an encysted tumor of about the size of an English walnut. The operation was entirely unattended with pain." Dr. Marcy concluded that nitrous oxide was more safe, equally efficacious, and more easily administered than ether, and therefore to be preferred, and retained that opinion to December, 1849.

Dr. E. R. Smilie, of Boston, in October, 1846, asserted that he had employed successfully an *ethereal* tincture of opium to subdue pain under the knife. He states that he applied this tincture by inhalation in the spring of 1844; that he opened a serious abscess on the neck of the late Mr. John Johnson, while he was rendered unconscious of pain from the operation by this tincture.

The Paris Medical Gazette of March, 1846, gives an account of remarkable experiments performed by M. Ducos by ether on animals, exhibiting most of the phenomena since witnessed in the human body. Sir Benjamin Brodie tried it on Guinea pigs, whom it put to sleep and killed. He doubted its safety.

Notwithstanding this long series of efforts to procure a true nepenthe, the object still seemed unattainable to the wisest and boldest members of the surgical profession. Velpeau, than whom no higher authority can be quoted, said, in 1839, "to avoid pain in surgical operations is a chimera which it is not allowable to pursue at the present day. The cutting instrument and pain in operative medicine are two words which never present themselves singly to the mind of the patient, and of which we must necessarily admit the association." Orfila, in his Toxicology, declares absolute insensibility to pain under surgical operations by etherization to be a discovery entirely new. Dr. J. C. Warren says, "the discovery of a mode of preventing pain in surgical operations has been an object of strong desire among surgeons from an early period. In my surgical lectures I have almost annually alluded to it, and stated the means which I have usually adopted for the attainment of the object. I have also freely declared that, notwithstanding the use of very large doses of narcotic substances, this desideratum had never been satisfactorily obtained. The successful use of any article of the materia medica for this purpose would therefore be hailed by me as an alleviation of human suffering." Finally, Sir Benjamin Brodie, in a discourse at St. George's Hospital, at so late a date as October 1,

1846, alluding to mesmerism, said, "there is no greater desideratum either in medicine or surgery than to have the means of allaying or preventing bodily pain, not only in surgical operations, but in other cases also; but there is good reason to apprehend that it has not been reserved for the revival of animal magnetism under a new name, to accomplish that *for which all physicians and surgeons have been looking in vain, from the days of Hippocrates down to the present time.*" Testimonials like these might be multiplied indefinitely, but the names already quoted are of those universally recognised on both continents as the most illustrious cultivators of medical science. The desideratum of which Brodie despaired on the 1st of October, 1846, had been found, and its efficacy demonstrated within the twenty-four hours preceding the delivery of his lecture. And in a few days after, the tidings were borne with the full speed of steam across the Atlantic, and dispersed over Europe and Asia, which for two thousand years had been looking for it in vain.

This sketch of the progress of human knowledge as to the inhalation of sulphuric ether and its effects, and as to attempts to superinduce anæsthesia by various agents in ancient and modern times, shows clearly what was and what was not known upon the subject previous to the investigations and experiments of Dr. Morton. It proves that, until the 30th of September, 1846, it was not known that sulphuric ether might be inhaled in sufficient quantity to produce total insensibility to pain, under the severest surgical operations.

The fact that other imperfect anæsthetic agents have been used, or that the inhalation of vapors and gases had been experimented upon previous to Dr. Morton's discovery, does not detract from his fame as a discoverer. We are told that an eminent philosopher gave it as an axiom—"Always examine what others reject as worthless;" and it has certainly been in what seems the most inconsiderate sources, that the greatest discoveries have been made. Galileo made his great discovery of the use of the pendulum by watching the swinging of a chandelier; Columbus saw the new world in the floating of a sea-weed; Newton drew most of his splendid discoveries in optics from a soap-bubble; Bell's discovery glanced into his mind from a diagram; Galvani's investigations of the scientific subject which bears his name, were suggested by the preparation of frogs for his table; Jenner, by observing dairy-maids and grooms, discovered the miraculous properties of vaccine innoculation; and Morton, by scientific observations upon what Pereira, and other writers whose works he studied, had said upon the inhalation of ether, transferred it from an inferior place in the pharmacopœia, to the fairest record of God's best gifts to man. Simple as all important discoveries seem in their elements, and when they are known, it is undoubtedly one of the highest faculties of the human mind to strike out from the observation of common things latent truths never before discerned, and to perceive important uses and applications in things trifling or hurtful. The value of such discoveries is not in their intricacy, but in their applicable utility to the human race.

The fact that philosophers might easily have been anticipated in their discoveries, had other people had a similar scientific capacity, should not longer be entertained—a dull man's blunders should not be suffered to cast a shade over the brilliancy of genius. Yet in Dr. Morton's case, as in that of other eminent discoverers, we see how this prejudice is suffered to do grievous wrong. A fact which had been lying common and at waste, floating on the very surface of daily experience, is seized upon by some penetrating and inquisitive mind. Its relations to the different branches of human knowledge are examined and defined; it throws a light all around, and is a lamp to the feet of the inquirer, while he surveys other regions. Having thus explored a *terra incognita*, up starts one and says: Sir, you have not the whole merit of this discovery; I knew that such a land as you have visited and explored, existed, for I saw it, but did not approach it. Another says: I was actually cast away upon the coast; I noticed some of the things which you have described. I did not examine them minutely, but I remember from your description that such things did exist, and I therefore am entitled to the merit and reward which you claim.

A process similar to this marked the discussions regarding the origin of vaccination, as well as of etherization. The subject had been forced upon the attention of many individuals, but as far as they were concerned, all the information relating to it might have remained in its original and unsatisfactory state. All the pretensions, therefore, of the men who became wise by the labors of Morton, who achieved what they were unable to accomplish, ought, instead of detracting from his fame, to raise it higher.

CHAPTER V.

We now return to the personal history of Dr. Morton, and, having demonstrated the long sought value of his discovery, will no longer deviate from the regular course of events that took place subsequent to his inaugural experiments. It is a condition in the fame of men who make their own reputation, that there must be a period in their past lives to look back upon, when their merits were contested or denied. The histories of Columbus, of Jenner, of Fulton, and a legion besides, prove this assertion. The recollection of the world's contumely is subdued by later testimonials of triumph over malice and ignorance, but it is a severe ordeal to pass through. Dr. Morton's memory, perhaps, is crowded with more of these "bitter recollections" than that of any other man, who, by the mere supremacy of genius, has not only won a scientific victory, but has "stood his ground" when others came to dispute his well-earned laurels.

We have already shown that at the very threshold of Dr. Morton's discovery, he was met by an opposition at the Massachusetts Medical

Hospital, that might have caused misgivings in the mind of any one who was not thoroughly convinced that his position was invincible. He had tested the safety of his discovery on himself, and had successfully administered it at the hospital, but the surgeons insisted upon being (to use the words of Dr. Hayward) "all confident that it might be used with safety," before they would consent to use it further. Doctor Morton's disinterested frankness, and the wonderful success of his experiments, both before and after communicating what the discovery was, disarmed this opposition, though many doubted for months afterwards.

The new anæsthetic agent now received the sanction of the eminent gentlemen connected with the Massachusetts General Hospital, and it would seem that the doubts of the most incredulous should have been removed. Dr. Morton, impressed with the value of his discovery, strained every nerve to confer its blessings upon his fellow-creatures—administering ether for surgical operations, perfecting his experiments, writing to all parts of the country and of Europe—in short, it was said by R. H. Dana, jr., that "Dr. Morton hardly knew a full night's rest, or a regular meal, for three months."

Yet opponents rose up on every hand, to thwart his plans, and to prejudice the public against his discovery. Among these, strange as it may seem, were two gentlemen (previously alluded to) who afterwards sought to appropriate a share of the honor themselves—Drs. Charles T. Jackson and Horace Wells!

Caleb Eddy, esq., a respectable Bostonian, who was at one time a member of the Board of Aldermen, testified before the commission in 1852, that, after successful experiment at the hospital, he asked Dr. Jackson if he knew that, after a person had inhaled the ether and was asleep, his flesh could be cut with a knife, without his experiencing any pain? Dr. Jackson replied: "No, nor Morton either; he is a reckless man for using it as he has!"

Dr. A. A. Gould, a prominent Boston physician, whose scientific position has already been mentioned in a previous chapter, testified that he had a conversation with Dr. Jackson on the dental operations performed by Dr. Morton under the influence of ether, a few days afterwards. In substance, Dr. Jackson said: "Well, let him go on with it; I don't care what he does with it if he don't bring my name in with it." He further testified, that he had but little conversation with Dr. Jackson at the time, as he "thought he seemed to disclaim having any thing to do with it, further than having mentioned the article to Dr. Morton."

Peleg W. Chandler, esq., city solicitor of Boston, and an ex-member of the legislature, testified that in a conversation with Dr. Jackson, soon after the discovery, an evident impression was left on his mind that that gentleman did not regard it "as a settled thing, or as a discovery that was to be any thing remarkable in itself, or one that was likely to be applied beneficially, in itself considered, but as rather opening the door to future investigation in that direction, that something

might hereafter be discovered that would stand the test of science and practical experiments. There was an obvious desire not to connect himself, as a man of science, with it to any great extent, and he made use of some expression of this sort with regard to Dr. Morton, that he was a reckless, dare-devil fellow, and that he would kill somebody yet. I think that was his very expression."

Joseph Burnett, esq., a well-known apothecary in Boston, testified that in conversation at his own office on the 20th of November, Dr. Jackson said: "He apprehended danger in the hands of those who used it, [ether.] Dr. Burnett thought the remark he made was, 'they would kill somebody with it.'"

Edward Warren, esq., of New York, testified that at the period of the discovery he was intimately acquainted with Dr. Jackson, and called on him to ascertain the nature of the agent used, and if some arrangement could not be made by which he could introduce it in Europe. "Dr. Jackson," testified Mr. Warren, "said he did not like to tell me what it was, and I then asked him why he did not compel Morton to do him justice by making the secret known. He replied by saying that he should do so—that if ten per cent. on foreign sales, as well as on sales made in this country, were not allowed him, he should write out to Europe and publish the whole thing to the world. I urged him to disclose the nature of the agent used, as up to this time, (the last of November, 1846,) it had been studiously kept as a secret. He declined, saying it was easily found out, that the public would soon know all about it; and that, at any rate, if he was not properly remunerated, he would blow the whole thing up. The claim above made, of ten per cent., of domestic and foreign sales under the patent, was all he made as his interest in the matter. That was the extent of his claim, made to me up to that time. We then had a long conversation in reference to the whole subject of this discovery. I asked him as to the safety of this agent. He answered, and here I pretend to give his own words, that 'it should be used with the greatest care; and that it would be very likely to injure the brain if repeated.' He furthermore added, that there would be great danger in giving it for a long time on any one occasion, or of repeating it, as, if it were, asphyxia, coma, or even death itself might ensue. I then asked Dr. Jackson what share he claimed in the discovery? He replied by saying, 'that the so-called discovery was not his; that Dr. Morton was responsible for it; that he was not answerable for the results, fearing that accidents might ensue from the use of this compound,' and that, therefore, he would refer me to Dr. Morton for further information. What I have stated above is the substance of a long conversation I had with him at that time, so far as I can recollect it. I recollect very distinctly what I have stated."

While Dr. Jackson was thus expressing his want of confidence in the new discovery, and refusing his sanction to Dr. Morton, denouncing him as a "reckless, dare-devil fellow, who would kill somebody yet," the object of his detraction wrote to his old partner, then in Hartford, endeavoring to enlist his assistance in disseminating a knowledge of

anæsthesia. In reply to this letter, (which was written on the 19th of October,) Dr. Wells promised to come, but in such a manner as clearly shows that he had never been aware of the anæsthesial effects of ether. He accordingly visited Dr. Morton, but was quite dissatisfied with the experiments which he witnessed with the ether. He advised Dr. Morton to abandon them, telling him that their operation would be uncertain, limited, and attended with danger, and of no practical utility to justify the expense. He declined attending any surgical operation, and evidently considered the whole affair a "humbug," advising Dr. Morton to sell licenses, and make as much money as he could out of it while the excitement lasted. "Very like the advice (said the honorable I. P. Walker, of the United States Senate) which he had given to Dr. Cooley, as to the use he should make of the nitrous oxyde. He was evidently impressed with the belief that the success of Dr. Morton's anæsthetic agent depended also, to some extent, on the mental preparation of his patients." This is also the view taken of the impression on the mind of Dr. Wells, during his visit, by R. H. Eddy, esq., as will appear by reference to his affidavit in the Congressional report.

It was, doubtless, painful to Dr. Morton to have a discovery treated as fabulous, or hazardous, of the truth of which he had satisfied himself by rigid and patient inquiry. But the firmness and decision of his character not only sustained him during this desertion of those who had professed friendship, but appeared to stimulate him to increased zeal in his cause. "Letters," says R. H. Dana, jr., esq., "came pouring in upon Dr. Morton from all parts of the country. He has shown the editor of this work ten bound volumes, containing about 2,000 letters received by him on this subject, between Oct., 1846, and July, 1847, some of them coming from distant lands, filled with queries. He was obliged to employ a secretary to answer these communications, to increase his accommodations at great expense; his dental business was neglected, and he risked all, labored, expended health, time, and money on this discovery. He issued circulars, giving detailed accounts of the experiments, and kept a minute journal of events, experiences, and suggestions." And he even sent instruments to Velpeau, Blandin, Jobert, Ricord, Maisonneuve, and other eminent Paris surgeons, with full instructions, and requests to send him accounts of their experiments, that he might promulgate them.

By his unremitting personal exertions, without any regard to the opposition manifested, Dr. Morton soon had the satisfaction of finding that his discovery was gaining foothold, and it would naturally be supposed that he would have been honored as a benefactor of his race, who had conferred a priceless boon upon suffering humanity. But, while he received many congratulations from the great and the good, his success awakened the envy and excited the jealousy of some of his professional brethren. Among these, a Dr. J. F. Flagg appears to have stood alone in his "bad eminence." He at once commenced a terrible onslaught upon the new application of ether, and (more terrible still) upon the hapless discoverer. But not succeeding in his first

attempts in crushing the young Hercules in its cradle, and the *eclat* of the thing still spreading, he at length excited his brother dentists to arouse and array themselves in order of battle. Accordingly, early in December, a meeting of Boston dentists was called, and a committee of twelve appointed, (with Dr. Flagg at its head,) to make a formal protest against anæsthesia.

This organized and systematic opposition made a formal appeal to the public against Dr. Morton's discovery through the newspapers. A "manifesto" (which remains as a monument to perpetuate their malice) was published by them in the Boston Daily Advertiser of December 12, 1846, and professed to give a large number of instances in which experiments had failed or produced unfortunate effects, though *not a single name* was given. Some of these pretended sufferers were represented to be young ladies, who, after having inhaled ether, had left Dr. Morton's office delirious, and had remained in that state for several days, with bleeding at the lungs, melancholy, and other dreadful results. This authoritative proclamation was spread broadcast over the country, presenting a most serious obstacle to Dr. Morton's agents sent abroad to promulgate his discovery, and it was quoted by the opponents of the utility and safety of etherization, as evidence, while the advocates were troubled by doubts. The voluminous correspondence of Dr. Morton shows, that for months he must have endured the daily annoyance of receiving long letters, elicited by this dentists' circular. Some wrote to him to inquire into its authenticity; others to inquire into its value; others had doubts awakened by it, which he was urged to answer; others volunteered evidence to contradict its assertions; and a few (who would blush at this autographic evidence against them could they see it) availed themselves of the opportunity to upbraid him as having announced the discovery of "a humbug."

Equally persevering in his attempts to render an essential service to his race, by exposing the dangers of Dr. Morton's discovery, was Professor A. Westcott, afterwards connected with a dental college in Baltimore. From the first he seemed to consider it his especial duty to declare war, not merely against the use of ether itself, but also against the unfortunate Dr. Morton. In a published statement, from this learned and facetious professor, he said: "If Dr. Morton can make *me* believe that the indiscriminate application of this vapor is really so very harmless, he will make me believe that I am the richest man on earth. I should then certainly go in for the new patents I spoke of in my former communication. For who would not freely administer a harmless thing, especially when it is endorsed by the first surgeons and medical men in New England, to stop the crying of cross babies. If the thing is really harmless, and the subjects, 'after breathing it from one-half to two minutes, drop into a *quiet slumber*,' it certainly would be invaluable for nursery purposes. *Morton's sucking bottles* would be in great requisition, surely. I again affirm, that had Mrs. Caudle only acquired a taste for this luxury, her poor husband might have been, comparatively, a happy man." This is a fair specimen of the learned professor's logic and humor.

Neither were members of the dental profession alone in their denunciations of the discovery. Robert M. Huston, M. D., editor of the Philadelphia "Medical Examiner," put on his veto in this wise: "We should not consider it entitled to the least notice, but that we perceive, by the Boston Medical and Surgical Journal, that prominent members of the profession in that city have been caught in its meshes." Again: "We are persuaded that the surgeons of Philadelphia will not be seduced from the high professional path of duty, into the quagmire of quackery, by this Will-o'-the-wisp." And again: "We cannot close these remarks without again expressing our deep mortification and regret, that the eminent men who have so long adorned the profession in Boston, should have consented for a moment to set so bad an example to their younger brethren, as we conceive them to have done in this instance. If such things are to be sanctioned by the profession, there is little need of reform conventions, or any other efforts to elevate the professional character: physicians and quacks will soon constitute one fraternity."

William C. Roberts, M. D., editor of the New York "Annalist," thus stated his objections: "By-and-by we may see 'Morton's Antipathetic Inhalation' puffed in an article to which shall be appended the honored names of Warren, Bigelow, and Pierson; and wherein, we ask, will it differ from the objectionable contributions of others, quite as high, to Swaim's Panacea?" In another place he says: "The last special wonder has already arrived at the natural term of its existence; and the interest created by its first advent has, in a great measure, subsided. It has descended to the bottom of that great abyss which has already engulphed so many of its predecessor novelties, but which continues, alas! to gape, until a humbug yet more prime shall be thrown into it." And again, this Solon says, in speaking of the use of ether in London: "We regret to observe that Mr. Liston is so negligent of what is due to the dignity of his profession, and of his own duty as a member of it, as to have employed this patented nostrum."

Charles A. Lee, M. D., editor of the New York "Journal of Medicine," says: "We are sorry to see many of our brethren, at home and abroad, stooping from the exalted position they occupy in the profession to hold intercourse with, and become the abettors of, quackery in any form. Such doings are certainly contrary to the ethics of the profession, and should not be tolerated for a moment in any one."

Drs. W. M. Carpenter, E. D. Fenner, J. Harrison, and A. Hester, editors of the New Orleans "Medical and Surgical Journal," offer the following sentiment on this subject: "That the leading surgeons of Boston could be captivated by *such an invention as this*, heralded to the world under such auspices and upon *such* evidences of utility and safety as are presented by Dr. Bigelow, excites our amazement. Why *mesmerism*, which is repudiated by the *savans* of Boston, has done a thousand times greater wonders, and without any of the dangers here threatened. What shall we hear next?"

All of the medical faculty, in short, on the first promulgation of the discovery, adhered with more or less tenacity to the opinion which had been expressed by that eminent French surgeon, Monsieur Velpeau, in 1839. "To avoid pain," said he, in his work on medical operations, "is a chimera which it is not allowable to pursue at the present day. The cutting instrument and pain, in operative medicine, are two words which never present themselves singly to the mind of the patient, and of which we must necessarily admit the association."

CHAPTER VI.

Dr. Morton states, in his memoir to the French Academy, (already published,) that he was partially induced to take out a patent, because he "was advised that it would be well to restrain so powerful an agent. which might be employed for the most nefarious purposes." The records of criminal courts in both the old and in the new world, show the truth of this supposition, for the agent intended to relieve the suffering has been used to stupefy the victims of desperadoes; and in one country, as we are informed by Dr. Bigelow, a government discountenanced the discovery on this very account. But this was not the only motive which induced Dr. Morton to wish that his discovery might be restrained within proper bounds. The agent was then comparatively unknown; he had himself (as his memoir shows) been once deceived by using an impure article, and had he announced that all the world could produce insensibility to pain by using ether, many fearful accidents would have followed by its indiscriminate administration, without regard to quality, quantity or regulation. He was well aware that he would be held answerable for every supposed misadventure of this kind, and naturally wished to avoid such opposition by controlling his discovery.

Those worthy and qualified to use it, however, received every encouragement at his hands. So early as the 30th November, 1846, he requested Dr. Warren to give him as perfect a list as possible of all the hospitals and charitable institutions in the country, that he might present them with the use of this new blessing to their suffering patients. This praiseworthy request was granted, and soon every eleemosynary institution in the country, where surgical operations were performed, every charitable hospital, and many eminent surgeons, received free license to use the discovery, with a donation of apparatus and instructions, as a sense of the obligation felt by Dr. Morton for the interest they had displayed in establishing the value of his discovery.

The official letters acknowledging these benefactions not only show Dr. Morton's liberality in extending the benefits of his discovery, but are important as evidences of his then undisputed claim to the discovery. One of them, showing this, reads thus:

"Boston, *Dec.* 21, 1846.

"Dr. W. T. G. Morton—*Sir:* At a meeting of the trustees of the Massachusetts General Hospital, held yesterday, your letter of the 14th inst., presenting to the hospital the right to use your "*Discovery for the prevention or alleviation of pain in surgical operations,*" was laid before the Board.

"I am directed, by a vote of the trustees, to inform you that they accept your polite offer, and to express to you their thanks for your valuable gift, and their sense of the importance of the right to use *your discovery* in the institution under their control.

"Your ob't servant, MARCUS MORTON, Jr.,
Secretary Mass General Hospital."

Not only did Dr. Morton thus give free rights to charitable institutions, but in every "License" granted under the patent to responsible practitioners, for a small equivalent, was a distinct clause guaranteeing a re-payment of the fee should the Government of the United States adopt the invention. "I had little doubt," said he, "that the proper authorities would take it out of private hands, if the public good required it."

We accordingly find him, while busily engaged in presenting his discovery to charitable institutions, sending forth agents to introduce it into individual practice, continuing his experiments, and combatting the various objections raised on every hand, mindful of his duty to the republic of which he was a citizen. Her armies were then engaged in the war against Mexico, in which "thousands of her best and bravest men," to use the words of Gen. Shields in his defence of Dr. Morton, "fell under the pains and afflictions that followed surgical operations." No time was lost in offering them this shield against suffering, and Edward Warren, esq., (a nephew of the celebrated Dr. Warren,) at that time Dr. Morton's principal agent, went to the seat of Government with full instructions and power to act.

Arriving at Washington on the 16th of December, 1846, Mr. Warren exhibited the discovery, "performing many experiments before a host of distinguished men, and with entire and perfect success," though he also wrote: "Every where I have been I meet with the statements of Dr. Flagg and others, which stare me in the face, and which must be met and disproved by some one on the ground. To overcome this prejudice and suspicion which they (as well as Dr. Jackson himself) have thrown upon the use of the inhaling vapor, requires all my logic and much time."

"Those statements of Dr. Flagg," wrote Mr. Warren, "have been placed in the hands of every professional man I have met with, leading them to entertain honest fears as to the safety of the thing. To illustrate my difficulties: While demonstrating your discovery to the medical class here, as well as to a large number of surgeons and physicians, Dr. Hunt (a dentist of standing here) came in with the statement of Dr. Flagg and others in the 'Advertiser,' which was read for my edification in the presence of all these persons. I succeeded in refuting these statements, and in showing their fallacy, and thus being on the ground prevented a verdict against ether. Thus I am assailed

from day to day, and thus I must meet objections raised by men of standing from all parts of the country."

A warm interest was taken by prominent gentlemen, and on the 28th of December, Dr. Morton's memorial was presented in the Senate, by Governor John Davis, and in the House by Hon. Robert C. Winthrop. It was referred in either branch to a select committee; that in the House consisting of Messrs. Fries, Relfe, Young, Lieb, and Toombs, the four first named being physicians.

Dr. Fries (who has always been a warm champion of Dr. Morton's cause) addressed letters to various medical gentlemen, asking their opinion. The results were anything but satisfactory, as may be inferred from the reply to a letter addressed to Prof. D. T. Mütter, of Philadelphia, on the subject, asking him if it could be "*usefully* employed in the practice of surgery in the manner proposed by Dr. Morton." To this the Professor replied:—"On this point, there is in my mind *not the slightest doubt*. I cannot consider any agent generally useful that unquestionably subjects the patient to the risk of *losing his life*." And, in another place, in his letter, he says:—"The pecular method of Dr. Morton is, consequently, of no value; but granting that his measures are peculiar and even better than those of others, I trust the day is far distant when we shall find so distinguished a body as our national Congress lending itself to the advancement of quackery in any shape."

Mr. Warren soon found that, with this opposition, there was little chance of a recognition by Congress of the discovery, and returned to Boston, where he endeavored to persuade the Doctor himself to repair to the metropolis.

Had Dr. Morton been merely desirous of reaping a pecuniary reward for his discovery, he doubtless would have complied with the suggestion, and hastened to the seat of Government. But he evidently felt that he had a higher duty to perform. He was not only in the daily receipt of a large number of letters making inquiries about the new remedial agent, but received constant visits from professional gentlemen anxious to obtain information at what was considered "head-quarters." Some of these inquiries consumed his time with speculative doubts, questioning the accuracy of experiments, and recapitulating the complaints of the antagonistic dentists. Others wished to see experiments which would confirm the very remarkable phenomena of which they had heard; and a third class, more troublesome than all others, zealously bestirred themselves to overthrow Dr. Morton's pretensions by insidiously worming themselves into his confidence, making loud professions of admiration, and then denouncing him to others.

He felt, and it was a noble feeling, that to desert his post at this critical juncture, even to secure a pecuniary reward for time and toil expended, would be an injury to the scientific cause which Providence had as it were placed under his protection, by selecting him from mankind as the instrument of its introduction. But while he was unwilling to go from Boston at this critical juncture, he made a formal tender of his discovery to the Secretaries of the War and of the Navy,

for the relief of the suffering soldiers and sailors engaged in the Mexican war. He offered each department, by letter dated January 18, 1847, to send agents to Mexico at once, whose expenses to the Government would be but a few hundred dollars, while the apparatus would be furnished at wholesale price, and the ether would cost but one or two cents to each patient.

The official replies to these generous offers show with what coldness and distrust the discovery was at that time received, even by gentlemen of the highest professional reputation and position. They are as follows:

NAVY DEPARTMENT, *March 17, 1847.*

SIR: Your letter of the 13th instant, tendering for the use of the Navy Dr. Morton's discovery, "whereby pain is prevented in surgical operations," has been received and referred to the Bureau of Medicine and Surgery.

The Chief of that Bureau reports that the article may be of some service for the use of large Hospitals, but does not think it expedient for the Department to incur any expense for its introduction into the general service, in which opinion the Department concurs.

I am, respectfully,

Your obedient servant,

J. Y. MASON,

Secretary of the Navy.

SURGEON GENERAL'S OFFICE, *May 3, 1847.*

SIR: Your communication of the 13th ultimo, stating that you take the "opportunity again to offer the use of Dr. Morton's discovery, whereby pain is prevented in surgical operations," has been received.

In reply, I have to state, that whatever may be the virtues of "Morton's Letheon," favored by all the facilities for its administration in civil practice, it is believed that the highly volatile character of the substance itself is ill adapted to the rough usage it would necessarily encounter on the field of battle.

For this and other reasons, which it is unnecessary now to detail, I must decline to recommend the use of your remedy in the surgical operations of the Army.

Very respectfully,

Your obedient servant,

H. L. HASKELL,

Acting Surgeon General.

CHAPTER VII.

Dr. Morton's prompt and energetic action in the promulgation of his discovery was not confined to his native land. Evidently impressed with the conviction that he held this great boon as a sacred trust, which should not be diverted from suffering humanity by private ambition, he not only philanthropically diffused the glad tidings over the United States, but—immediately after his individual experiments—transmitted accounts of them across the Atlantic, followed by every new evidence of the success of the discovery, with instructions both as to the agent, the instruments used, and the method of application. At this critical period, when many doubted and more opposed the unknown remedial agent, to falter was to acknowledge a failure, to make an announce-

for the relief of the suffering soldiers and sailors engaged in the Mexican war. He offered each department, by letter dated January 18, 1847, to send agents to Mexico at once, whose expenses to the Government would be but a few hundred dollars, while the apparatus would be furnished at wholesale price, and the ether would cost but one or two cents to each patient.

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NAVY DEPARTMENT, *April* 17, 1847.

SIR: Your letter of the 13th instant, tendering for the use of the Navy Dr. Morton's discovery, "whereby pain is prevented in surgical operations," has been received and referred to the Bureau of Medicine and Surgery.

The Chief of that Bureau reports that the article may be of some service for the use of large Hospitals, but does not think it expedient for the Department to incur any expense for its introduction into the general service, in which opinion the Department concurs.

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ment was to hazard reputation. Irresolution would have been the ruin of the discovery, but resolution threw a fearful personal responsibility on the discoverer. Yet Dr. Morton, conscious of the strength of his position, did not hesitate. He took the most thorough measures for diffusing the blessing, and he thus won the admiration and the confidence of the English and European physicians.

Dr. Morton's letters first reached London, where the discovery was hailed with generous enthusiasm. Scientific discrimination far outweighed any discreditable feeling of professional prejudice or of national jealousy, and the united scientific world abandoned themselves to a determination of the real value of the discovery. No opportunity for experiment was lost—no evidence rejected. The whole medical community gave themselves to the work, and in a short time most honorably avowed that the discovery of etherization was not second to the discovery of their own Jenner.

The following account of the first public operation with ether in the Old World, is an interesting portion of the facts connected with Dr. Morton's biography. It is taken from the "London Illustrated News" of January 9, 1847:

"THE NEW MEANS FOR RENDERING SURGICAL OPERATIONS PAINLESS.—Last week the first experiment was made in this country, of employing the inhalation of the vapor of sulphuric ether as a means of rendering surgical operations painless. The application is of American origin, and was first introduced, a few months since, by Dr. Morton, a dentist of Boston, United States, by whom it was communicated to Dr. Boot, of Gower street. By this gentleman the discovery was described, on the 17th of last month, to Mr. Robinson, the surgeon-dentist, also of Gower street, who, on the following day, operated upon a young lady, thrown into sleep by the inhalation, during which a molar tooth was extracted from her lower jaw.

"The inhalation occupied a minute and a half, and the patient's recovery from sleep another minute. Dr. Boot questioned her respecting the tooth, and she expressed her great surprise at finding that it was removed. She said that all she had felt was merely a sensation of cold around the tooth—a sensation which was caused, perhaps, by the coldness of the extracting instrument."

The "London Lancet," well known as the organ of the surgical and medical professions in Great Britain, said of the discovery:

"The discovery of Dr. Morton—more striking to the general than to the scientific mind—will undoubtedly be placed high among the blessings of human knowledge and discovery.

"That its discoverer should be an American, is a high honor to our transatlantic brethren; next to the discovery of Franklin, it is the second and greatest contribution of the New World to science, and it is the first great addition to the medical art.

"Dr. Morton deserves, if his discovery stand the test of time, the

gratitude and reward of every civilized people and government upon the face of the earth."

The leading medical men and surgeons of London were prompt in giving the results of their experiments. Thomas Bell wrote: "I fully intend to try it the first opportunity. The cases are very satisfactory, and the whole affair most important." Liston (the head of his profession in London) wrote, as early as the 21st of December—"I tried the ether inhalation to-day, with perfect and satisfactory results. It is a very great matter to be able thus to destroy sensibility to such an extent, without apparently a bad result. It is a fine thing for operating surgeons; and I beg to thank you sincerely for the early information you were so kind as to give me of it." Sir James Clarke, the royal surgeon, in speaking of this case of amputation, performed by Liston, after the administration of ether, said: "It is really a marvellous thing." Richard Bright did not delay to forward the news to Guy's Hospital, "that no time might be lost in affording so great a relief to any who might be in the unfortunate condition of being obliged to undergo a serious occussation."

A graphic account of the introduction of the discovery into England, and the opposition made to it, (which will apply almost as well to many other lands,) is taken from the works of Professor Miller. The fact that he is the author of standard surgical works, a lecturer of marked ability, and one occupying high official positions in his profession, gives additional force to his brilliant style of description.

"On the 23d of December, 1846," said Professor Miller, "it was my privilege to read a letter in this class-room, from the late Mr. Liston, announcing, in enthusiastic terms, that a new light had burst on surgery, and that on mankind a large boon had been conferred. The letter conveyed the writer's earliest and most lively impressions of a subject as startling as it was new; and there was a large-hearted generosity about it, that was sure to meet with a suitable response in all right-beating hearts.

"The subject was anæsthesia; and its first sound had come from across the Atlantic. It fell on no dull or idle ear. It was taken up, tried, and speedily re-echoed, and in a few days it filled the island. Mr. Liston struck the key-note; and a pealing note it was. We followed here, with less power, perhaps, but, we hope, in tune—well pleased to find, that high as the note at first seemed to be, it was still within reach of an ordinary compass. The profession were surprised, excited, charmed in the mass; and more especially those on the junior side of the grand climacteric. The elderly gentlemen had their preconceived and heretofore settled notions sadly jostled and disturbed. Not a few grew irritable, and resented the interference; they closed their ears, shut their eyes, and folded their hands; they refused to touch, or in any way meddle with, the unhallowed thing; they had quite made up their minds that pain was a necessary evil, and must be endured; they scouted on the attempted innovation, and croaked that

'no good could come of it.' On, notwithstanding, sped the movement.

"The public, as was naturally to be expected, were greatly excited, and rejoiced in the tidings. By some they were scolded for interfering; but, to my mind, they might as well have been reprehended for showing great and personal concern in the wars of the Indian Punjaub, repeal of the Corn laws, or any other of the large and pressing questions of public interest at the time. At first they seemed somewhat incredulous, as if it were 'too good news to be true.' Soon all became satisfied of there being something in it, on good hearsay evidence; and some had ocular demonstration of what they sought to know. * * * Like the queen of old, they found it was 'a true report they had heard,' but that 'one-half had not been told them.'

"And this reminds me of one august visitant who at this time honored the institution with his presence, the singularly humane Chalmers. No pruriency of sight-seeing brought him there. No man, it is well known, was ever more tender of eye, as regards blood and pain. But he had heard of humanity's boon, and sought to know the truth; and it was one of the early triumphs of anæsthesia here, to see that man of large and tender heart witnessing a bloody and severe operation with composure and serenity; feeling little because the patient felt not at all, and the little that he himself did feel was far more than compensated by the thought that a brighter day for that suffering humanity, with which he so closely and continually sympathised, had at length dawned, and that, from henceforth, injury and disease were shorn of half their terrors."

The letter sent to Paris, with the news of the discovery, reached there in November, 1846, but the incredulity of the surgeons prevented its early adoption, as Velpeau and others "politely declined" to experiment upon it. When, however, the accumulation of evidence arrived from England and America, a new interest was excited. One of the inhaling apparatus, then used by Dr. Morton, reached Paris, and an experiment made with it by an American medical student was so entirely successful, that, before the first of February, 1847, Velpeau and Roux averred, in the presence of the two academies, that the discovery "was a glorious triumph for humanity." The news rapidly spread over the European cities, and over the civilized world.

"This great discovery," wrote a Paris correspondent of the "Boston Atlas," "is making a sensation in Europe, and is regarded as next to those of Harvey and Jenner. Its use has been introduced into the hospitals of London and Paris. The distinguished American dentist in Paris, Dr. Brewster, has tried it with perfect success. A medical gentleman from England, now residing here, informs me that he saw the amputation of a limb this morning at one of the hospitals, and that the patient was perfectly quiet, and unconscious of any pain, by reason of the use of this new agent. He remarked that the American Government ought to make a grant to the discoverer of £20,000; should they

do nothing, a grand subscription should be set on foot throughout the civilized world in behalf of this great benefactor of the human race."

While the professional journals, and the public press of Europe, teemed with instances in which this great discovery had been tested and applied at most of the large hospitals, Dr. Morton continued to forward the results of his experiments. To quote from one of his private circulars: "Asphyxia and etherization are two very different things," and he feared that the continuance of dangerous practices in administering ether might lead to fatal consequences.

Following the usual custom in monarchical countries, Dr. Morton had prepared a number of sets of costly apparatus, which with full instructions how to produce etherization, and what dangers were to be guarded against, were duly forwarded to Nicholas, Emperor of Russia; Ferdinand, Emperor of Austria; Louis Philippe, King of the French; Leopold, King of the Belgians; Charles Jean, King of Sweden; Christian VIII, King of Denmark; Frederic Augustus, King of Saxony; Ernest, King of Hanover; William, King of Holland; Louis, King of Bavaria; and Charles Albert, King of Sardinia.

Louis Philippe, then in the zenith of his power, evidently took the most interest in the discovery—perhaps, because, as is well known, he always had a passion for amateur surgery—and a special letter of thanks, dated from the Tuilleries, states that he "appreciates the sentiment which inspires this obliging communication."

We cannot better conclude this chapter, than by giving an article which appeared in the "People's London Journal," of January 9, 1847, as indicative of the joy with which this acquisition to surgical science was hailed in the Old world:

"Good News from America.—Hail happy hour! that brings the glad tidings of another glorious victory. Oh, what delight for every feeling heart to find the new year ushered in with the announcement of this noble discovery of the power to still the sense of pain, and veil the eye and memory from all the horrors of an operation. And then to find it acted upon almost on the instant by our first operators, is as gratifying as unexpected. We have conquered Pain. This is, indeed, a glorious victory to announce; a victory of pure intellect. And from America comes the happy news; from our brothers in another land, with whom we were lately going to war. Oh, shame be in the thought! This is, indeed, a glorious victory; but there is no blow struck, there has been no grappling together in the war of savage impulse, no bloodshed, no remorse. It is the victory of knowledge over ignorance, of good over evil; there is no alloy; all our finer sympathies are enlisted in one universal prayer of grateful rejoicing. Benevolence has its triumph. It is a victory not for to-day, nor for our own time, but for another age, and all time—not for one nation, but for all nations, from generation to generation, as long as the world shall last."

"Yet, hark! there is no firing of cannon from the Tower—no banners waving in the air—no drums and fifes sounding before the conquering hero—no hubbub in the streets—no gazing multitudes thronging

the towns to see the illuminations; no, these are for the most part but the instruments of war, the loud rejoicing of the passions of men triumphing over their fellow-men. We have nothing to do with that now; but only to stretch forth our hand to soothe the agonizing wounds the sword has caused, to allay the sufferings of the afflicted, to still the nerve and sense, whilst the knife performs its friendly office."

"The rejoicing here is of the heart, in the smile, the tear of joy for suffering relieved, the still voice of the benevolent soul rejoicing inwardly; for to those who can grasp the full sense of the immense boon which has been given to us, it is, indeed, overpowering—the blessing is incalculable. Let the joyous news spread quickly from ear to ear through all the length and breadth of the land, and wing its way over the seas from shore to shore. And you, poor sufferers, who are now lying in our hospitals and infirmaries on the bed of sickness, waiting your time for the dreaded operation, hear you the reprieve which has been sent!—fear no more the pain that you shall endure—a sweet oblivion shall steal over your nerves—and it shall all be to you as though it were not; you shall awake—it is all over, you have felt nothing. Go forward, nurse, from ward to ward, from bed to bed, and announce the glad tidings, and cheer the drooping spirits of the sufferer, and raise a load of fear and anguish from the heart. And see—yes the pulse beats tranquilly again: they smile—they press your hand in thankfulness. They are prepared. They are ready now, when you will; the knife is robbed of all its terrors!"

CHAPTER VIII.

Dr. Morton, at this period, labored under a weighty responsibility, for the rapidly increasing interest attached to the subject of etherization brought with it a daily addition to his labors. The service to which he had devoted himself was that of mankind, and it was chiefly to him—as the discoverer—that foreigners as well as his countrymen looked for assistance. Dr. Gould, of Boston, in whose family he was an inmate, testifies that "he was overwhelmed, day and night, conducting the administration and introduction of ether;" there was a strong prejudice against it in this city, [Boston,] and more especially elsewhere—the administration of it was denounced generally, and many things were written against it in the medical and daily journals. I don't know any particulars further than writing articles and denunciations in private conversations." And when asked what Dr. Morton did, and how far he went, in his own defence, Dr. Gould replied: "He wrote and talked, too; I have seen several pamphlets, prepared, as I suppose, at his instance, and at his expense."

This is confirmed by the testimony of Dr. Bigelow. "There was,"

he says, "a great difference of opinion—first, as regards its safety. Many people maintained that it was dangerous. Some eminent surgeons have pertinaciously, and in the most surprising manner, adhered to this opinion to the present day, objecting to its use. At an early period, certain religious grounds were urged against its adoption. Dr. Morton, as far as I know, uniformly and perseveringly urged it upon the medical profession and upon the world."

The medium through which Dr. Morton communicated the results of experiments on etherization to the public, was a "circular" which he had printed at his own expense almost every week. It was at first, as its name imports, a mere letter of advice; but, as it became the receptacle of newspaper articles, and correspondence from every portion of the Union, announcing the success of etherization, it was necessarily enlarged into a large and closely printed sheet of four pages. Soon this "circular" became a pamphlet, and of this five different editions were published under Dr. Morton's immediate supervision, embodying a digest of all the authentic information, both from Europe and America, on anæsthesia. This was a perfect magazine of arguments against the opponents of etherization, and its preparation naturally gave Dr. Morton a good deal of care and anxiety, as he was considered responsible for the contents.

When the news of the European success of Dr. Morton's discovery came back across the Atlantic, he changed the form of his publication, although he retained its simple title, adding to it "A voice from Europe." This last edition of this valuable work, which was of nearly one hundred closely printed pages, embodies much of great interest, and it conquered the prejudices of many who had previously had such imperfect sources of authentic information on the discovery, that their minds had remained warped by prejudice, or they had been unable to form a candid opinion on the subject.

This "Voice from Europe," as the fifth edition of Dr. Morton's circular was also called, acted like sunlight upon the sceptical among the American medical fraternity, and before its bright rays of truth the darkness of prejudice was soon dissolved. Ether was immediately a universal favorite, and, strangest of all, some of those who had denounced it with the most bitterness became not only its champions, but (in two instances) endeavored to claim the honor of suggesting its discovery to Dr. Morton. One of them (Dr. Jackson) had, almost up to the very date of this publication of the fifth edition of the circular, spoken in terms of contempt and reprobation of Dr. Morton and his alleged recklessness in the use of ether. Neither he nor Dr. Wells had a word to say about it while the test experiments were being performed, or while Dr. Morton was zealously urging its introduction; yet, now that the victory was won, they began to claim a share of the honor. The real position of the parties was appropriately described by R. H. Dana, jr., esq., who was familiar with the whole controversy which ensued, but the details of which we have neither time nor space to perpetuate. Dr. Wells (says Mr. Dana) "had not made the discovery

that inhalation would produce that degree of insensibility that would render the otherwise most painful operations painless. He had only experimented in that direction, upon the hint of Davy; and abandoned his experiments, without a single test operation in surgery, as uncertain, hazardous, and of little practical value; leaving it entirely uncertain what the effect would be in a protracted and severe operation. He had started out as a pioneer in this cause, and after following an imperfect trail another had pointed out to him, he returns disheartened, and gives up the pursuit to others. He fixes his beacon where he had failed, and Dr. Morton avoids it and passes on to the great discovery. Dr. Jackson is the bystander, who says to the adventurer: I looked down the path you are going some years ago, with my glass; it seems to lead in the direction of the place you wish to find; but whether there be any such place, whether it be worth finding, and whether this path will lead to it, or end in a bog after all, I cannot tell; you must try for yourself; and remember, if you find you are mistaken, don't bring my name in with it."

Dr. Morton now had the satisfaction of seeing his discovery appreciated and commended in the warmest terms. Dr. J. C. Warren, a name confessedly among the first in the United States in the department of medicine and surgery, published a work on "Etherization," in which he said:

"A new era has opened on the operating surgeon! His visitations on the most delicate parts are performed not only without the agonizing screams he has been accustomed to hear, but sometimes with a state of perfect insensibility, and occasionally even with the expression of pleasure on the part of the patient. Who could have imagined that drawing a knife over the delicate skin of the face might produce a sensation of unmixed delight? That the turning and twisting of instruments in the most sensitive bladder might be accompanied by a beautiful dream? That the contorting of anchylosed joints should co-exist with a celestial vision? If Ambrose Pare, and Lovier, and Desault, and Chesselden, and Hunter, and Cooper, could see what our eyes daily witness, how would they long to come among us, and perform their exploits once more.

"And with what fresh vigor does the living surgeon, who is ready to resign the scalpel, grasp it, and wish again to go through his career under the new auspices!"

"The Letheon," an able pamphlet in vindication of Dr. Morton's claims to the discovery, and his efforts to introduce it, was published in Boston, in the spring of 1847, and ran through three large editions, each of the two last revised and enlarged from its predecessor. It was edited by Mr. Edward Warren, and contained articles from the able pens of Doctors J. Mason Warren and George Hayward; the Messrs. Eddy; R. H. Dana, jr. esq., and other gentlemen who knew and who appreciated Dr. Morton's labors.

At this critical period Dr. Morton found himself suddenly crippled in pecuniary matters by the unwarrantable action of the General Gov-

ernment. He had (as we have previously stated) offered to furnish the military and naval forces then engaged in the Mexican war, at a merely nominal price, just sufficient to defray the expenses of competent operators. But his generous offer was not only disregarded, but the very Government which had agreed to protect him against the abuse of his discovery by giving him a patent, that he might control it, now disregarded the validity of its own instrument. It is officially stated by E. H. Abadee, Asst. Surgeon U. S. A., in a communication addressed to the chairman of a Congressional committee in 1852, that—"ether was first used by the army early in 1847, during the Mexican war, more particularly on Gen. Scott's line." And Dr. Pierson, of Salem, Mass., informed the Hon. Mr. Bissell by letter, in 1852, that in Sept. 1847, he "wrote to Gen. Cushing and to Captain Hoyt, of the Massachusetts regiment, then in Mexico, in favor of ether, and urging them to use their influence to extend its introduction into the military hospitals of the army."

This and other evidence clearly shows that Government not only deprived its soldiers of the benefits of anæsthesia, while suffering from their wounds, by introducing it through incompetent persons, instead of accepting Dr. Morton's liberal offer, but directly cancelled its own patent. Nothing could have struck more fatally at the validity of this covenant, in public opinion, than its open infraction by the very power which had granted it; and this appropriation of Dr. Morton's discovery to the public service without compensation was attended with consequences far more serious to his rights than the mere neglect or refusal to obtain his sanction.

He had, through competent agents, licensed agents in every city and large towns in the Union, whose application had been made for it, who were thoroughly instructed in the administration of ether, and guarded against the dangers which might arise from an impure article, or improper use of that which had the inventor's sanction. The sum which these thus licensed paid, had barely met the enormous expenses incurred in extending the agencies, the cost of experiments, and the distribution of the publications before alluded to, by which the latest information was circulated on every hand; and it is a fact worthy of record, that no accident or mishap ever occurred in the use of Dr. Morton's discovery, by those who were thus instructed and authorized by him. Like Jenner, it was his earnest desire to check all *abuse* of his discovery, by keeping it beyond the reach of reckless speculators, who sought to use deadly materials with impunity, or disregarded the rules which the discoverer had laid down, in a manner "alike indicative of their avarice and their ignorance."

No sooner was it announced in the New York Herald and other papers, that the Government had adopted the use of ether for the public service, without any regard for its own patent, than those who had been kept from it for good reasons, joined in the cry that the licenses were of no use, and that the discovery was free to all. Its legitimate *use* had never been subject to other than proper restraint; had been gener-

ously offered to all public institutions, and to the very Government which so ungenerously appropriated it. Now, its *abuse* commenced.

The natural consequence was, that Dr. Morton found that the sources of the revenue which supported his establishment, his agents, his secretary, his publications and his family, were at once cut off, while unexpected demands poured in from every quarter. Agents, in distant sections, had to be supplied with funds to defray their expenses home, for, like Othello, they found their "occupation gone;" and those who had derived great pecuniary benefits from licenses, now clamored for a return of the comparatively trifling sum which they had paid, upon the ground that others had equal privileges.

This was a most unfortunate era in Dr. Morton's life, and left him exactly where Dr. Jenner was, when he also had been induced to incur large expenses in London for the introduction of vaccination, and found himself a great pecuniary loser. A knowledge of the ungrateful conduct of Government stirred up greater hostility and envy, and materially added to his own responsibility, without giving him the strength and independence which might better have enabled him to cope with his antagonists. He was left with the whole weight of a momentous undertaking upon his own shoulders. Those who were jealous of his fame waxed more bold; his friends became lukewarm; the demands upon his time and attention were increased; his private resources were diminished, and he could not devote himself to his practice.

As if Providence seemed determined to frown upon him, he suffered a great loss at this time in the death of his brother-in-law, Mr. Francis Whitman. This estimable young man had, as Dr. Morton's time became engrossed with his discovery, taken charge of his practice, and his excellence in every relation of life commanded the regard and confidence of all who had the good fortune to know him. This sudden loss of his business-manager and confidant, at this critical time, tended further to cripple and distress Dr. Morton, who was not, however, to be diverted from his great purpose. Fixing his mind upon the great object which he was called upon to fulfil, he resolved at all hazards to persevere, and never to desert the cause while he had power to labor in it.

Although his pecuniary circumstances were disheartening, and a rancorous opposition to his merits as a discoverer had been stimulated by the unjust appropriation by the United States of his discovery, Dr. Morton appears to have been animated by the conviction that the knowledge of his discovery was rapidly extending itself over the earth, and that no opposition could interfere with the real and substantial benefits which it was conferring on humanity. Having obtained for the world a precious boon, and found himself greatly the loser, he availed himself of the leisure afforded by the prostration of his plans, to draw up a memoir of his claims to the discovery. In this plain, straightforward paper, (which we have given in a previous chapter,) he embodies the testimony which had been taken at the request of his friends, and it will ever remain a verbal monument to his patient scien-

tific investigation, to his courageous experimentization, and to the triumphant conclusion at which he arrived.

Having finished this memoir and sent it, Dr. Morton found himself comparatively at leisure, and availed himself of the opportunity to attend the annual session of the "American Society of Dental Surgeons," held that year at Saratoga. This association had been instituted for the purpose of elevating dental surgery into an acknowledged science, and extended a warm greeting to Dr. Morton, whose discovery was the first important fruit of dental practice. Dr. Eleazer Parmly, the president of the society, and the acknowledged head of the profession in America, with many other eminent members, took occasion to congratulate Dr. Morton on the important service which he had rendered to this especial branch of surgery, and gave him marked approbation of his course, with an official invitation to participate in the proceedings. Having made many friends, and enjoyed this first public triumph, Dr. Morton returned home, several of the prominent members of the society accepting his invitation to visit Etherton Cottage. Among those who thus shared his hospitalities was Professor Chapin A. Harris, the leading professor of the Baltimore College of Dental Surgery, and editor of that valuable periodical, the American Journal of Dental Science. This excursion was a pleasant era in Dr. Morton's life. "I have thought much and often of the agreeable interview we had at the springs, (wrote Dr. E. Parmly to Dr. Morton afterwards,) and I never think of it without feeling pleasure, and without a cordial wish for your welfare and happiness."

So numerous were the inquiries propounded to Dr. Morton as to the use of ether in producing anæsthesia, that, on his return from Saratoga Springs, he wrote and published a work on the subject, entitled "Morton on Inhalation." This work was, in fact, a manual for the direction of practitioners who used the author's discovery—was dedicated to the "Surgeons of the Massachusetts General Hospital." One of these, Dr. S. D. Townsend, after having examined the manuscript of this valuable production, returned it to Dr. Morton, with the following note:

"Somerset Street, *Sept.* 6, 1847.

"Dear Sir: I have looked over your manual for the use of ether, and have appended two trifling notes, on pages 17 and 39. I think it will be a very useful book to circulate in the country.

"Your obedient servant, S. D. TOWNSEND.

"Dr. W. T. G. Morton, *No.* 19 *Tremont street, Boston.*"

This treatise met with an extensive sale, passing through several editions, and was the more necessary from the fact, that since the licensing system had been overthrown by Government, every practitioner felt at liberty to use Dr. Morton's discovery, and many did so in such haste that their discretion did not keep pace with their zeal. We make some brief extracts from some of the criticisms upon this work, which appeared in the Boston newspapers:

"We are indebted to the author, Dr. W. T. G. Morton, for a beautifully-printed little treatise, dedicated to the surgeons of the Massachusetts General Hospital, 'On the Proper Mode of Administering the Sulphuric Ether by Inhalation.' Dr. M., it is well known, is intimately identified with the discovery of this new agent in surgery. It would be a waste of labor for us to comment upon a subject that has received such universal attention of late, and it is, therefore, only necessary to observe that the object of this publication is to guide those who wish to act understandingly in using the ether, and particularly such as have had neither experience nor an opportunity of witnessing the process. This book makes the matter perfectly clear, so that there can be no misapprehension in regard to any essential point."—*Boston Medical Journal.*

"Dr. Morton has laid upon our table a very neat little manual of instructions for the administration of sulphuric ether by inhalation—the discovery in connection with which his name has gained so extensively and just celebrity at home and abroad. We do not know who should be able to speak on the subject better than one whose persevering experiments first demonstrated the marvellous properties of this formerly little esteemed fluid. The matter of the work is both very well, and, what is of importance, very clearly expressed, and it ought to have a circulation in some degree co-extensive with the use of the agent of whose operation it treats. It is dedicated, with an expression of gratitude, to the surgeons of the Massachusetts General Hospital."—*Boston Evening Gazette.*

"This is an exceedingly neat, and, what is better, a very intelligible pamphlet, prepared under the direction of Dr. Morton, who, as we have before said, must be allowed the credit of partially introducing the great alleviator of human suffering. As the use of ether in surgery and labor is rapidly extending itself, this little manual cannot fail to satisfy a wide demand."—*Boston Chronotype.*

"This is a small book of instructions and information in regard to the practice of etherism—the celebrated discovery with which Dr. M.'s name is associated. It is handsomely got up and intelligently written, and we should judge it to be a work which will find its place in every family, as there is, we believe, no other compendium of practical suggestions on the subject, and this seems well calculated to occupy the ground. It is dedicated to the Surgeons of the General Hospital."—*Boston Transcript.*

"The author has here presented to the public an appropriate supplement to the great discovery for the use of which they are already indebted to him. It is a very intelligibly written manual of directions for the use of this agent, now considered indispensable in medical and surgical practice. Such a work should find its place in every household, unless there be some so fortunate as to be free from all liability to accidents and pain."—*Boston Post.*

Strange to say, though, at this late period, the use of ether was regarded with jealous fear by many eminent members of the medical profession, even in the United States. A striking evidence of this appears in "the Annual Report on Surgery, read before the College of Physicians, Nov. 2, 1847, by Isaac Parish, M. D.," where it is said: "*At the Pennsylvania Hospital in this city it has not been tried at all;* being considered by the judicious surgeons of that institution as a remedy of doubtful safety, or, at least, as not sufficiently established to warrant them in its employment." And yet, in the same report we find the following sentence: "But when we extend our vision to foreign countries, and call to mind that, during the past nine months, it has been adopted in most of the large hospitals of Great Britain, in the vast hospitals of Paris, and, for the last six months, in the numerous institutions of like character in Germany, including the immense hospitals at Vienna and Berlin, we can form some idea of the extent to which it has been carried, and of the firm hold which this great American discovery has taken of the mind of the scientific world."

On the day after this testimony of the backwardness of the Philadelphia surgeons to even test what their transatlantic brethren acknowledged as a triumphant addition to their art, Dr. Oliver W. Holmes, a visiting

physician at the Massachusetts General Hospital, and a professor in Harvard University, in his "Introductory Lecture, delivered before the Medical Class of that Institution, on the 3d of November, 1847," thus vividly described the beneficent effects of Dr. Morton's discovery: "The knife is searching for disease—the pulleys are dragging back dislocated limbs—nature herself is working out the primal curse, which doomed the tenderest of her creatures to the sharpest of her trials;—but the fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deepest furrow in the knotted brow of agony has been smoothed forever."

In this same month Dr. Morton received a valued endorsement of his rights as a discoverer from Doctor Simpson, a distinguished professor in the University of Edinburgh. The professor had just published a pamphlet upon chloroform, the application of which he had discovered, and proposed as a substitute for ether in certain cases. Upon a fly-leaf of a copy of this pamphlet which he sent to Dr. Morton was written the following note:

"My Dear Sir: I have much pleasure in offering, for your kind acceptance, the accompanying pamphlet. Since it was published we have had various other operations performed here, equally successful. I have a note from Mr. Liston, telling me also of its perfect success in London. Its rapidity and depth are amazing.

"*In the Monthly Journal of Medical Science, for September, I have a long article on etherization, vindicating your claims over those of Jackson.*

"*Of course, the great thought is that of producing insensibility—and for that the world is, I think, indebted to you.*

"I read a paper lately to our society, showing that it was recommended by Pliny, &c., in old times.

"With very great esteem for you, allow me to subscribe myself,

"Yours, very faithfully,

"Edinburgh, 19th Nov., 1847. "J. Y. SIMPSON."

Among other interesting letters received by Dr. Morton during this same year, from eminent Americans, was one from the Hon. Edward Everett. The son and daughter of this distinguished statesman had been among the first patients to whom Dr. Morton had administered the ether, and he wrote a long letter to show, that though a friendly relation had existed between Dr. Jackson and himself for many years, any paper that Dr. Morton might address to the American Academy would be received. He closed by saying: "It is hardly necessary to add that in nothing done or omitted by me is there any unfriendliness to you. I was, as you know, one of those who, at a very early period, gave you the most decided proofs of confidence."

A literary gentleman who visited Boston about this time, and sent descriptive letters to the New York Spectator, gave the following "word-sketch" of Dr. Morton:

"I was fortunate enough yesterday," he wrote, "to meet and converse with the famed discoverer of ether, in the office of Mr. Dana, who is his warm friend and legal adviser. He is young, of middle stature, and (for a wonder) perfectly free from the vanity which one would suppose such a man would feel. His conversation expressed perfect self-confidence, without the slightest presumption. In speak-

ing of his discovery, he expressed himself with perfect firmness, but without the least intrusive forwardness; yet when he differed with me in opinion, he did not hesitate to express himself with a decision that showed him to be just the man to follow an idea until he succeeded in perfectly accomplishing his desires. There was a strong expression of sense in all the lineaments of his expressive countenance, which is lit up with the burning fire of genius. He politely invited me to his country residence, though I am told he is somewhat reserved in forming acquaintances, preferring domestic tranquillity to figuring as a 'lion' in Boston society."

CHAPTER IX.

At the commencement of the year 1848, the discovery made by Dr. Morton was engaging the attention of the whole civilized world—partly on account of its inestimable value, and partly because royal academies and academies of science were agitated with the claims of those who professed to have suggested the wonderful qualities of ether. The question was now definitely decided, after all claims had been carefully weighed, by a most appropriate tribunal—the trustees of the Massachusetts General Hospital—at which the first public exhibition of this pain-destroying power was made, and where its effects were first witnessed by an admiring audience.

The twelve gentlemen who, as trustees of the hospital, made a thorough investigation of the discovery of etherization, had great advantages, (independent of their personal characters and qualities,) for conducting a thorough and impartial inquiry.* They were on the spot where the discovery was made, had intercourse with Doctors Morton and Jackson, as well as the principal witnesses; and were none of them physicians. The estimable chairman of the sub-committee which drafted the report, (Hon. Nathaniel I. Bowditch,) with two other gentlemen, are well-known members of the legal profession; three, or more, were members of the American Academy of Arts and Sciences; one of them (Mr. J. A. Lowell) being, by his position as sole trustee of the Lowell Institute, in Boston, brought more intimately into contact with scientific men than almost any one in that community; and three-quarters of the whole board were graduates of Harvard University. Never was a more fair, intelligent or competent "jury of the vicinage" empanelled to try an issue. It is the duty of this board annually to lay before the corporation a statement of the affairs of the hospital during the past year. What should have been done on this occasion? The institution had become somewhat identified with the announcement of the discovery, and the fact could not be passed over unmentioned. In mentioning

* See letter from Hon. Daniel Webster, Chapter XII.

it, it was not easy to avoid thoroughly investigating to whom the honors of discovery belonged.

The report, after carefully taking up, considering, and weighing all the evidence, and all the assertions presented, came to the following as the essential conclusions in the case:

1st. Dr. Jackson does not appear at any time to have made any discovery in regard to ether which was not in print in Great Britain some years before.

2d. Dr. Morton, in 1846, discovered the facts before unknown, that ether would prevent the pain of surgical operations, and that it might be given in sufficient quantity to effect this purpose without danger to life. He first established these facts by numerous operations on teeth, and afterwards induced the surgeons of the hospital to demonstrate its general applicability and importance in capital operations.

3d. Dr. Jackson appears to have had the belief that a power in ether to prevent pain in dental operations would be discovered. He advised various persons to attempt the discovery. But neither they nor he took any measures to that end, and the world remained in entire ignorance of both the power and safety of ether until Dr. Morton made his experiments.

4th. The whole agency of Dr. Jackson in the matter appears to consist only in his having made certain suggestions which led or aided Dr. Morton to make the discovery—a discovery which had for some time been the object of his labors and researches.

With this award (to use the words of a Congressional document) Dr. Jackson, Dr. Wells, and the scientific world should have been satisfied. It was the *first*, and ought to have been the *only* contest. Our enlightened system of jurisprudence forbids, except under extraordinary circumstances, *a second trial of questions of fact.* It forbids it as a guard against the danger incident to repeated investigations, that truth will be overcome by artfully manufactured evidence. No body, either legislative or scientific, to which this decision of the trustees of the Massachusetts General Hospital has ever been submitted, have overruled it. It carries conviction with it, and is uncontrovertible.

We omitted, in quoting from the report, to give a paragraph which stated, as "a mortifying fact, that Dr. Morton's pecuniary affairs had become embarrassed in consequence of the interruption of his regular business, resulting from his efforts and experiments in establishing this great truth, and that his health has also seriously suffered from the same cause, so that he can devote only a small part of each day to his professional labors. He has become poor in a cause which has made the world his debtor."

It well became these gentlemen, who knew the sacrifices prompted by Dr. Morton's generous nature in establishing his discovery, to take care that he (who had imparted a secret which in another age would have secured to him boundless wealth and honors all but divine) should not, after having perilled his own life to mitigate suffering, and studied for years how to prolong the lives of others, now be forced "to study to live."

He had not only spent a great deal of time, and incurred a great deal of expense, as we have related, in perfecting and in introducing his discovery, but, by the action of the United States Government he had found what promised to be a source of sustaining revenue transformed into a heavy incumbrance. He was not, it will be remembered, in affluent circumstances when he first conceived the idea, and he now

found himself, with a family who looked to him for support, dependent on his dental practice.

This, of course, had been very much interrupted by his devotion to his discovery, and even now that he resumed it, suffering under impaired health, he was forced to keep up his extensive correspondence upon anæsthesia—a task which made him almost a public servant, laboring for the benefit of others, whilst there was nothing of advantage to himself, but the consciousness that he was so employed.

Under these circumstances, it was thought by his friends that the magnitude of his discovery and the very disinterested manner in which he was sacrificing his time and his property in diffusing its blessings, (deprived of the guarantee solemnly secured by his letters-patent,) were fit subjects for the consideration of the American Congress. This course had been recommended some months previous by eminent physicians, who had drafted an appeal to the National Legislature, but, after due deliberation, it was decided that it would be better for Dr. Morton to go in person to the seat of Government, and have his claim brought before Congress by his personal memorial.

This had been the mode of proceeding when Jenner submitted the merits of vaccination to the Parliament of Great Britain. By it, proofs of the utility of the discovery, and the right of Dr. Morton to that discovery, would be placed in such an unquestionable shape as to put to silence all gainsayers; and it would not only demonstrate how much his own private interests had suffered by his endeavors to serve others, but to what extent the course of the Government, in infringing its own patent, had rendered it worse than useless.

Previously, however, and in a great degree preparatory to a direct application to the National Congress, some of the prominent citizens of Boston began to take measures to give a testimonial of the value set upon the discovery, and the sympathy for the discoverer.

The trustees of the Massachusetts General Hospital took the lead in this becoming expression of public feeling, and their committee exerted themselves with laudable energy, more anxious to secure the co-operation of many eminent citizens than large amounts from a few. The following letter shows the sentiments entertained by these gentlemen:

"Boston, *May* 12, 1848.

"Dear Sir: At a meeting of the Board of Trustees of the Massachusetts General Hospital, a few weeks since, it was informally suggested, that a limited subscription of one thousand dollars shall be raised for your benefit in acknowledgment of your services in the late ether discovery; no one to be asked to subscribe more than ten dollars. We consented to act as a committee to receive and apply the proceeds of this subscription. The proposed sum having been obtained, we have now the pleasure of transmitting it to you. We also enclose the subscription book in a casket which accompanies this note. Among its signatures you will find the names of not a few of those most distinguished among us for worth and intelligence; and it may be remarked, that it is signed by every member of the Board of Trustees.

"You will, we are sure, highly value this *first* testimonial, slight as it is, of the gratitude of your fellow-citizens. That you may hereafter receive an adequate national reward is the sincere wish of your obedient servants,

"SAMUEL FROTHINGHAM,
"THOS. B. CURTIS.

"To Dr. William T. G. Morton."

The silver casket accompanying this note was executed by Messrs. Jones, Low, and Ball, and bore the following inscriptions:—In front, "Testimonial in honor of the ether discovery of September 30, 1848;" and on the lid:

THIS BOX,
Containing One Thousand Dollars,
Is presented to
WILLIAM THOMAS GREEN MORTON,
By the Members of the
Board of Trustees
of the
MASSACHUSETTS GENERAL HOSPITAL,
And other citizens of Boston,
May 8, 1848.

William J. Bowditch and Caleb Eddy, esquires, were appointed a committee to present this gratifying acknowledgment of public gratitude to Dr. Morton, who made the following reply to the gentlemen who had so handsomely directed the affair:

BOSTON, *May* 15, 1848.

GENTLEMEN:—I need hardly say that your communication of the 12th inst., and the accompanying casket, subscription book, and donation, have been received by me with gratification of no ordinary degree.

Apart from the positive value of the gifts, the kind feeling which has led to this manifestation on the part of so many of the first citizens of Boston, has affected me in a manner that I am not likely soon to forget. The circumstances in which I have been placed for some time past give them an additional value; and by my children the testimonial will be appreciated hardly less than by myself.

In recognising among the names those of each of the Trustees of the Massachusetts General Hospital, I am bound to acknowledge this renewal of my indebtedness to that institution. It was the first to receive, verify, sustain, and promulgate the ether discovery; and, from the earliest, I have received from its officers, surgeons, physicians, and trustees, nothing but constant courtesy, liberality, and kind consideration.

Allow me to acknowledge your personal kindness in acting as a committee for the purposes of subscription, and the tasteful manner in which you have given to it an enduring value and significance.

You are pleased to speak of my services as deserving a national reward. I am glad to have your concurrence and sympathy in this opinion; and it is not unknown to you, that, if received, it would be to me not only a reward, but an indemnification and relief.

Respectfully, your obliged and obedient servant,
WILLIAM T. G. MORTON.

To Messrs. SAMUEL FROTHINGHAM and THOMAS B. CURTIS.

The hospital report, meanwhile, had an extensive circulation, many prominent medical and scientific periodicals copying it entire—Hays' Philadelphia Medical Gazette among the rest. In Littell's Living Age it was accompanied by an able review of other matters connected with the discovery, by Richard H. Dana, jr. esq., author of "Two years before the Mast." This publication Dr. Morton had translated into French, and sent an edition to Europe. Unfortunately the box

destined for the French Academy of Sciences, (as will be shown hereafter,) never reached its destination until too late to be of service.

"Ether and chloroform; their Discovery and Physiological Effects," appeared in November, 1848. It was from the pen of Dr. Henry J. Bigelow, one of the surgeons of the Massachusetts General Hospital, and had, in part, been prepared at the request of the Surgical Committee of the National Medical Convention, which had that year held its annual session at Boston. In concluding this elaborate review of the discovery, the author says: "Dr. Morton was, according to the evidence in print, both the prime mover and the immediate agent in the introduction of this discovery to the world."

Dr. Morton now appears on a new stage of action, where a national recognition of his labors, by reports of Congressional committees, and the votes of each House of Congress in his favor, shows that he had done well in waiting for public opinion and a sense of right to work their proper and just effects.

CHAPTER X.

Dr. Morton arrived at Washington in January, 1849, and was warmly welcomed by his friends, and many others, to whom he was highly recommended, and to whom he was already well known by reputation. His acquaintance was also sought by the medical officers of the army and the navy, who had used the agent which he had discovered in the public service, and could bear testimony to the incalculable benefits resulting from it, in saving the lives, and in allaying the sufferings of the gallant soldiers and sailors who defend our country's starry ensign. To show the estimation in which Dr. Morton was held in Boston, and the appreciation of his merits as a discoverer, we give a few of the letters of introduction which he brought to the national metropolis."

Letter from Governor Briggs.

"Council Chamber, Boston, *Jan.* 12, 1849.

"Dear Corwin: Allow me to introduce to your acquaintance Dr. Morton, of this city, whose name the world knows as the discoverer of the application of ether to alleviate pain. An application to Congress for some compensation for the discovery is to be made. May I ask you, for the doctor, who, thus far, though he has relieved thousands of others from suffering, has had nothing but suffering himself as his reward, to look at his case, and, if you find it has merits, give it your support.

Sincerely and truly yours,

"GEO. M. BRIGGS.

"Hon. Thos. Corwin."

Letter from Governor Morton.

"Boston, *January* 12, 1849.

"Dear Sir: I am happy to have the opportunity of presenting to your acquaintance Dr. W. T. G. Morton, of this city. Dr. M., who by reputation is doubtless known to you, has the distinction to have his name identified with one of the most important discov-

eries of modern times, the application of ether as an agent for producing insensibility to pain in surgical operations. His object, as I understand, in visiting Washington at this time, is to endeavor to procure from Congress some recognition of the value of his discovery. I beg leave to recommend him to your kind attention.

"I am, very respectfully, your friend and servant,

MARCUS MORTON.

"To Hon. Thos. H. Benton."

Letter from Mayor Bigelow.

"Boston, *December* 9, 1848.

"Sir: I avail myself of the honor which I had of making your acquaintance last season, during your visit to Boston, to introduce to you my friend, Dr. Morton, the discoverer of the effect of ether in producing insensibility to pain, a discovery which has placed him in the front rank of the benefactors of the human race. He visits Washington in the hope of obtaining some recognition on the part of Congress of the value of his discovery, and has already secured the favorable consideration of some of the members. Your assistance in the matter would be in keeping with your well-known and enlightened philanthropy, and would be gratefully appreciated.

"I have the honor to be, very respectfully, your obedient servant,

"JOHN P. BIGELOW.

"Hon. Isaac E. Holmes."

Letter from Hon. Charles Sumner.

Boston, *January* 11, 1849.

"My Dear Sir: Dr. Morton visits Washington in the hope of obtaining something from Congress on account of his great ether discovery. I wish to express to you my interest in his cause, and my sense of his remarkable merit.

"Faithfully yours,

"CHARLES SUMNER.

"Hon. John P. Hale."

Letter from Dr. John Jefferies.

Boston, *January* 10, 1849.

Hon. J. G. Palfrey.

"Dear Sir: Mr. W. T. G. Morton, a dentist of considerable eminence in this city, who claims to have originated the use of sulphuric ether to produce insensibility to pain, and who most certainly first introduced it into practice, visits Washington to seek some remuneration from Government for this great benefit to the country.

"At his request, I beg leave to present this to your consideration, with the unreserved expression of my opinion, that the world is indebted solely to Mr. Morton for the introduction of the greatest physical blessing that has been bestowed upon suffering humanity.

"The use of the anæsthetic agents, begun by Mr. Morton, as a means of preserving life, and especially of preventing an incalculable amount of pain, is not, I think, of less importance than the benefit conferred to the world by the immortal Jenner in the introduction of vaccination. I most truly wish that Mr. Morton might receive some return for his benefaction.

"With much regard, yours,

"JOHN JEFFERIES."

The Hon. Daniel Webster, who was then in the United States Senate, had ever taken a great interest in the personal success of Dr. Morton, and was again of great service to him, as was his senatorial colleague, the Hon. John Davis. The Hon. Daniel P. King (another distinguished son of Massachusetts, who has since departed this life full of honors) was earnest in his assistance; while the Hon. J. G. Palfrey, D. D., the Hon. George Ashmun, and others from the old Bay State,

seemed to take a pride in the discovery, and in the discoverer. Nor was this disposition to reward just merit confined to those from the State in which the discovery was made, for gentlemen from all quarters of the Union appeared equally interested, asserting that their constituents had been equally benefitted. Foremost among those who volunteered their aid was the Hon. John Wentworth, of Illinois, (who, like Dr. Morton, is a progressive amateur farmer,) and, on the 19th of January, he presented the memorial to Congress, in the House of Representatives.

This memorial was a brief, well-written statement by Dr. Morton of the leading facts in the case. It represented that while in the prosperous practice of the dental profession, "he saw frequent instances of physical suffering; and was (as many others had been) induced to consider whether there might not be some means of alleviating such sufferings, and rendering operations less painful to those obliged to submit to them. That, in pursuance of this object, he examined such known and approved treatises on materia medica as he could obtain, and consulted with the most learned persons to whom he could get access, but found the scientific knowledge on this subject wholly vague and unsatisfactory; that, nevertheless, he continued the investigation, and, gathering all the information he could, was led, step by step, after many examinations and experimenis, to the belief that sulphuric ether, properly administered, might produce partial if not total insensibility; that, desirous to verify his belief by actual experiment upon the human system, and finding the idea prevalent among the scientific, that any application which would be productive of such effects would be injurious to health, if not fatal to life, he made the experiment upon himself, and, after an unconsciousness of several minutes, awoke with no injury to health; that thus confirmed in his views, he proceeded, against much opposition and amidst many obstacles, until at last, in the presence of the most eminent surgeons and physicians of a public institution, and on a public occasion, he was enabled to manifest the truth of his conception, and exhibited a patient submitting to an amputation of a leg, without the slightest sentiment of pain, or the least injury to general health, in consequence of the application which produced this insensibility.

To this modest statement of his discovery, Dr. Morton added a brief narrative of the outlays and losses to which it had subjected him, besides impairing his health by mental anxiety and over exertion, and concluded by appealing to Congress in these expressive, convincing, yet dignified words: "Considering the nature of the discovery, the benefit which it confers, and must continue to confer so long as nature lasts, upon humanity; the price at which your petitioner effected it, in the serious injury to his business; the detriment to his health; the entire absence of any remuneration from the privileges under his patent, and that it is of direct benefit to the Government, by its use in the army and navy, you should grant him such relief as might seem to you sufficient to restore him at least to that position in which he was before he made known to the world a discovery which enables man to undergo, without the sense of pain, the severest physical trials to which human nature is subject."

It may not be amiss to state here that history presents many instances in which masters of the healing art have received national rewards. Herodotus informs us that wealth and honors were heaped upon Democedes for having improved the health of Darius, king of the Persians, when he was their prisoner. Hippocrates was enrolled by the Greeks as a citizen, presented with a golden crown, and endowed with a public maintenance. The physicians of Smyrna received honors scarcely inferior to those paid the most eminent magistrates, and we often see their effigies stamped upon ancient coins, in common with the images of Hygeia, and other divinities who presided over health.

Nor was this national recompense for ameliorating human suffering confined to the ancients. So recently as 1806 the Parliament of Great Britain had received and favorably considered a memorial exactly parallel to that of Dr. Morton, from Dr. Edward Jenner, the discoverer of vaccination. He, like Dr. Morton, anxious to promote the safety and welfare of his countrymen and of mankind in general, sedulously endeavored to spread the knowledge of his discovery, and was triumphantly successful. But, in prosecuting his experiments, Dr. Jenner was "so interrupted in the ordinary exercise of his profession as materially to abridge its pecuniary advantages," as he stated in his "humble petition" to parliament, in which he prayed that they would "grant him such remuneration as to their wisdom should seem meet." The readiness with which England granted this national reward, naturally inspired Dr. Morton with the hope that our republic would be equally grateful for an American discovery, equally beneficial to mankind.

Dr. Morton's memorial, on the day after its presentation, was referred under the rules to a select committee, which had been raised expressly for the consideration of medicinal questions, and was entirely composed of physicians, viz: Doctors T. O. Edwards and Pries, of Ohio; W. A. Newell, of New Jersey; Lord and Jones. They considered the subject—it was unanimously admitted—with more care and attention than had ever before been bestowed by a Congressional committee on a private memorial. Their sessions were numerous and protracted, often extending late into the night, and a large mass of oral and written testimony was carefully analyzed. As was the case when Dr. Jenner's claim was before a committee of the English Parliament, "efforts of a very extraordinary kind were made to impugn the claim," and several individuals officiously endeavored, by presenting what the committee styled "irrelevant affidavits," to detract from Dr. Morton's merits.

A powerful argument in Dr. Morton's favor was the ease and the success with which he personally administered the ether, while the subject was before the committee. Some of these experiments were successfully made in presence of distinguished members of Congress, and of medical officers in the army and the navy. Surgeon General Lawson, of the army, and Dr. Harris, chief of the Naval Bureau of Medicine and Surgery, addressed official communications to the com-

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A powerful argument in Dr. Morton's favor was the ease and the success with which he personally administered the ether, while the subject was before the committee. Some of these experiments were successfully made in presence of distinguished members of Congress, and of medical officers in the army and the navy. Surgeon General Lawson, of the army, and Dr. Harris, chief of the Naval Bureau of Medicine and Surgery, addressed official communications to the com-

mittee, stating that ether was used in the army and the navy, and that it constituted a portion of the regular supplies. Both officers were zealous in supporting Dr. Morton's claim, and Dr. Harris, in several letters, spoke of him as "the acknowledged author of the anæsthetic discovery."

Congress, moreover, had frequently rewarded individuals for discoveries of limited importance, which in no wise entitled them to a place among the benefactors of mankind. Purchasing the right from a patentee to use a valuable discovery was no new thing at Washington, as was shown by the Hon. Mr. Borland, of Arkansas, in the United States Senate, in a subsequent debate. "I will cite," said he, "a few cases: We paid for the right to make anchors of a certain form for the navy, $1,500; for the use of circular bullet moulds, $5,000; for the use of gas in vapor baths, $5,000; for elevating and pointing heavy cannon, $20,000; for the right to use patent anti-attrition metal, $20,000. We paid to the heirs of Robert Fulton, for benefits conferred by his improvements in steam navigation, $76,300. We paid for Mix's manger stopper, used in the cavalry service, $3,000. We paid to Dr. Locke, for the use of his magnetic clock, $10,000. We paid to McCulloch & Booth, for the right to use the improved method of refining our argentiferous gold bullion, $25,000—thus making an aggregate of $165,000 paid in these cases. But, in addition to these, there have been numerous instances in which patent-rights, or the privilege of using in the service of the Government patented articles, have been purchased by the Departments—some of which instances I find cited in connection with the report of the select committee of the House of Representatives—for which were paid $178,032;—making an aggregate of $343,000 paid by the United States for patents and the use of patented articles. Since I have been a member of the Senate, when meritorious individuals have come before us who had made important discoveries, we have aided them to test their discoveries by appropriations amounting, in the whole, to $120,000.

Meanwhile, the close of the session approached, and with it the close of Mr. Polk's administration, which was to be followed by that of Gen. Taylor, involving a sweeping change in every important office. Much business before Congress remained unfinished; and there was no chance of bringing up any question on which the invariable discussion attending every appropriation of money must ensue. The committee therefore deemed it advisable not to recommend any pecuniary remuneration—but they submitted a most decisive report.

This document (Report No. 114) is a careful review of Dr. Morton's claim to the practical discovery of the anæsthetic properties of ether. "Your committee are satisfied," it says, "that Dr. Morton is entitled to the merit of the discovery. *The great thought was of producing insensibility to pain; and the discovery consisted in that thought, and in verifying it practically by experiment.* For this the world is indebted to Dr. Morton; and even if the same thought, in all its distinctness and extent, arose also in the mind of Dr. Jackson, at or prior to

that time, yet he did not carry it out by experiment, and thus give it to the world; and, on that supposition, it was the case of an important thought occupying two minds at the same time—one only of whom brought it out by experiment, and is therefore the discoverer. It was clear that the discovery was destined soon to be given to the world. Science had almost reached it—but a single step, and it was compassed; and it happened in this case, as in many others, that the necessities of the profession, and a want deeply felt in the daily business of life, rather than scientific induction, at last produced the consummation."

One of the experiments showed the utility of the discovery for both branches of the public service, in detecting feigned diseases. The consummate art ofttimes displayed by malingerers, who are desirous of procuring their discharges from the service, or to escape unpleasant duty, is such as not unfrequently to baffle the skill of the most experienced officers. It is not enough in these cases to *suspect* that disease is feigned. Humanity requires that the fact of malingering be *proved*, before the kind offices of the physician are refused. In the case in point: A man named Charles Lanke, who had been a private of artillery, had applied for a pension on account of alleged anchylosis of the knee-joint. But when Dr. Morton administered ether to him, in presence of a number of members of Congress and medical officers, it was very evident that the stiffness of the knee-joint was feigned, and that no pension was deserved.

Although the committee deduced their conclusion from evidence, without resting on individual opinion or authority, they were greatly strengthened by the report of the trustees of the Massachusetts General Hospital. This was confirmed by a statement, sent by authority of Dr. James Jackson, the head of the medical profession in Boston, that "Dr. Morton is more entitled to a grant from Congress, for the ether discovery, than any and all other persons in the world.

Resolutions were appended to the report, one of which, unanimously endorsed by the professional and scientific gentlemen who had interested themselves in the question, read thus:

"*Resolved*, That to Dr. W. T. G. Morton is due the credit of having made the first practical application of sulphuric ether as an anæsthetic agent, and demonstrating to the world its power to destroy nervous sensibility to such an extent as to enable surgeons to perform all the various surgical operations upon the human body without pain."

CHAPTER XI.

Returning to the North immediately after the presentation of the report made by the Congressional committee, Dr. Morton made a brief stay in Baltimore, where he had first devoted himself to professional study ten years previous, and where he now unexpectedly received the regular degree of Doctor of Medicine from Washington University. Dr. J. C. S. Monkur was at that time president of this well-known

Alma Mater, and among the professors were Doctors Stokes, McCook, Roberts, Bond, Wright, and Cook. Invited to dine with these gentlemen, Dr. Morton found the following note under his plate—an agreeable way of conferring the honor:

DEAR SIR: It affords me much pleasure to inform you, that at a meeting of the faculty of the Washington University of Baltimore, you were unanimously admitted to the Degree of Doctor of Medicine.

THOMAS E. BOND, *Dean of Faculty.*

Dr. W. T. G. MORTON.

The mere announcement of Dr. Morton's arrival in Boston was sufficient to bring him a return of the lucrative practice which he had previously enjoyed, and which he now resumed at No. 17, Tremont Row, the birthplace of his discovery. He did not cease, however, the vindication of his rights, and lost no time in superintending a translation of the Congressional report into French, that it might be sent abroad. Its character he announced in a letter which appeared in the *Compte Rendus* of the French Academy of Sciences, page 556 of the volume for 1849, under the date of April 23d.

"M. Morton writes a letter concerning the question of priority for the discovery of the anæsthetic properties of ether. The author begs the academy, in the case they were disposed to pronounce upon this question, a wish that it should be made known to him in advance, so that he can come in person to sustain his rights before them. M. Morton, after having noticed that the first experiments with this subject had been made at the hospital in Boston, announces that the administrations of this establishment, in their annual report for the year 1848, attribute to him formally the honor of the discovery. He adds, that the question having been brought before the Congress of the United States, the majority of the committee to whom it had been submitted have judged in the same manner."

The academy, unfortunately for its own reputation as an impartial arbitrator in scientific matters, had previously shown a disposition to make a decision on the discovery of ether, based upon the *ex-parte* testimony produced by the friends of claimants in Paris. Another extract from the *Compte Rendus*, under date of March 24, 1848, conclusively proves this. "M. Morton," it says, "announced the sending of documents destined to establish in his favor the priority relative to the discovery of the effect of the inhalation of ether. The documents announced are not yet before the academy. The letter of M. Morton was sent to be examined by the commission upon ether and chloroform."

The cause of this detention of documents, it was afterwards discovered, was the neglect of the commission house, to whom they were consigned, to take them from the custom-house at Havre, where they remained from May 6th to December 6th. The consequence was a partial recognition of Dr. Morton's discovery of the anæsthetical effects produced by the inhalation of ether, by giving him the distinct award of merit for having introduced this priceless boon.

Devoted to his profession, and ever ready to communicate to others the results of his practical observation, Dr. Morton wrote, in the spring of 1849, a valuable series of papers on "Mechanical Dentistry." These were published in that sterling periodical, the "American Journal of Dental Science," then under the editorial supervision of Dr. Chapin A. Harris, of Baltimore.

The appearance of the Asiatic cholera at Boston not only drove all who could leave into the country, but kept those residing in the suburbs at home. Availing himself of this temporary cessation of home-practice, Dr. Morton visited the ocean isle of Nantucket, where he had often been urged to make a professional visit. In this point of view it was highly successful, and it was also rendered personally agreeable by the attentions of the residents, and those who were sojourning there for health or recreation.

A new pamphlet on the question of anæsthesia was published in the summer of 1849, entitled "The Casket and the Ribbon, or the Honors of Ether." It was by William H. Dwinelle, M. D., of Baltimore, and was a review of the whole question, descanting especially upon the relative value of the casket presented Dr. Morton by the citizens of Boston, for his labors in the discovery of anæsthesia, and the ribbon of chevalier, the minor degree of the French Legion of Honor, sent by Louis Napoleon to Dr. Jackson. "We sincerely congratulate Dr. Morton," says the concluding paragraph of this able pamphlet, "upon the fact that the opinion is constantly becoming more and more strong and general, that to *his* efforts and labors the world owes one of its choicest blessings."

It afterwards appeared, by a letter from Mr. George Sumner (then at Paris) to Dr. George Hayward, of Boston, that the presentation of this "order" to Dr. Jackson, "was principally owing to the efforts of M. Elie de Beaumont, the distinguished geologist, and was just as much for what Dr. Jackson may have done as a geologist, as for any thing he may have had to do with ether."

In the spring of 1850, Dr. Morton received intelligence that the Paris Academy of Sciences—the "Institut de France"—had awarded him one of the prizes founded by the philanthropic Monthyon, to be awarded to benefactors of the human race. Alexandre Vattemare, esq., the well-known director of "International Literary Exchanges," said, in forwarding the announcement to Dr. Morton: "I feel myself highly honored in thus being the humble interpreter of the proclaimed esteem and high appreciation of the Institute of France, for the service rendered to suffering humanity by your important labors."

Monsieur Flourens, the perpetual secretary of this Academy for the Division of Natural Science, closed his official announcement of the award to Dr. Morton by saying: "I avail myself, with great pleasure, sir, of this occasion to offer my personal congratulations, while I bear witness to the interest which the academy takes in your studies and in your success. Be pleased to accept, sir, the assurances of my high consideration."

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This was, indeed, a noble evidence of the appreciation of Dr. Morton's scientific labors by the foremost learned body in the world. To use the words of the Hon. Mr. Walker in a subsequent debate in the Senate, "It shows whom they considered as the real inventor;" and this flattering mark of distinction, coming from this high source, was highly gratifying to Dr. Morton's friends. Letters of congratulation poured in from all quarters, and the award of the Academy appeared to give it an additional importance in the eyes of many eminent scientific men, who hailed its decision with pleasure. Some, however, thought that even this recognition was not commensurate with Dr. Morton's merits; among them, Dr. Thomas W. Evans, a distinguished practitioner, then at Paris. "Although," he wrote Dr. Morton, "they have, in some measure, done you justice, yet I think not so much as you merit. It is the general opinion of medical men here, that you should have a much larger share of thanks than the Institute has awarded you. Allow me to congratulate you upon the honorable mention of your name."

The Academy's expression of opinion was received by Dr. Morton in the acceptable form of their largest gold medal. On one side of this magnificent testimonial is a finely executed medallion head of Minerva, surrounded by the legend : "Institut National de France." On the other side is inscribed, surrounded by a laurel wreath : "Academie des Sciences—Prix Montyon—Medicini et Chirurgie—concours de 1847 et 1848—William T. G. Morton, 1850." Valuable as was the medal, it did not absorb the whole sum of twenty-five hundred franks voted by the Academy, and the balance was expended in a massive gold frame, ornamented with branches of laurel—that classic tribute to victory.

Attending the annual convention of Dental Surgeons, (which was again held at Saratoga Springs,) Dr. Morton met his Paris correspondent, Dr. C. S. Brewster, a gentlemen whose professional merits had won him an order of knighthood. Having attained an ample fortune by his lucrative practice, Dr. Brewster was then on a visit to his native land, and was naturally an object of marked attention. Being thoroughly acquainted with the introduction of ether into Europe, his society was especially attractive to Dr. Morton, and after the adjournment of the convention, they took a pleasure tour westward, accompanied by their ladies and several professional friends.

At Niagara they remained some time, enjoying the grandeur and beauty of the scene, and interchanging thoughts upon such scientific and professional topics as presented themselves. Returning eastward by way of the lakes, the whole party continued together, and were entertained by Dr. Morton at Etherton Cottage, which had become a beautiful spot.

In September, 1850, Dr. Morton published a work "On the physiological effects of Sulphuric Ether, and its superiority to Chloroform." He had been continually called upon (as he stated in the preface) and addressed by letter, by persons unacquainted with the properties of ether, asking information concerning its safety and adaptation to their

individual cases. There was no work of small compass and of good authority to which he could refer the majority of popular readers for satisfactory answers on these questions; and, in order that he might answer once for all such interrogatories, he reduced his practice in etherization into the compass of a work adapted for public circulation.

The Appendix to this work embodies a mass of valuable information, extracted by Dr. Morton from his scientific correspondence with Professors Bigelow and Ware, of Harvard University; Professors Huston and Muller, of Jefferson Medical College, Philadelphia; Professor Knight, of Yale College, New Haven; Doctors Post and Watson, of New York; and other eminent gentlemen.

Dr. Morton also published an article on the "Comparative Value of Sulphuric Ether and Chloroform," in the "Boston Medical and Surgical Journal" for September 11, 1850. Having some years previous written on the proper way to administer ether, he now considered the comparative value of different anæsthetic agents, and on this last mentioned topic he gave evidence of deep research, sustained by extensive experiments and correspondence. What was the most interesting and valuable, was his own tabular statement of professional observation, from which valuable results were easily to be derived.

While Dr. Morton continued to give direction, as it were, to his discovery of anæsthesia, and spared no exertions in extending its precious benefits, he continued to supervise and direct the professional operations at his establishment. Never, perhaps, had dental surgery been so scientifically carried on, for Dr. Morton perfected every branch of the practice, even to the manufacture of artificial teeth. Experiments and chemical tests enabled him to furnish directions to those in this department of his establishment, with such receipts and directions as enabled them to manufacture teeth from mineral substances, which were neither subject to abrasion or decay. These soon became known, and were in great demand, far and near. Dr. Edwards (who after leaving Congress had become a professor in the medical college at Cincinnati) wrote to Dr. Morton: "I had hoped ere this you could have had an invoice of your teeth forwarded us. We are doing a 'land office business' in teeth, and had we yours, with your reputation, we could double our sales."

Through the next winter Dr. Morton continued his professional labors, although the subject of etherization had constant possession of his mind, and at times gave him no small trouble. He continued his scientific correspondence, in order to collect reliable testimony on the best method of enjoying the benefits of his discovery, pursuing his work with as much earnestness as if he had been commencing his career, and had never effected anything for mankind.

Domestic afflictions also restrained his desires and detained him at home, when he would fain have watched the use of his discovery abroad. "I had expected to have met you at Paris ere this," he wrote to Dr. Brewster, in May, 1851, "but the ill health of my wife (who suffers from bleeding at the lungs) absolutely forbids my leaving home."

CHAPTER XII.

At this period of Dr. Morton's life, the agricultural society of Norfolk county, in which West Needham is situated, was instituted by the Hon. Marshal P. Wilder, and others who were his personal friends. Under their fostering influence a spirit of agricultural inquiry was aroused, which led practical as well as amateur farmers to such information on those natural laws and principles upon which depend the full development of agricultural resources.

No one would have supposed that Dr. Morton, who naturally sought at his country-seat relaxation from the professional duties of the city, would have been willing to enter into agricultural investigations. Yet he was no sooner solicited to lend his aid to the advancement of the objects of the county society, than he entered into it with zeal. Its published transactions show the results of his careful observations on the different breeds of cattle and swine, with the food best calculated to increase their value; on the various fertilizing substances, and the best methods of applying them; on the circumstances and requirements that are essential to enable esculent roots to take up and assimilate the elementary principles that are essential to their vitality and growth; on the advantages of under-draining; in short, he gave the results of his practical experience, illuminated by the light of science.

The number of premiums awarded to Dr. Morton, at different times, by the Norfolk County Agricultural Society, not only bore testimony to his own superiority of culture, but to the necessity for science in this primitive vocation. In fact, there is no pursuit which requires more scientific investigation. It was by studying the laws of those chemical changes which take place in fertilizers and soils, and their influence on vegetation, from the germination of the seed to the maturity of the crop, that Dr. Morton based his much talked-of crops of esculent roots.

It was by a careful attention to the laws of animal physiology, that he carried on a series of experiments, directed by scientific research into the nutritive value of substances for food, that he so perfected different races of live-stock, as to have his animals sought for all over the United States. And it was doubtless a source of true enjoyment to the proprietor of "Etherton," while engaged in the stormy conflict of professional controversy, to retire to his well-tilled domain, and there—while reviving the memories of his childhood's home among his household treasures—to feel that he was (by the fruit of his scientific researches) redeeming labor from drudgery, while quadrupling its efficiency, and crowning the earth with plenty.

In the autumn of 1851, Dr. Morton received a letter from the Secretary of State, enclosing an extract from a despatch received from the American minister at Berlin, which stated that Baron Humboldt wished the name of the original administration of ether for surgical purposes. "Your name has been connected with the subject," wrote Mr. Crit-

tenden, "and therefore any information you may see fit to forward hither for the purpose will be transmitted with pleasure for Baron von Humboldt's use."

Ere this reached Boston, Dr. Morton had determined to revisit Washington, and again submit his claim to the investigation of a Congressional committee. Supposing that this would not occupy many weeks, he delayed his reply, which will hereafter appear.

The mere announcement of his intention to have his claims again presented before Congress, was received by his friends with enthusiasm, and we copy some of the letters of encouragement and of introduction which reached him on every hand. They show that the great and the gifted of our land bore him nobly in their memories, and did not hesitate to volunteer their opinion of his individual worth, his intrepid defiance of professional opposition, his triumphant introduction of his discovery, and the value of that discovery itself.

Letter from Hon. Daniel Webster.

WASHINGTON, *December* 20, 1851.

Dr. W. T. G. MORTON.

DEAR SIR: In reply to your letter of the 17th instant, I would say that, having been called on, on a previous occasion, to examine the question of the discovery of the application of ether in surgical operations, I then formed the opinion which I have since seen no reason to change, that the merit of that great discovery belonged to you, and I had supposed that the reports of the Trustees of the Hospital and of the Committee of the House of Representatives of the United States were conclusive on this point.

The gentlemen connected with the hospital are well known to me as of the highest character, and they possessed, at the time of the investigation, every facility for ascertaining all the facts in the case.

The Committee of the House were, I believe, unanimous in awarding to you the merit of having made the first practical application of ether, and a majority, by their report, awarded to you the entire credit of the discovery.

Very respectfully, your obedient servant,

DANIEL WEBSTER.

One of three letters from Dr. Holmes.

BOSTON, *November* 28, 1851.

MY DEAR MORSE: Here is our townsman, Dr. Morton, anxious to give his high-minded compatriots one more chance to do him justice. He expresses himself greatly indebted to you for your assistance two years ago, and I know you for a staunch friend and supporter when you have once set down your foot. What can you do for him now? Will you do it?

Yours, most truly,

O. W. HOLMES.

Hon. ISAAC EDWARD MORSE.

Letter from Dr. George Hayward.

BOSTON, *Nov* 28, 1851.

MY DEAR SIR: This will be handed to you by Dr. Morton, who is entitled, I think, to the name of the discoverer of the anæsthetic powers of ether. You are fully aware what a blessing this has been already to the human race, and I trust that Congress sufficiently appreciate it to grant him some reward.

It is for this purpose he visits Washington, and I hope that he will receive some compensation for the labor he has incurred, and the sacrifices he has made, though it would be hardly possible to make him one that would be at all in proportion to the benefit mankind will receive from his discovery.

I remain, very truly, your friend and humble servant,

GEO. HAYWARD.

Hon. CHAS. SUMNER.

Letter from Doctor H. I. Bowditch.

BOSTON, *Nov.* 29, 1851.

SIR: May I be allowed to commend to your favorable notice the petition which Doct. Morton intends to present to Congress relative to a recompense for the discovery of the peculiar properties of ether. I believe that to *him alone* we owe the *complete proof* of these properties; and that had it not been for the boldness and determined character of Doct. Morton, we should now be wholly ignorant of that which relieves so much of human misery. Believing this, I think he deserves most richly a national reward.

I remain, very respt., yours,

HENRY I. BOWDITCH.

Hon. ROBERT RANTOUL.

Letter from Doctor R. W. Hooper.

BOSTON, *Nov.* 28, 1851.

Hon. GEO. T. DAVIS.

DEAR SIR: Doctor Morton visits Washington this winter to present his claims for the discovery of etherization to the notice of Congress. I take a particular interest in his claim which I think a just one, and worthy of being acknowledged by such a tribunal. If any thing can be done for him through your assistance, it will be fully appreciated by your friend and servant,

R. W. HOOPER.

Letter from John J. May, esq.

BOSTON, *Nov. 28th*, 1851.

Hon. GEO. T. DAVIS, *Washington.*

DEAR SIR: I have learned from Dr. Morton that he is going to Washington with the view of bringing before Congress his merits and claims in the matter of the ether discovery. Having long felt an interest in the subject, I feel very glad that he has decided to give personal attention to the matter, and hope he may have success. And I take pleasure in introducing Doct. Morton to you, hoping that as far as your time will allow you will give to his cause the aid it deserves.

Very respect. and truly, yours,

JOHN J. MAY.

Letter from Dr. Edwards, Ex-M. C.

CINCINNATI, *Dec.* 18, 1851.

MY DEAR MORTON: Yours with the telegraphic dispatch reached me. You have more confidence and hope than any other living man. I am ready to do any thing in my power to aid you in your enterprise. Write me what you want, and as you are on the ground, write me to whom to write; you shall have any number of letters.

I trust you may find a decided friend in the committee, if one be raised, who will give the subject his attention. I am satisfied of the justice of your claim, and trust sincerely I may be gratified in your success in obtaining from Government the atonement for the neglect of my profession in awarding you substantial honor for the greatest discovery of this or any other age.

Yours, very truly,

T. O. EDWARDS.

W. T. G. MORTON, *M. D.*

CHAPTER XIII.

On his arrival in Washington, Dr. Morton was greeted with that cordiality ever manifested towards him by those whose minds have not been warped by prejudice; prominent among these, who were well acquainted with him and with the merits of his discovery, was the Honorable Daniel Webster, then Secretary of State, who now again took a deep interest in the just claim brought before Congress. He also introduced Dr. Morton to many distinguished individuals, among them the celebrated Kossuth. The attendance of Dr. Morton at the Congressional banquet given to this distingushed Hungarian, is the only occasion in which we find any record of his appearance in public, excepting at professional or at agricultural meetings. Conscious of his position, and of his merits as a world benefactor, he has never sought to parade himself before large assemblages, but rather preferred the quiet enjoyment of home and friends. It is this exemplary domestic life which has gained for Dr. Morton that personal popularity which ever attaches itself to an unobtrusive man, pointing him out as worthy of esteem and confidence.

Dr. Morton's memorial, presented in the House of Representatives early in the session, was referred to a select committee, consisting of Hon. W. H. Bissell, M. D., of Illinois; Hon. Jos. Sutherland, of New York; Hon. Robert Rantoul, jr., of Mass.; Hon. Graham N. Fitch, M. D., of Indiana, and Hon. E. Stanley, of North Carolina. Dr. Fitch had been a professor in Rush Medical College, and was at that time a regent of the Smithsonian Institution; the other gentlemen were also of high scientific character and research.

The report of the four first-named gentlemen of the committee commences with a history of its examination of the evidence, from which it appears, "that, upon the suggestion of the memorialist, that his claim to the discovery was contested by Dr. Charles T. Jackson, of Boston, the chairman addressed to him a letter, notifying him of the proceedings, and of the day when the committee would begin the investigation; advising him, that if he desired to do so, he was at liberty to contest Dr. Morton's application. The chairman received a statement from Dr. Jackson, in reply. Afterwards a memorial from Dr. Jackson was presented to the House and referred to your committee. And on the 20th day of Dec. 1851, at a meeting held pursuant to notice, both parties appeared before your committee; Dr. Morton, by his counsel, J. M. Carlisle, esq., and Dr. Jackson, by J. L. Hayes, esq. In his paper, Dr. Jackson presented objections to the inquiry, combining in effect a plea that the matter was *res judicata*, and a plea to the jurisdiction of Congress which were discussed, and considered as preliminary to a general investigation."

"Your committee being unable to perceive the force of these objections, overruled them, and, in the discharge of the duty imposed on

them by the House, proceeded with the investigation. A mass of written and printed statements was offered by Dr. Jackson, tending to impeach the character of Dr. Morton, which the latter requested should be received, he being allowed time to produce rebutting evidence, and to adduce evidence on his part impeaching Dr. Jackson's character for veracity, and proving several cases in which he had claimed the inventions of others as his own. This your committee rejected, deeming it wholly irrelevant to the subject committed to them by the resolution of the House, and leading to a long and laborious trial of many immaterial issues."

Opposition to the use and worth of his discovery, Dr. Morton had become accustomed to, and he had at times suffered from the effects of innuendoes carefully thrown out against his reputation when but a minor—the pretences for foundations upon which was based the fabric of falsehood which he now so earnestly endeavored to overthrow. His letter of September, 1847, to Dr. Gardner, of London, showed his desire that his detractors should put their insinuations "in print," that he might prove their falsehood and their malevolence. But, as he states in the same letter, he had been induced to believe that the personal warfare was at an end, and the matter in controversy placed upon scientific grounds. It would have been well for his opponents had this been the case, for they would then have been spared the mortification of seeing their cunningly collected mass of defamation rejected without any further examination than to ascertain its nature. And although Dr. Morton might have exclaimed, as did Lord Stafford in his memorable defence: "Where has this fire lain hid, without smoke to discover it until it bursts forth to consume me and my children?" He did not even seek to avoid it; and his eagerness to meet the issue had an effect on the committee directly opposite to that which had been intended by the authors of the slanders.

The committee, unwilling to entertain any personal slanders, invented for the purpose of diverting their minds, commenced an investigation of the subject of anæsthesia which even eclipsed that submitted to the preceding Congress. Their report shows, that after making a historical examination into the attempts to produce anæsthesia in ancient and modern times, they were "satisfied, upon a full and careful examination of all the evidence before them, that until the 30th of September, 1846, it was not known that sulphuric ether might safely be inhaled in sufficient quantity to produce total insensibility to pain under the severest surgical operations. The safety of this agent, [say the committee,] its certainty, its efficiently, are now established beyond question, and acknowledged by the whole scientific world. This great discovery, by far the noblest contribution which medical science has made to humanity within the present century, and with which, looking through all ages, no other except that of Jenner can take rank, sprung to light in the year 1846, in the State of Massachusetts; and the memorialist, Dr. William T. G. Morton, claims at as his own."

"Certain it is," the report goes on to say, "he was the first who

exhibited it to the world, and the only one who publicly used or claimed it, until after its reality and efficacy had been fully established. The honor of the discovery, therefore, must be awarded to him, unless some one show, by satisfactory evidence, an older and a better title. From the 30th of September, 1846, until the 2d day of January, 1847, during which time this discovery passed successfully the *experimentum crucis*, Dr. Morton was in full, and sole, and undisputed possession. For a time, he held the operative agent as a secret, but at last disclosed it, by letter, to the faculty of the Medical Hospital at Boston, with a view to its trial, in what is called in surgery *a capital case*. It was not until some time after this trial had been made, and proved successful, that a claim was publicly set up by any one to the honor or a share in the honor of the discovery."

This position the committee sustained by the publication in their report of Dr. Morton's "Memoir to the French Academy,"* which they justly say is "simple, natural, and in every step corroborated by some marked circumstance, proved by the testimony of one or more disinterested witnesses. A narrative such as his, so supported, goes far to sustain the title which possession, undisputed for a time, would have given him."

After this "Memoir" in the report, is a record of the elaborate investigation of all the evidence on the subject, which is analysed and criticised with great ability, and the summing up of which is a glorious triumph of Dr. Morton's claim to the discovery.

Having established the question that a discovery of great importance to mankind had been made—and that it had been made by Dr. Morton—the committee then took into consideration the question of national recognition and reward. In fixing the importance and value of the discovery, (though fully satisfied themselves,) "the committee thought it not proper to act upon their own unaided opinions." Dr. Morton's carefully continued record of the rise and progress of etherization supplied them with many important facts, and he lost no time in issuing a circular, addressed to physicians, and soliciting informations "of the results of the larger amputations" performed by them. He thus provided a large array of statistical data, showing, by the most satisfactory numerical results, that the mortality of surgical operations has been greatly lessened by the use of anæsthesia.

So conclusive was this evidence, that the chairman of the committee adopted it, by addressing a second series of circulars, in his official capacity, to the different hospitals, to medical institutions, to many of the most eminent physicians and surgeons in the United States, and to the surgeons of the army and navy. The answers to these were very numerous; too much so, and too lengthy for publication, but were carefully perused, and their contents carefully noticed by the committee. Only two of this mass of letters spoke disparagingly of the discovery, and one of them did not profess to speak from the writer's own observation.

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* For this "Memoir" see Chapter II.

The committee annexed extracts from some of these answers, and a few entire letters, exhibiting the general opinion of the *value* of the discovery; its value being indisputable, and almost universally acknowledged, it was not deemed necessary to multiply extracts in its proof—and exhibiting likewise, the use of the discovery in the army and navy.

Prominent among the professional documentary evidence were the following letters from the Surgeon General of the Army, and the chief of the Bureau of Medicine and Surgery of the Navy, addressed to Dr. Morton, and laid by him before the committee:

"SURGEON GENERAL'S OFFICE, *March* 1, 1852.

"SIR: In compliance with your verbal request to be furnished with information in regard to the employment of anæsthetic agents in the army of the United States, and also for an expression of opinion as to the value and importance of this class of remedial agents, I have to state:

"That sulphuric ether and chloroform were used to some extent in the military hospitals established at the theatre of war in Mexico, but the use of those articles was not so general as at present, for the reason that the apparatus at that time believed to be essential to their proper and safe administration was not adapted to service in the field.

"At the present moment it is believed that no surgical operation of importance is performed by the medical officers of the army without the aid of some anæsthetic agent.

"Previous to the discovery of this new application of sulphuric ether, the annual supply of that medicine was one pound for every hundred men. On the revision of the standard supply table by a board of medical officers in 1849, the pure washed sulphuric ether was substituted for the ordinary sulphuric ether, and the quantity allowed was increased one hundred per cent. At the same time another anæsthetic agent, the tincture of chloroform, commonly called chloric ether, was added to the supply table, and is now regularly furnished to the medical officers in such quantities as, in connection with the sulphuric ether, will suffice to meet all the demands of the service in this particular.

"Although the discovery of this new therapeutic effect of sulphuric ether has led to the introduction and employment of other anæsthetic agents, this does not in any way militate against the merits of the original discovery, which I regard as one of the most important and valuable contributions to medical science, and to the relief of suffering humanity, which has ever been made, the only discovery to be compared therewith being that of vaccination, which has rendered the name of Jenner immortal.

"Through the influence of these remedial agents, the surgeon is not only enabled to perform the most extensive and difficult operations, undisturbed by the cries and struggles of the patient, but what is of far greater importance, the patient, being rendered insensible, escapes that shock to the nervous system, which in itself is not unfrequently fatal. For this reason operations can now be performed with much more safety than heretofore, and that too in cases in which the attempt to perform them would have been forbidden by the general condition of the patient.

"To the physician this class of remedial agents promises to be of the greatest utility, though their application in the treatment of disease has yet to be more fully developed.

"It will suffice at this time to allude to their employment for the relief of suffering woman in the hour of her greatest trial, and at the moment she claims our warmest sympathies. That these agents can be safely used in parturition, so as to afford full and entire exemption from pain to the mother, and with safety both to her and to the child, has been amply demonstrated.

"In conclusion, permit me to congratulate you upon the flattering testimonial you have received from the National Institute of France for this discovery, and to express the hope that, inasmuch as it is impossible for you to derive any pecuniary benefit therefrom in ordinary course by letters patent, you may receive from your country that acknowledgment of your merit which is due to one who has conferred so great a boon upon mankind.

"I am, very respectfully, your obedient servant,

"TH. LAWSON, *Surgeon General.*

"W. T. G. MORTON, *M. D.*
Brown's Hotel, Washington, D. C."

"Navy Department, Bureau of Medicine and Surgery,

"*February* 26, 1852.

"Sir: As the views of this bureau are desired in regard to the importance attached to the different anæsthetic agents by the medical officers of the navy, it gives me pleasure to express the high sense entertained by them of their great utility, not only in surgical practice, but as powerful agents in many painful affections, which have resisted the ordinary remedies. This opinion is strengthened by the concurrent testimony of the ablest civil practitioners of our own country, with the emphatic endorsement of their value by the best British and Continental surgeons. In the absence of statistical information, accurately made up, it is somewhat difficult to estimate the relative value of these etherial preparations; but if the recorded opinions of professional men, as expressed in the various medical journals of this country and Europe, are deemed of any weight, the discovery of etherization as a means of avoiding pain in severe surgical operations may be considered the most important, in a philanthropic view, which this century has produced.

"The observation that exhilarating effects resulted from the inhalation of ether is no recent acquisition to medical science; but the novelty and gist of this discovery consists in finding that nervous perception is suspended under the influence of the etherial inhalation, and while so suspended, the patient is unconscious of pain while under the operation of the knife.

"In addition to the great benefit derived from its use in alleviating pain, it has a decided effect in diminishing mortality. Its advantage in this respect appears to be in saving the system from the severe shock and nervous exhaustion which attend most of the graver surgical operations, and which of themselves often prove fatal.

"It dispels the fear of pain, which formerly prevented many from submitting to an operation, or induced them to defer it until too late.

"It enables the surgeon, also, to operate more coolly and effectually, undisturbed by the cries and struggles of the patient, which sometimes unnerve the steadiest hand, and render abortive the best directed efforts.

"The medal of the first class, awarded to you by the 'Medical Institute' of Paris, evinces the high estimation entertained, in that centre of medical science and intelligence, of the services you have rendered to humanity.

"It is earnestly hoped that our Government, with a similar appreciation of this great acquisition to medical science, will stamp their sense of importance, by a substantial acknowledgment which, while it encourages the philanthropist in his efforts to meliorate the condition of his fellow-men, will remunerate you in some measure for the toil and vexation attendant on your struggle for success.

"Respectfully, your obedient servant,

"THO. HARRIS,

"*Chief of the Bureau of Medicine and Surgery.*

"Mr. Wm. T. G. Morton, M. D., *Washington.*"

These opinions, strengthened by the concurrent testimony of the ablest practitioners of both Europe and America, convinced the committee that Dr. Morton's discovery was an invaluable acquisition to medical science, and a real boon to the human race. The only remaining question then to be decided was, what would be a proper compensation to Dr. Morton, both as a reward for the contribution which he had made to the public good, and a fair equivalent for the immense advantage resulting to the public service of the country from the discovery. To use the words of the committee: "Great Britain, France, and all other enlightened nations, have, from time immemorial, rewarded munificently such services to humanity. The British Parliament, by two successive statutes, bestowed upon Jenner the sums of ten thousand and twenty thousand pounds for the discovery of vaccination. The world has as yet produced but one great improvement in the healing art deserving to be ranked with that of Jenner. America, by annihilating pain, has done as much for the benefit of the race, as England

did when she furnished the instrument by which the smallpox may be finally exterminated. It would be unworthy of our greatness, and our destiny, as the nation soon to be the most powerful on the globe, to undervalue a benefaction to mankind, which is the peculiar glory of science, of our age, and of our country."

The committee therefore recommend: "That an appropriation be made for the benefit of Dr. W. T. G. Morton, to be paid to him in consideration of his discovery of the anæsthetic properties of the vapor of sulphuric ether, and of his public and successful application of the said pain-destroying agent in surgical operations, and of its use in the army and navy of the United States, and conditioned that he surrender to the United States his patent for the discovery. The majority of the committee, in view of its use as above mentioned, and of the incalculable value of the discovery to the whole world, are of the opinion that one hundred thousand dollars would not be an unreasonable appropriation for that purpose."

And they reported a bill to that effect.

This glad tidings was carried forth by the telegraph with lightning speed, awakening joyous hopes in the hearts of thousands—in every section of the republic—that this republic was not ungrateful, and that one of her sons, who was a world's benefactor, would be rewarded.

Strange to say, in the same telegraphic announcement of what was transpiring at the metropolis, was a paragraph stating that Dr. Jackson had been arrested and held to bail at the instance of Dr. Morton, on a charge of slander. This suit was brought in consequence of the publication of the verbiage which the committee had refused to take any cognizance of, but which had been inserted in a scurrilous sheet, a copy of which was laid upon the desk of every member of Congress.

Another attempt to prejudice Congress against Dr. Morton was made at the American Medical Convention, which met about the same time at Richmond, Virginia. Careful plans had been laid by Dr. Jackson, and by the attorney of the Wells claim, to obtain from that body the passage of a resolution disparaging the merits of Dr. Morton as the discoverer of anæsthesia, but the doctor fortunately became apprised of their intentions. Letters of the highest character were given him by Justice McLean, and by the Hon. Mr. Faulkner and other gentlemen in Congress, to Southern physicians at the convention, while those from the North were already acquainted with his position, and ably defended it.

CHAPTER XIV.

The political excitement which prevailed at Washington at the time when the elaborate and conclusive report of the select committee was prepared, rendered it impossible to get it before the House. Entirely engrossed with the important nominating conventions which met at Baltimore in June, 1852, a majority of the Representatives refused to

abandon "president-making" for any business whatever, and the bill recommended was not, therefore, acted upon, although warmly endorsed by the Secretaries of the Treasury, of the War and of the Navy Departments.

It was then that Dr. Morton lost a staunch and tried friend, the Hon. Robert Rantoul, jr., of Massachusetts, who had thoroughly investigated the question of anæsthesia, and who had taken a great interest in rewarding the discoverer. Dr. Morton was with Mr. Rantoul during his last illness, and sent the sad tidings of his death to the Boston newspapers. It was sad thus to lose a champion in the hour of trial, especially one so worthy and well qualified as Mr. Rantoul was. But Dr. Morton had the satisfaction of seeing his friend and adviser

> ——"Sustained and soothed
> By an unfaltering trust," and sink to death
> "Like one that draws the drapery of his couch
> About him, and lies down to pleasant dreams."

But though thus deprived by death of one old friend, Dr. Morton gained a host of new ones the moment his case was made known by the publication of his report. The following selections from an entire volume of letters in Dr. Morton's possession, shows how the report was received and regarded:

Letter from Senator Houston, of Texas.

WASHINGTON, *August* 16, 1852.

DEAR SIR: I have had the pleasure to receive the report of the Select Committee on the subject of your memorial to Congress, and though I have not had the pleasure to give it a thorough reading, yet I have read enough of it to satisfy me that you alone are entitled to the credit of the discovery. I draw my conclusions from the statements of Dr. Jackson mainly, in his facts as quoted by the committee and set forth in the report.

I am, very respectfully, your most obedient,

SAM HOUSTON.

W. T. G. MORTON, M. D.

Letter from Hon. A. G. Brown, M. C. from Mississippi.

HOUSE OF REPRESENTATIVES, *Aug.* 13, 1852.

DEAR SIR: At the instance of Dr. Edwards, late a member of Congress from Ohio, I made some examination (two or three years back) into your claims to be the discoverer of Anæsthetic Ether, and more recently I have read, with greater care, a very thorough and searching report on the same subject by a committee of the House of Representatives. I am perfectly satisfied that the credit of the discovery belongs to you, and I am so much impressed with its importance to the nation at large, and especially to the Army and Navy, and Marines of the United States, as to entertain a lively hope that Congress will adequately and liberally remunerate you for the use the Government has made of it in these departments. You are entitled, justly, to the sum reported by the committee, $100,000, and I shall, without hesitation, vote for that sum myself.

Very respectfully, your obedient servant,

A. G. BROWN.

Dr. W. T. G. MORTON.

Letter from Senator Walker, of Wisconsin.

WASHINGTON, *August* 15, 1852.

DEAR SIR: A few days since I received from you a copy of the report of the Select Committee of the House of Representatives on your memorial, in regard to your discovery of the anæsthetic properties of sulphuric ether. I did not, at first, reflect upon the subject,

and neglected to read the report. In a day or two, however, I happened, more by accident than otherwise, to take it up, and after commencing it, I became so much interested in it that I did not leave it until I had finished it.

I now frankly say to you, that it is a matter of astonishment that any man should hesitate to acknowledge your right to the discovery, or to a munificent reward from the Government for the inestimable blessing you have conferred upon our country and mankind.

The amount of this reward I feel myself incapable to determine. but certain I am that the sum recommended by the House is, by no means, too great. My reason for this conviction is this: You have done more for humanity than any other man of the present age; you have done that for mankind which is, in fact, priceless, and which entitles you, at least, to exemption from future pecuniary cares for life.

I feel this acknowledgment due from me, as at first I neglected your claims, and the evidence upon which they were based.

Yours, very truly and respectfully,

I. P. WALKER.

Dr. Wm. T. G. Morton.

Letter from Senator Brooke, Mississippi.

Senate Chamber, *August* 1, 1852.

Dear Sir: I have read, with great interest and pleasure, the report of a committee of the House of Representatives in reference to your claim to the discovery of the anæsthetic properties of sulphuric ether, which you did me the honor to send me. This report most triumphantly vindicates your rights in the premises, and in view of the important results that belong to your discovery, I have no hesitation in saying that you are richly entitled to the thanks of suffering humanity throughout the world.

With the sincere hope that you may reap the full reward of your exertions, I remain, very respectfully, your obedient servant,

W. BROOKE.

Dr. W. T. G. Morton.

Letter from Col. Orr, M. C. from South Carolina.

House of Representatives, *August* 28, 1852.

Sir: I have carefully read the reports of Dr. Edwards and Col. Bissell, on your application for remuneration as the discoverer of sulphuric ether, as an anæsthetic agent. The facts therein elicited, together with others, that have come to my knowledge in an authentic shape, leave no doubt on my mind that you were the first person on this continent to use sulphuric ether as a pain-destroyer in the human system, and are entitled to all the honor incident thereto from the civilized world, for your signal service to suffering humanity.

I have the honor to be, very respectfully, your obedient servant,

JAMES L. ORR.

Dr. W. T. G. Morton.

Other letters, from the Hon. Thomas B. Florence, of Philadelphia; the Hon. Henry M. Fuller, and the Hon. Alfred Gilmore, also of Pennsylvania; the Hon. Horace Mann, of Massachusetts; the Hon. Emanuel B. Hart, and the Hon. Gilbert Dean, of New York; all spoke in the same terms of the high claims of Dr. Morton to national recognition, and we regret that we cannot give them.

Finding that, in the pressure of business and of politics, the bill in favor of Dr. Morton would not be reached during the session, it was (in conformity with the written views of the Secretaries of the War, of the Navy, and of the Treasury Departments) adopted as an amendment to the Naval appropriation bill by the Committee on Naval Affairs. This consisted of the Hon. Messrs. Stanton, of Tennessee; Florence, of Pennsylvania; Goodenow, of Maine; Harris, of Alabama; and Cabell, of Florida.

But a new obstacle presented itself, in a recent ruling of the House, which made it out of order to append amendments to the regular appropriation bills, which were not made to "carry out previously existing laws." This barrier could not be overcome, and the late period of the session precluded the hope that it could be reached as an independent bill before the House adjourned. "Had this been possible, (as wrote the Hon. Mr. Bissell,) there was every disposition on the part of the House to favor it, and its many friends were sanguine of its passing by a large vote."

Brought now before the notice of the Senate, the subject was thoroughly investigated by the Committee on Military and Naval Affairs, who, after a careful investigation of the facts submitted to them, concurred in an amendment to the Army appropriation bill, which gave Dr. Morton, for his discovery of the anæsthetic properties of sulphuric ether, *one hundred thousand dollars*. This amendment was accordingly submitted when the bill was under consideration, on the 28th day of August, 1852, by Hon. S. Borland, M. D., Senator from Arkansas.

Senator Borland's argument was effective and conclusive, giving (as a member of the medical profession) his opinion of the value of the discovery; (as a citizen) his opinion of Dr. Morton as the discoverer; and (as a Senator) his conviction that Dr. Morton should receive a national reward. "I will not," he said, in conclusion, "detain the Senate by saying more on the subject. I will briefly sum up. This discovery is a most valuable one to the human family at large. The two branches of our public service, the Army and Navy, have availed themselves extensively of it. It is one of the most valuable remedial agents that the world has ever known. It is in constant and growing use. This idea which we are thus using, not only prolongs human life, and protects our soldiers and our sailors, and all in our public service from immense suffering, but it is saving, in that mode of treating diseases, thousands upon thousands of dollars every year and every month. This individual cannot enforce his legal rights against anybody, owing to the very nature of the case. We are making use of his property to our great benefit, and he is receiving no compensation whatever for it. Then the papers before me, as I have read them, show that he is the individual who is entitled to compensation, if any one, for the use of this property. We find that the practice of the Government—a very enlightened and useful practice, in my opinion—has been in favor of appropriations of this sort. Then, sir, I ask if this is not a proper occasion for the continuance of this practice? When was there ever before us a more meritorious case? The medical profession throughout the country sustain me in the assertion that this is the most valuable remedial agent that ever has been known. How can we, then, in justice to ourselves, in common justice to the individual who has furnished us this valuable, or rather invaluable remedy, refuse to pay him for it?

Senator Smith, of Connecticut, took a position as unexpected as it

was violent in reply. It afterwards appeared, (from remarks made by Senator Badger, of North Carolina,) that the gentleman from Connecticut was the attorney of the heirs of Dr. Wells, and he used language in his "plea" that would not have been tolerated in the court of many a country justice, so outrageous was its tone. "I pledge," said he, "whatever reputation I may have, that if the Senate will allow me, at the next session of Congress, an opportunity to be heard on this subject, I will make out a case for the family of Dr. Horace Wells, deceased. If the subject shall then be referred to the judgment of a committee of this body, I will be prepared to make out a case worthy the most grave and serious consideration."

Senator Shields, of Illinois, said: "It has been stated that this is one of the greatest discoveries of modern times. I believe it is. Of that, however, I only know this—that if this remedial agent had been known when the honorable Senator from Connecticut says he understood it was, it was unpardonable that its use was not applied to the American army in the late war with Mexico. It was criminal that it was not applied, if it was known, and it was wicked in that gentleman to withhold his information from the country on such an occasion as that; for, sir, I believe it would have saved thousands and thousands of lives."

"Any man," (continued Gen. Shields,) "who witnessed the scenes which some of us were there called upon to witness, well knows that such an agent would have saved thousands of lives. Sir, thousands of our bravest and best men fell under the pains and afflictions that followed surgical operations. I have seen so much of that, that I was rejoiced to have an opportunity, when I found there was such an agent discovered, to give it my support in any way; and although I was not acquainted with the subject, I was happy to have it in my power to turn it over to the honorable Senator from Arkansas, who was acquainted with it. I venture to say that there is not a professional man in America or in Europe, who will not consider this the most beneficial discovery since the discovery of vaccination."

"I cannot tell whether Dr. Morton is the discoverer or not; I know that those who have examined the subject thoroughly say that he is the discoverer. I have seen in addition, for he has shown it to me, the medal of one of the first medical institutions in the world—that of Paris—acknowledging, and in the name of France pronouncing him the discoverer of this agent, and that he had been able—for it was a good fortune on his part—to make a discovery which has been more beneficial to humanity, than any discovery made in the medical profession since the time of vaccination."

Senator Hale, of New Hampshire, said, "I am not one of those who object to the proposition on account of the amount of money. If this discovery really belongs to Dr. Morton, it is no more than right that we should pay for it; because, whatever may be the value of the patent-right, it is such a discovery that he cannot enforce his patent-rights. It seems to me that the Government of the United States,

having granted a patent by their own officers, are estopped from denying its validity; and as the Government are making use of it in the army and navy so extensively, it seems to me but fair to compensate this gentleman."

"I have been through the Massachusetts General Hospital, where this remedial agent was first introduced, and where it was tested. I went through all the wards and rooms of that hospital, and I saw every form of disease and suffering. I went into the dissecting room, and I confess my blood almost ran cold as I looked at the instruments of torture, as they appeared to me, which were about the room; but I was assured by the physicians attending upon that hospital, that, by the use of this remedial agent, patients were insensible to the operation of these instruments of torture—that the effect of it was to make them go quietly to sleep; and that the most difficult and dangerous operations were performed there every day, without those on whom they were performed being sensible of them. That great hospital is one of the finest charities on the face of the earth, and by the operation of this agent the most revolting surgical operations are performed every day, while the patients are, as it were, in a deep sleep."

"I do not believe there has been a greater contribution made to the cause of humanity anywhere. I do not put this discovery second to vaccination, or anything else; and if the Senate are determined to vote upon it to-day, I hope they will make this appropriation; and with my present convictions, although I should be glad to postpone the subject until the next session, in order to avoid all danger of injustice, I must vote for this appropriation."

Senator Douglass, of Illinois, after exhibiting evidence which put a complete extinguisher on the case of the "clients" of Senator Smith, and produced an ebullition of anger from that gentleman, went on to say: "I shall not enter into this controversy, or allow my feelings to be excited at all. I thought it my duty to call the attention of the Senate to that testimony, because I saw that an impression was about to be produced on the minds of the Senate which seemed to be contradicted by the testimony in the case. I know nothing of Dr. Morton. I believe I have seen him once or twice this winter, and that is all I know of him. I confess that before I examined the matter, my prejudices were against his claim, until my colleague in the other House, [Mr. Bissell,] who is a regularly-educated physician, a man of great intelligence, and has had practice as a physician, took it up, and as chairman of that select committee gave it a thorough investigation. This report produced entire conviction upon my mind that Dr. Morton was entitled to the credit of this discovery."

"I do not mean, nor does that report mean, that he discovered sulphuric ether, or that he was the first man that ever administered sulphuric ether, but simply that he discovered the application of sulphuric ether with reference to destroying pain in surgical operations, and that he discovered it to a degree and extent in which it had not before been administered, and in which it was supposed was not safe

to administer it. He risked his own life by experiments upon his own person; and then he administered it to other persons, and ran the risk of a prosecution for malpractice in the event that it should fail. I became satisfied from the testimony that he alone made the experiments, and he alone introduced it to the public; that he introduced it first into the General Hospital of Massachusetts, and from there to the world; that he took the entire, sole, and exclusive responsibility of the use and introduction of this agent, until its entire success had been established."

"I also find from the report, that while these experiments were going on—while it was doubtful whether they would prove successful—Dr. Jackson was ridiculing and denouncing Dr. Morton as a reckless man, who was hazarding the life of his patients by administering this agent to them; and that he never set up his claim, although experiments were being made in the immediate vicinity of his own house, until after those experiments had proven successful, and the judgment of the world was about to be pronounced in favor of Dr. Morton, and of this invention that had been made by him."

"I find this in the report of the committee of the House of Representatives, and I understand that both parties were represented before that committee. Taking, then, the report of that committee, before whom both parties were represented in person, and by their counsel, where testimony was adduced, and taking that report in connection with the judgment of the General Hospital of Massachusetts, where the first experiments were made, and taking all the testimony together, I cannot doubt that the credit is solely due to Dr. Morton."

Senator Walker, of Iowa, after going into a detailed investigation of all efforts made, from the days of Hippocrates down, to obtain an anæsthetic agent, showed that Dr. Morton had discovered it, and was entitled to awards in his favor, from high sources. "Again," said he, in conclusion, "as another testimonial, I may state that the subject was brought up in the thirtieth Congress, before a select committee of the House of Representatives, and with all the testimony before them, they decided that Dr. Morton was the discoverer. Here, again, in this Congress, after another review of all the testimony, Dr. Morton appearing before them in person, and Dr. Jackson, both in person and by counsel, a select committee of the House of Representatives has decided Dr. Morton to be the discoverer."

"All that there is now to answer against his claim, is the remonstrance to which the Senator from Maine has alluded; and what is that remonstrance? It is a remonstrance said to be signed by one hundred and forty-four physicians. The register of physicians of Massachusetts shows that there are about fifteen hundred in that State. Not one of these remonstrators was in the General Hospital of Massachusetts at the time this discovery was brought out; but on the contrary, a great many of them are dentists, who were personal enemies and personal rivals of Dr. Morton, and they are to this day his personal rivals. At the time he was risking his life to bring out this discovery, they were denouncing him, and endeavoring to put him down. They were getting

up prosecutions against him, to drive him, if possible, from respectable society. Yet these are the men who come forward and remonstrate? But, is it true, as the remonstrance states, that it is from "Boston and its vicinity?" I have here the State record of Massachusetts, and I find that the names on that remonstrance are scattered all over the State. There are three hundred medical men in Boston alone, and here are one hundred and forty-four remonstrants from the whole State of Massachusetts, and these are Dr. Morton's rivals—men who had first given him notes, and then refused to pay them, and became his enemies, and tried to make out that he had made no discovery! The remonstrance is dated in February last, and they have been ransacking the State of Massachusetts from that time to this, to get up remonstrators against Dr. Morton, and they have succeeded in getting one hundred and forty-four out of fifteen hundred in that State."

"We have two reports of the hospital of Massachusetts; we have the prize awarded by the Acadamy of Arts and Sciences of Paris; we have the award of a casket and $1,000, by the trustees of the Massachusetts hospital; we have the reports of two select committees of the House of Representatives; we have the concurrent voice of two committees—the Committee on Military Affairs and the Committee on Naval Affairs—of this body; and there is nothing to answer it but this simple remonstrance of which we have heard to-day."

The debate was protracted by the factious opposition of Senator Smith, who was pointedly rebuked for his conduct by Senator Weller, of California, and by Senator Badger, of North Carolina. "I know not, Mr. President," said he, "what private griefs the honorable Senator from Connecticut [Mr. Smith] has; but, certainly something or other seems to have stimulated him into a very undue excitement on this occasion, one not usual upon questions of this kind, and one which certainly that Senator is not in the habit of exhibiting in the Senate. The honorable Senator demands an opportunity of making out a case—for whom? For clients of his. Does he demand that we shall postpone this inquiry, in order that we may have another investigation at the next session? If so, that is one strong reason with me why we should promptly decide it now. I do not want to occupy two months out of three of the ensuing session with the investigation of these contradictory claims, which the honorable Senator desires to set up on this subject."

"I do not undertake to decide on this question, from information which I have derived from Dr. Morton. I never had any conversation with him upon the subject of the invention; I refused to have any conversation with him. I have refused to read anything which he has written upon the subject, but I rely upon information which I have received from impartial sources, and the unanimous report of the Committee on Military Affairs. Upon that I am willing to vote. We are taking no snap judgment upon any person—the clients of the Senator from Connecticut, or otherwise. We merely propose to purchase for the use of the public service, what we think is a valuable, or rather, I should say, an invaluable remedial agent."

Senator Mallory of Florida closed the debate. "I am pleased," said he, "to have this opportunity to manifest, by a vote upon this proposition, my appreciation of the importance of the subject to which it refers; and, sir, if no voice in its behalf had been hitherto raised; if no advocate had ever before appeared to press the claims of him whose successful devotion, whose self-sacrificing labors have secured for him throughout the earth this heaven-born gift, I would have considered it one of the high privileges of the place I occupy to stand forth in that attitude. But, sir, such fortunately is not its position; for the earnest appeals of men, women and children, the united and consistent testimony of the learned and the unlettered throughout this broad land, have raised up for it here unwavering friends."

"This amendment, Mr. President, proposes to pay to the discoverer of the anæsthetic properties of sulphuric ether inhaled, and of their extraordinary advantages to medicine and surgery, $100,000, upon the condition that he shall relinquish it to the free enjoyment of mankind, and abandon all the rights of a discoverer and patentee. If the question be asked, what is the character of the service rendered, what is the utility of the discovery? The response comes from thousands of our own fellow-citizens, in every walk of life, whom gratitude has made eloquent. It comes from the lowly couch of the poorhouse patient, and from the aristocratic mansion of the millionnaire; from feeble woman in the agonies entailed upon her first disobedience, and from the stern, strong man writhing in pain. It comes from your battle-fields, from your military, naval, and civil hospitals, from your gallant soldiers and sailors tortured by wounds and amputations. It comes to you from the practitioner in every department of medicine, and with our consent the surgeons of the Old and New World hail it as the great discovery of the age. Its claims have been examined by select committees of Congress, aided by able counsel, with an industry and accuracy equally honorable to them and to the subject. The trustees of the Massachusetts General Hospital presented the discoverer with $1,000 and an appropriate letter. The chiefs of our own Departments, our Surgeon General, and the head of our Naval Bureau of Medicine and Surgery, give it their unqualified approval; and the Academy of Sciences of Paris, after a thorough investigation of its character, conferred upon its discoverer the 'Monthyon golden medal' as an extraordinary mark of its approbation."

"Such are a few of the thousand evidences of the various characters from Europe and America in its favor. And well, sir, does it merit this praise. Hitherto the surgeon's skill, though advancing with gigantic strides, has been circumscribed and controlled by the power of endurance of his patient; and many operations which comparative anatomy justifies and demands for the salvation of life, have been rendered impracticable by their tortures upon an enfeebled or organized frame, or by their violent shock to the whole nervous system; and thousands have annually perished whom this discovery might have saved. Men of undoubted courage, wounded at last, after facing death in many

forms, shrunk with undefined terror from the prospect which the cold-blooded torture of the surgeon's knife holds before their eyes; and timid woman, sinking beneath disease, not unfrequently prefers the pains of death to the untold horrors of the operator's table. But all this is now passed. The knife has lost its terrors, the tourniquet and saw are regarded without a shudder, and the appearance of the surgeon by the pallet of the untimely sufferer is hailed with joy, for he not only banishes pain, but substitutes for an anguished frame the happy dreams of a joyous spirit."

"If I felt justified, Mr. President, in view of the pressing legislation yet before us, I would embrace this occasion to give the conclusive testimony of the principal practitioners of Europe and America in its behalf; but I do not feel authorized to consume a moment beyond a mere reference to them."

He then read a few brief extracts from Doctors Warren and Holmes, already given in this work, and then concluded:

"And now, Mr. President, if it be difficult to establish a standard by which merit generally is to be rewarded, how utterly impossible must it be to determine its proper bounds in a case like the present, in which an humble individual is the donor, and the whole human family the recipient. His most enduring and valuable reward will be in the undying gratitude of a posterity whose lot is suffering and pain, and a supreme happiness flowing from gratitude to God for being made the medium of such a boon to his creatures. But, sir, let us fulfil *our* duty. *We* cannot PAY Dr. Morton. His services are beyond price; but we can place his future life beyond the reach of poverty, and in this manner do justice to ourselves; for, Mr. President, to the living searchers after truth, as well as to those children of genius who are yet to struggle in her paths, and in the eyes of all honorable men, the course of the American Senate upon this question will be a beacon of warning or of hope."

"I believe not the worn-out apophthegm, that republics are ungrateful. Ingratitude is the crime of men, not of political organization—and the sons of Adam possess in common the same virtues and vices. But yet, sir, there is much upon history's page to justify the proposition, even within our own short political existence. The graves of our revolutionary sages are unknown to their free and happy descendants. No Old Mortality renews their fleeting letters; and the monument of its father and hero struggles lingeringly upwards, stone by stone, in spite of their seeming indifference."

"Fulton's merits were disregarded; and he was suffered to die owing more dollars than would have covered him in his grave. In pleasing contrast to this, sir, is the grant of the British Parliament of $150,000 to Dr. Jenner for his discovery of vaccination; and its liberal reward of discoverers in various walks of science. I am persuaded that the objection based upon a constitutional prohibition, made by the honorable Senator from New York, is not seriously urged; and certainly upon one of the alternatives suggested by him, we can reward this applicant.

I never saw him till within a day or two, and I know personally nothing of him, but entertain no doubt of the justice of his claim, and hope the amendment will pass."

Irresistible as these arguments appear, the personal influence of the Senator from Connecticut prevailed. Professing to plead in behalf of the widow and orphan, he pledged himself so strongly to "make out a case" for them at the next session of Congress, that the amendment did not pass. Seventeen Senators voted in its favor—twenty-eight against it—and several (who were in favor of it) were absent.

CHAPTER XV.

The position of Dr. Morton at this period of his life would have been regarded by most men similarly situated as a hopeless one, so far as a national recognition of his merit as a discoverer was concerned. He had successfully combatted professional jealousy—he had lived down personal malice—he had received the endorsement of those competent to decide the question of the discovery of anæsthesia. Yet, when his country was about to crown his labors, one of the national Senators, in his seat, interposed a veto—disregarding the eloquent appeals of his colleagues in the upper house of Congress, he placed his individual reputation at stake against Dr. Morton's credit to the discovery. Most men, we repeat, would have abandoned the case in despair, not thinking it possible to contest it with a national Senator who sought to "make a case for a client." But Dr. Morton supported himself gallantly at this dark moment. Despair might have flitted with dark wings across his mind, and urged him to forsake this unprofitable appeal to the gratitude of his countrymen, for his lucrative profession—but a sense of RIGHT seized his spirit, asserted his duty to himself and his family, and inspired him for fresh contests, for decisive victory!

Meanwhile he had not been idle in perfecting his record of anæsthetical progress, continuing his correspondence with scientific and professional gentlemen, both in Europe and in America. One of these letters was a reply to a request, (already alluded to,) from the Department of State, that he would address the noted Baron von Humboldt, who is deservedly at the head of the world of science. This renders it deserving of a place in this work, with other letters from the members of the Committee of the House of Representatives to the same distinguished individual.

Letter from Dr. Morton to Baron von Humboldt.

BOSTON, *May* 8, 1852.

BARON VON HUMBOLDT, &c., &c., &c.

SIR: Through the Department of State of the United States, I received notice of your request to be informed of the name of the person who originated the administration of ether for surgical operations.

I do not desire to appear to advocate my own claims by an argument or statement of my own, but prefer to submit to your consideration the recorded opinions of the most eminent

medical gentlemen of this country; those of the Trustees of the Massachusetts General Hospital; and the report of a Committee of the last House of Representatives of the United States; all of which will be found in the volume herewith transmitted.

I have been informed by the Hon. G. N. Fitch, that he has forwarded to you a copy of the report of the present Committee of the House of Representatives upon the same subject; which report, however, has not yet been made public, it not having been reached in the order of business of the House.

Upon the recent investigation, my opponent, Dr. Jackson, not content to leave the question to be decided upon the proofs which relate to it, has resorted to what I am constrained to characterize as an infamous attempt to blacken my private character, by false and malicious publications which have been traced to him. I immediately caused him to be arrested, and proceedings are now going on against him in an action for defamation.

Your liberal and enlightened mind, sir, will at once determine what is due to such an attempt; and I only refer to it that you may be made aware of the motives which have prompted these falsehoods, and of the means I have adopted to refute them.

I have the honor to be, with the most profound respect, your obedient servant,

W. T. G. MORTON.

Letter from Hon. Mr. Fitch to Baron von Humboldt.

HOUSE OF REPRESENTATIVES, U. S., *Washington, May* 10, 1852.

BARON VON HUMBOLDT, &c., &c., &c.

SIR: As a member of the Committee of the House recently charged with the investigation of the question of invention of the administration of ether in surgical operations, it became my duty to consider the claims of persons who have made pretensions to that honor, viz.: Dr. Morton, Dr. Jackson, and Mr. Wells; and thoroughly to weigh and examine their respective allegations and proofs. The committee consisted of five members—four of those concurred in a report awarding the invention to Dr. Morton.

It having appeared from a letter of the Secretary of State to Dr. Morton, that application had been made to you, through Mr. Fay, to that Department, for information upon this subject, I have thought that a copy of the report might not be unacceptable to you, and I have therefore the honor of transmitting one to you herewith.

The subject is one of very general interest, and has especially commanded my attention from the fact of my being a member of the medical profession. The report has been finally adopted by the committee, and is now about to be presented to the House.

Very respectfully, your obedient servant,

GRAHAM N. FITCH, M. D.

[*Dr. Fitch was at that time one of the Regents of the Smithsonian Institution, and Ex-Professor of Institutes and Practice of Medicine in Rush Medical College, Chicago, Illinois.*]

Letter from Hon. Mr. Venable to Baron von Humboldt.

WASHINGTON CITY, D. C., *May* 31, 1852.

SIR: The question of the discovery of etherization, so interesting to science and humanity, has received a very thorough and careful investigation by a special committee of this House at the present session; and perceiving by the report adopted by the committee that you, sir, (as might have been anticipated,) had directed your attention to the subject, I thought it might not be unacceptable to you to receive a copy of the report, of which I beg your acceptance herewith. You will observe that the right to the honor and reward of this discovery has been fully and impartially examined, with the aid of legal advice supporting the pretensions of the respective parties, and that the result has been the clearest establishment of the right of Dr. Morton, in whose favor the committee has reported a reward of one hundred thousand dollars. It would appear that very great injustice has been attempted towards this gentleman, now that all the facts have been ascertained with the precision of a practical investigation. I feel assured that you will take pleasure in

aiding, with your exalted name, in defeating the attempt to deprive him of the reputation which is due to him in Europe, and which has already been conceded to him in this country.

Begging you to excuse the liberty I have taken,

I remain, sir, with profound respect,

Your very obedient servant,

A. W. VENABLE, *M. C.*

BARON VON HUMBOLDT, &c., &c., &c.

Letter from Hon. Mr. Townsend, M. C., to Baron von Humboldt.

HOUSE OF REPRESENTATIVES, WASHINGTON, *July*, 1852.

BARON VON HUMBOLDT, &c., &c., &c.

SIR: A report which has been adopted at the present session of Congress by a special committee charged with the investigation of the question of the discovery of etherization, has called attention to the fact that you have manifested some interest in ascertaining the true author of this inestimable blessing to mankind, and that some efforts had already been made to mislead the opinion of Europe with respect to this question. Your extensive reputation, and great influence with the scientific world, will, I trust, sufficiently account for the liberty I am taking in offering to you the means of forming a correct judgment upon the pretensions of the parties claiming the discovery.

By the report, a copy of which I have the honor of begging you to accept, herewith, you will perceive that the controversy has been adjudicated, and settled definitely in favor of Dr. Morton, to whom the committee recommend a reward of one hundred thousand dollars.

With the highest respect, I am, your obedient servant,

N. S. TOWNSEND.

It may not be amiss to state, that after the report was made in his favor, Dr. Morton thought seriously of accepting the numerous invitations which had been made him to visit Europe. No sooner was this known, than a large number of letters of introduction were tendered him, from which we select the following:

Letter from the Hon. Daniel Webster, Secretary of State, to the respective Diplomatic and Consular Agents of the United States in Europe.

DEPARTMENT OF STATE, WASHINGTON, 23*d June*, 1852.

DEAR SIR: This letter will be handed to you by William T. G. Morton, M. D., of Boston, the discoverer of etherization.

He is about visiting Europe in relation to this subject, and I take pleasure in commending to your kindness and consideration a person who has done so much for the alleviation of human suffering; and I request that you will extend to him such friendly attentions as may conveniently be in your power.

Yours, truly,

DANIEL WEBSTER.

Letter from Hon. A. J. Donelson, Ex-minister to Berlin.

WASHINGTON, *June* 12, 1852.

His Excellency ALEXANDER HUMBOLDT, &c., &c., &c.

MY DEAR SIR: I beg leave to present to your acquaintance Dr. W. T. G. Morton, the discoverer of the anæsthetic properties of ether, who is the bearer of this note, and whose first object, when he arrives at Berlin, will be the desire of seeing the individual who, above all others, possesses the admiration and respect of the scientific men of America.

I avail myself of the occasion to renew the obligations under which I was so often placed, when I was at Berlin, by your excellency's kindness and regard, and to subscribe myself again,

Your excellency's very humble

And obedient servant,

A. J. DONELSON.

Mr. Smith's unexpected course in the Senate had forced Dr. Morton to relinquish, for the present, his visit to Europe, and he set himself to work to overthrow this new obstacle to his just rights. The claim in behalf of the heirs of Dr. Wells had received a prominent support from the citizens of Hartford, who were, doubtless, stimulated by a local pride to secure the honor of the discovery for their city, and by a natural sympathy for the widow and orphan. Much had been said about the evidence there, and Dr. Morton, conscious of his position, determined to "carry the war into Africa."

He accordingly went to Hartford, employed counsel, and commenced taking this testimony *himself*, before Erastus Smith, esq., a United States commissioner. At the same time he had notices legally served upon Mrs. Elizabeth W. Wells and upon Mr. Truman Smith, her counsel, notifying them to be present at the taking of testimony, and to put interrogatories, if they thought fit. Mr. Smith immediately came to Hartford and superintended the cross-examinations, which were made by H. K. W. Welch, as counsel for Mrs. Dr. Wells. Many of the witnesses were informed by him that they were not bound to appear before the commissioner and testify, and thus Dr. Morton was deprived of valuable testimony showing the groundlessness of Dr. Wells's pretensions, while others were induced to make depositions secretly before a magistrate, locked up in a room, to which the counsel of Dr. Morton was refused admittance. Yet, in the face of this legal chicanery, this local feeling, and this sympathy, Dr. Morton obtained a mass of testimony which took all the foundation from the legal edifice erected by Mr. Smith—a mass of testimony which is on record as a Congressional document, and which has never been contradicted or denied.

But it was not in Hartford alone that Dr. Morton busied himself in taking testimony. About the same time another commission was opened at Boston, under the statutes of the commonwealth of Massachusetts, before which Dr. Morton, assisted by R. H. Dana, jr., esq., proceeded to cite and examine such witnesses, *in perpetuam rei memoriam*, as were conversant with the discovery. He thus obtained the evidence of Doctors John C. Warren, Henry J. Bigelow, S. D. Townsend, J. Mason Warren, A. L. Peirson, A. A. Gould, and other gentlemen, which made his position as the discoverer of anæsthesia impregnable—having the testimony taken in the presence of Dr. Jackson's counsel, and with ample opportunity to him to detect error, or to expose misstatements.

This double duty, with its varying and shifting perplexities, caused by the professional attempts of opposing counsel to throw embarrassments in this search of Dr. Morton after truth, must have been arduous in the extreme. But, as has been shown throughout this work, Dr. Morton never takes heed of toil, mental anxiety, or expense when the question of anæsthesia is involved. Probably no other man living would thus have gone into the enemy's camp, and proved, by the unerring standard of judicial testimony, that the weapons there were worthless. "This has been my course," said he, on submitting his con-

vincing testimony to Congress, "open, bold, courting investigation, defying controversy."

But this testimony, the fruits of the commissions at Hartford and at Boston, was not all that Dr. Morton had to carry back to Washington in support of his claim. The speech of Senator Walker (quoted in the last chapter) showed that a remonstrance had been presented to Congress, signed by a small fraction of the physicians of Massachusetts. "Not one of these remonstrators was in the General Hospital of Massachusetts at the time this discovery was brought out; but, on the contrary, a great many of them were dentists, who were personal enemies and personal rivals of Dr. Morton."

To rebut this "remonstrance," and to triumphantly sustain his claims, D. Morton received the following "memorial" and "petition" to Congress. Never before, we venture to assert, did such a brilliant galaxy of medical and surgical talent unite on any one measure:

MEMORIAL.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

The undersigned hereby testify to your honorable body, that in their opinion Dr. William T. G. Morton first proved to the world that ether would produce insensibility to the pain of surgical operations, and that it could be used with safety. In their opinion, his fellow men owe a debt to him for this knowledge. Wherefore, they respectfully ask a recognition by Congress of his services to his country and mankind.

JOHN C. WARREN, M. D., *Senior Surgeon Massachusetts General Hospital, and late President American Medical Society, and Emeritus Professor of Anatomy of Harvard University.*
GEORGE HAYWARD, M. D., *President Massachusetts Medical Society, and Surgeon Massachusetts General Hospital.*
S. D. TOWNSEND, M. D., *Surgeon Mass. Gen. Hospital.*
J. MASON WARREN, M. D., " " " "
S. PARKMAN, M. D., " " " "
HENRY J. BIGELOW, M. D., *Surgeon Massachusetts General Hospital, and Professor of Surgery Harvard University.*
HENRY S. CLARK, M. D., *Surgeon Massachusetts General Hospital, and City Physician.*
JACOB BIGELOW, M. D., *Professor Materia Medica Harvard University, and President of the American Academy of Arts and Sciences, and Physician to Massachusetts General Hospital.*
OLIVER W. HOLMES, M. D., *Professor of Anatomy Harvard University.*
HENRY I. BOWDITCH, M. D., *Physician to Mass. Gen. Hospital.*
D. HUMPHREYS STORER, M. D., " " " "
M. S. PERRY, M. D., " " " "
JAMES JACKSON, M. D.,
GEORGE C. SHATTUCK, M. D.,
JOHN JEFFRIES, M. D.,
EDWARD REYNOLDS, M. D., } *Consulting Physicians and Surgeons Mass. General Hospital.*
WALTER CHANNING, M. D., *Professor of Midwifery Harvard University.*
JOHN WARE, M. D., *Professor Theory and Practice Harvard University.*
JOHN HOMANS, M. D., *President Suffolk District Medical Society.*
WM. J. DALE, M. D., *one of the Trustees Massachusetts General Hospital.*
JOHN L. FOX, M. D., *Surgeon Naval Hospital, Chelsea.*
WM. INGALLS, *Physician and Surgeon, U. S. Marine Hospital, Chelsea, Mass.*
S. L. ABBOTT, M. D., *Admitting Physician Massachusetts General Hospital.*
HENRY W. WILLIAMS, M. D., *Secretary Suffolk District Medical Society.*
M. H. CHIELDS, *President Birkshire Medical College.*
R. W. HOOPER,
GEORGE A. BETHUNE,
EDWARD REYNOLDS, } *Massachusetts Charitable Eye and Ear Infirmary.*

Members of Massachusetts Medical Society.

Walter Channing, John Homans, (President Suffolk District Medical Society,) Z. B. Adams, John C. Hayden, John Ware, Ephraim Bush, George Bartlett, Jonas H. Lane, Anson Hooker, Henry Dyer, Augustus A. Gould, Charles Gordon, Joseph L. Jones, Samuel Kneeland, sr., T. Fletcher Oakes, Geo. Hubbard, Chas. W. Moore, Richard H. Salter, Fytche Edward Olwein, Wm. J. Dale, Wm. Ed. Coale, James W. Stone, B. W. Newell, Francis A. Willard, Wm. Hawes, Charles Mifflin, J. Wippasne, Abrm. A. Watson, Aaron P. Richardson, Henry A. Ward, Wm. Bowen Morris, James B. Gregerson, M. Mattson, David Thayer, Samuel Morrill, Silas Durkee, Geo. Stevens Jones, Jesse Chickering, J. A. Tarbell, Geo. H. Symane, Henry W. Williams, J. Randolph Lincoln, George Derby, Warren J. Whitney, Francis Minot, D. D. Slade, W. E. Townsend, John B. Alley, Geo. H. Gay, Luther Parks, jr., Wm. G. Wheeler, F. H. Gray, James F. Harlow, George Russell, Chas. E. Ware, E. W. Blake, Edw. H. Clarke, Samuel Gregg, E. D. Miller, C. G. Putnam, Chas. A. Phelps, John Oden, jr., Joseph Reynolds, Geo. Hayward, jr., Henry Osgood Stine, Wm. W. Morland, M. C. Greene, Horace Stacy, Franklin F. Patch, Samuel L. Abbot, John H. Oix, James Ayer, Jos. J. Fales, P. Wibrand, Ezra Bartlett, S. F. Parcher, James Hyndman, Henry S. Lee, E. D. Cleaveland, John Stevens, Ira W. Tobie, J. Everette Herrick, N. C. Stevens, Enoch C. Rolfe, Henry Willard, A. Alexander, D. McGowan, Alex. S. Butler, Benj. B. Appleton, G. Newton Thomson, J. M. Phipps, Abner Phelps, Josiah Curtis, E. D. G. Palmer, Daniel V. Folts, R. L. Hinckley, J. W. Hinckley, M. B. Souard, P. E. Molloy, Henry Bryant, Chas. E. Buckingham, J. W. Warren, jr., D. D. Smith, George Power, William Read, J. F. W. Lane, Constantine B. O'Donnell, M. R. C. S. E., John S. H. Fogg, Edmund T. Eastman, J. C. Sanborne, E. A. Kittredge.

Charlestown.—E. E. Braun, A. J. Bellows, Benj. Seabury, George W. Otis, jr., Charles H. Allen, A. C. Webber, J. P. Alden, W. W. Wellington, H. L. Chase, Chas. F. Foster, A. J. Cummings, Thomas J. Stevens, Hutchinson Germaine, Alexander Poole, James B. Forsyth, John Toomy.

Salem, Mass.—A. L. Peirson, William Mack, George Choate, Wm. Henry Prince, J. G. Wood, James Stone, jr., E. B. Peirson, Geo. C. S. Choate, Geo. A. Perkins, H. Wheatland, Samuel Johnson, Edward A. Holyoke.

Newburyport, Mass.—E. Cross, S. M. Gale.

Lynn, Mass.—A. S. Adams, J. T. Galloupe, Danl. Perley, James M. Nye, John Renton, Nathaniel Ruggles, D. E. Johnson, E. Porter Eastman, Chas M. Weeks, Edw. Newhall.

Worcester, Mass.—Henry Clarke, Saml. Flagg, Geo. A. Bates, Chas. W. Whitcomb, Joseph Sargent, Oramel Martin, William Workman, Rufus Woodward, Henry Sargent, A. Goulet, P. B. Mignoult, Benj. Heywood, John E. Hathaway.

Springfield, Mass.—Jas. M. Smith, Edwin Seeger, N. Adams, A. S. McClean, Alfred Lambert, C. C. Chaffee, H. A. Hamilton, Henry B. Vaille, D. C. Perkins.

Pittsfield, Mass.—H. H. Childs, President of Birkhead Med. Institution, N. S. Barnes, O. S. Root, Frank A. Cady, O. E. Brewster, Nath'l Foote, Avery Williams, A. N. Allen, L. F. Humeston, Willard Clough, M. D., Clark F. Hall, M. D., N. J. Wilson.

Taunton.—Alfred Bayliss, H. B. Hubbard, Horace Bowen, Ebenezer Dawes, William Dickinson, Dan. King, George Leonard.

New Bedford.—T. S. Mayhew, Johnson Clark, Jno. H. Jennings, Wm. A. Gordon, Elijah Colby, C. D. Stickney, John Howell Mackie, Paul Spooner.

Fall River.—James W. Hartley, P. A. Smyth, Jerome Dwelly, Foster Hooper, E. T. Learned.

Lowell.—John O. Green, Henry Whiting, J. P. Jewett, J. D. Pillsbury, Elisha Huntington, John W. Graves, Benjamin Skelton, H. Pillsbury, P. P. Campbell, L. B. Morse, Charles A. Davis, Ployer G. Kittredge, Chas. A. Savory, Joel Spalding, David Wells, Daniel Holt, Daniel Mowe, J. W. Scribner.

Lawrence.—Geo. W. Sanborn, Wm. D. Lamb, David Dana, J. H. Morse.

South Andover.—James Howarth, W. H. Kimball.

Fitchburg.—Thos. R. Boutelle, Levi Pillsbury, T. W. Wadsworth, W. M. Barrett, Henry M. Linrab.

Plymouth.—Jas. L. Hunt, Winslow Warren, Benjamin Hubbard, Timothy Gordon.

Dedham.—Jeremy Stimson, D. P. Wight, H. F. Spear.

Hingham.—Ezra Stephenson, Robt. T. P. Fiske.

Quincy.—Ebenezer Woodward, William G. Pattee, W. Goddard.

Danvers.—Andrew Nichols, Joseph Osgood, David A. Grosvenor, George Osgood.

Marblehead.—James C. Briggs, Chandler Flagg, Daniel Gill.

Beverly.—W. C. Boyden, Charles Haddock, Ingalls Kittredge.

Gloucester.—Isaac P. Smith, C. H. Hildreth, Geo. W. Smith.
Rockport.—Benjamin Haskell, Lemuel Gott, Oscar D. Abbott.
Newton.—Henry Bigelow, Cyrus K. Bartlet.
Framingham.—Simon Whitney, Allston W. Whitney.
Milford.—Francis Leland, Theodore O. Cornish.

PETITION

OF THE TRUSTEES OF THE MASSACHUSETTS GENERAL HOSPITAL.

To the honorable the Senate and House of Representatives in Congress assembled:

The subscribers respectfully represent, that they are members of the Board of Trustees of the Massachusetts General Hospital; that the power of the inhalation of sulphuric ether to produce insensibility to pain during surgical operations, was discovered by experiments instituted in this hospital by Dr. William T. G. Morton, and that in their opinion he is entitled to a liberal national reward for the service thus rendered to the country and to mankind.

N. I. Bowditch,
John P. Bigelow,
W. S. Bullard,
Francis C. Lowell,
Thomas Lamb,
Amos A. Lawrence,
Wm. J. Dale,
Ed. Wigglesworth,
Charles H. Mills,
J. Thos. Stevenson,
G. A. Shaw.

Boston, *November* 22, 1851.

CHAPTER XVI.

The very first petitions presented to the Senate, at the commencement of the second session of the thirty-second Congress, were those in favor of a national recognition of Dr. Morton's claim as the discoverer of anæsthesia. They were offered by the Hon. John Davis, and came from the Physicians and Surgeons and the Trustees of the Massachusetts General Hospital—the Massachusetts Charitable Eye and Ear Infirmary—and members of the Massachusetts Medical Society. They, with the evidence collected by Dr. Morton to sustain them, were referred to the Committee on Military Affairs, and he waited the action of his opponents.

Mr. Smith was still a member of the Senate, before which he had pledged himself to "make out a case" for his clients, and the professional advisers of Dr. Jackson were also there. But neither made any manifestation of bringing forward their respective pretensions, and at length Dr. Morton's patience became exhausted. It appeared to him—as he stated officially—that the strategy of his opponents was directed to wearing out his life, and exhausting his means, that they might be "*in at the death.*" This stimulated him to prompt action, that complete and impartial justice should be done him if Heaven spared his life, and if not, that his wife and children might enjoy the vindication of his name and memory!

Dr. Morton, therefore, after having waited nearly a month, gave proper notice to Mr. Hayes, (counsel for Dr. Jackson,) and to Mr. Smith, (counsel for the Wells' heirs,) to present their evidence, respectively, and have it referred to the committee to which his own documents had been referred.

But Mr. Smith was too old a practitioner to take such a straightforward course. Taking a day, (the 3d of January, 1853,) when General Cass had announced his intention of speaking on "Liberty of Conscience Abroad," and attracted crowds of spectators, Mr. Smith offered his "Wells' Petition," and moved its reference to the Committee on Patents, of which he was a member.

As Dr. Wells had never had any connection with a patent-right in the experiments upon which his claim was based, and as no question of a patent was involved in it, this step appeared singular—the more so, perhaps, because Mr. Smith, in an offensive speech, undertook to say that the Committee on Military Affairs had "prejudged" the question. That committee, (which consisted of Messrs. Shields, of Illinois, Clemens, of Alabama, Borland, of Arkansas, Dawson, of Georgia, and Jones, of Tennessee,) were naturally somewhat indignant, and a debate ensued on the question of reference. This was probably exactly what Mr. Smith wished, and, as he must have foreseen, General Cass grew restive. His speech had been announced—his audience was dispersing—and he therefore prevailed upon the Senate to lay Mr. Smith's petition upon the table.

The next day, the Senatorial lawyer brought it up again, and moved its reference to the Committee on Military Affairs. But his remarks of the day previous had made a consideration of the subject, upon which they were said to be "prejudged," extremely unpleasant. "It ought," said the high-minded General Shields, "to be investigated in some other way. We had no hesitation in the world, believing that Dr. Morton was the discoverer—and it is my opinion still, after the investigation I have bestowed upon the subject, that he is the discoverer—in proposing that he should be rewarded, for it is one of the most beneficent discoveries ever made." But he now expressed no wish to investigate the new question forced upon the committee, and he therefore moved its reference to a select committee of five.

This was objected to by several Senators, who did not like to see gentlemen thus driven from the consideration of a subject already referred to them. But the members of the committee were firm.. "I, (said Governor Jones, of Tennessee,) am a member of the Committee on Military Affairs, and I should regret exceedingly, under the circumstances that surround us, to be required to take charge of the question again. No matter what report we might make, it could not, and would not be satisfactory to all the claimants—and it seems to me that, under the circumstances, we would expose ourselves to imputations which no honorable gentleman ought to be willing to bear. It is on that ground that I am opposed to the reference of the memorial to the Committee on Military Affairs. I hope it will be sent to a special committee, and that we may be relieved from a further investigation of it." This, and similar protests made by other gentlemen on the committee, carried the day. A select committee was ordered, to consider the subject of the discovery of anæsthetic agents, and the next day the President of the Senate, *pro tempore*, announced that he appointed: Messrs.

Walker, Smith, Davis, Butler, and Mallory. Subsequently, Mr. Hamlin was substituted for Mr. Mallory.

At the close of the previous session of Congress, it will be remembered, a sudden coalition between the Jackson and Wells claims had suddenly interposed difficulties in Doctor Morton's way—and the advocates of these interests seemed again anxious to procrastinate all examination, until the last moment. Apprehending a repetition of this conduct, he had previously determined to submit his claim to the most severe judicial investigation, if that were considered necessary, and if—on that basis—Congress would appropriate what it should determine might be due to the discoverer, whoever he might prove to be. Finding, therefore, that his opponents were procrastinating, he presented each of them with the following *projet* of a bill:

AN ACT

To reward, by a national testimonial, the discovery of the means of producing insensibility to pain in surgical operations and other cases of suffering.

Whereas a discovery has been made of the existence of anæsthetic qualities capable of being applied safely and certainly, and with great utility, to produce entire insensibility to pain, and thus enabling surgical and obstetrical operations to be performed safely and without suffering, and of the application thereof; and whereas the Government of the United States have had the benefit thereof in their military and naval service, and the free and common use by the public generally; and whereas a judicial inquiry seems to be necessary to ascertain which of the three claimants hereinafter named is justly entitled to be rewarded for the discovery aforesaid, be it therefore enacted, &c., as follows:

Sec. 1. That the sum of *one hundred thousand dollars* is appropriated in the hands of the Secretary of the Treasury, out of any moneys in the Treasury not otherwise appropriated, as a remuneration for the use of the discovery aforesaid, to be paid by the Secretary of the Treasury to one of the claimants hereinafter mentioned, who shall, by legal and competent evidence in the proceedings hereinafter provided, establish his claim thereto, for and on account of the discovery aforesaid: *Provided*, That if W. T. G. Morton, hereinafter mentioned, shall be declared by final judgment in the proceedings hereinafter mentioned to be entitled to receive the fund hereby granted, he shall, before receiving the same, execute and deliver to the Commissioner of Patents a surrender of the letters-patent granted to him on the twelfth day of November, in the year eighteen hundred and forty-six.

Sec. 2. That the district attorney of the United States for the district of Massachusetts shall forthwith file in the Circuit Court of the United States for the district of Massachusetts, sitting in equity, in the name and in behalf of the Secretary of the Treasury, a bill of interpleader, therein reciting this act as the substance thereof; the Secretary of the Treasury, as stakeholder of the fund hereby granted, shall be made complainant, and William T. G. Morton, of Boston, in the State of Massachusetts, Charles T. Jackson, of Boston, aforesaid, and the legal representative or representatives of Horace Wells, late of Hartford, in the State of Connecticut, deceased, shall respectively be made respondents, in which suit the said Morton and Jackson and the legal representative or representatives of the said Wells shall litigate their respective claims to receive the remuneration hereby granted for and on account of the discovery aforesaid. And the said Circuit Court is hereby authorized to take jurisdiction in the said cause, and determine the question to whom the reward shall be paid, by reference to the principles and analogies in which courts of equity having jurisdiction of patent-rights and other equitable jurisdiction proceed, for which said court is authorized to make all necessary orders therein, and to make a final decree, declaring which of the said claimants is entitled to receive the said reward for and on account of the discovery aforesaid. And from the final decree of the said Circuit Court made in the premises, either of the other respondents may appeal to the Supreme Court of the United States, which appeal shall be taken, entered, prosecuted, and disposed of like other appeals from the Circuit Courts in equity cases.

Sec. 3. If either of the said respondents, after due notice and summons, shall fail to appear and put in an answer to said bill at the time that may be prescribed by the court, the court shall proceed and adjudicate upon the claim or claims of the other respondent or respondents who may have appeared and answered as aforesaid.

This liberal proposition of Dr. Morton to invite judicial investigation would, it will be imagined, have met with a cordial reception by those interested. But they well knew the weakness of their respective positions. Mr. Smith declined, on the ground that Mrs. Wells was unable to sustain the expense of litigation, whereupon Dr. Morton offered, (through the Hon. Charles Chapman, Hon. E. T. Davis, and E. March, esq.,) to either advance her in cash the means for such litigation, or to defray the expense himself. This doubly liberal offer was declined! Mr. Hayes, in behalf of Dr. Jackson, also declined! They each sought darkness rather than light!

One of these claimants, it will be borne in mind, depreciated and condemned the use of sulphuric ether, but recommended nitrous oxide gas. To prove the fallacy of this argument, Dr. Morton addressed the following letter to the committee:

"National Hotel, Washington, *January* 18, 1853.

"Dear Sir: The subject of the discovery of anæsthesia being now before a committee of which you are chairman, I beg leave to submit to you, and through you to the committee, a proposition.

"One of those who contest my right to the discovery, does so on the ground that anæsthesia had been discovered by Dr. Wells prior to my alleged discovery; and that the anæsthetic agent used in the discovery by Dr. Wells was nitrous oxide gas. Now, if anæsthesia, for surgical purposes, was ever discovered through nitrous oxide gas as the agent, that agent, for the same purposes, will still manifest its efficiency. I deny that such a discovery, by means of said agent, ever was made, or that said agent possesses available anæsthetic properties alone for surgical operations. At the same time, I assert and claim that anæsthesia was first discovered by me, through the agency of sulphuric ether. Therefore, to prove that nitrous oxide never was discovered to be an available anæsthetic agent in surgical operations, and that it is not such now; and to prove also that sulphuric ether was discovered to be an available anæsthetic agent for such purposes, and is so now, I propose that an actual demonstration shall be made before the committee of the two agents, in such surgical operation or operations as are considered fair tests by scientific men, at such time as the committee may direct, and patients obtained.

"Yours, very truly,

"W. T. G. MORTON, *M. D.*

"Hon. J. P. Walker, *Chairman, &c.*"

This offer was accepted by the committee, who selected Dr. May to conduct the demonstration. Apprehensive that it might be said that the nitrous oxide gas could not be procured, Dr. Morton caused it to be manufactured by Dr. Kidwell, (a competent chemist recommended by a professor of Columbia College,) and further to satisfy Dr. May of its purity, he administered it to several persons on the evening of January 27th, in his presence, and that of several Senators.

The demonstration came off on the 28th, at the Washington Infirmary, where Dr. Morton had a patient and the nitrous oxide gas in readiness. Dr. May was urged by the chairman of the committee to use the nitrous oxide. He refused peremptorily. He had also been requested to do so by Mr. Truman Smith, and had refused. Dr. Morton then proceeded in presence of the committee, and of surgeons of the army and navy, and of the medical class, to administer ether. Complete etherization was produced, which continued through a dangerous and protracted surgical operation, lasting about three quarters of an hour.

But this was not the only manner in which Dr. Morton showed his desire to have an investigation which should forever satisfy all impartial minds. He prepared, and had published at his own expense, a volume of over six hundred large octavo pages, which not only embodied his own evidence, but that of his opponents. It contains two annotated minority reports in favor of Dr. Jackson, with all the evidence, rumors, speculations, arguments, and opinions relied on in these reports to support his pretensions. And with it are re-publications of the two pamphlets published in favor of Dr. Wells, (the first by Wells, himself, the second written by the Hon. Isaac Toucey,) together with all the evidences, rumors, hearsay, speculations, arguments, and opinions by which they are attempted to be sustained. This was novel, yet conclusive proof of Dr. Morton's consciousness of right! Determined not to receive any honor, reward, or payment not clearly his due, upon an impartial hearing of all sides, he thus published, at his own expense, all that had ever appeared in behalf of his opponents.

With this were the statements in his favor, and the evidence supporting them, embodying much that has already been given in these pages, especially the results of the recent commissions at Boston and at Hartford.

"It is now more than six years," said the introduction of Dr. Morton to his chain of evidence, "since the world received, at my hands, what I may not scruple to call one of the greatest of physical blessings. Whatever attempts may be made to throw doubt upon other points in the case, no one has been reckless enough to deny that I alone have been, in fact, the humble instrument through whom a beneficent Providence has conferred this boon upon mankind. Whatever floating notions may have crossed men's minds from the earliest ages, tending to the same end, it must be conceded that the world was no whit richer for them, until it fell to my lot to devote all my energies and sacrifice all my means to its attainment. Now it is fully attained. What was the dream of the philanthrophist and the half-formed conjecture of the scientific speculator, has become a household fact."

"To me alone, of all the world, this result has been fraught with suffering instead of comfort. Of pecuniary sacrifices I will not speak; but surely it was not to have been anticipated that this discovery should have made me the target for the most malicious and envenomed assaults. There are wounds which are sharper than those of the surgeon's knife, and which,

> ——'Not poppy, nor mandragora,
> Nor all the drowsy syrups of the world,'

can make us feel less keenly. These have been my portion. I trust that the reward is at hand. I look to you for justice: nothing more, nothing less."

While the question was under investigation by the select committee of the Senate, a pamphlet entitled "An examination of the question of Anæsthesia," was printed and circulated among members of either branch of Congress. "It was written, (said the Hon. Mr. Walker,

chairman of the committee,) by the Hon. Truman Smith, a member of the committee, and had thus a quasi-official character. And as, in my opinion, that paper presents a one-sided and partial view of the question; such as might be expected of an advocate of easy faith in his client's cause, and strong indignation against all that oppose it; and consequently comes to a conclusion widely different from that which a calm and impartial consideration of the whole case would warrant, I deem it an act of mere justice to the person who I believe has the right, to present also the opinion which I have formed upon the same points after a careful examination.

"The writer of that paper gives the whole merit of the discovery of practical anæsthesia to the late Dr. Horace Wells, of Hartford, Connecticut, and he denounces, in no measured terms, as pirates and impostors both the other claimants to that distinguished honor. He is especially bitter and abusive of Dr. Morton, whose character is above all reproach, and whose claim to the contested prize is supported by very strong evidence, while he shows some little forbearance towards Dr. Jackson, who has failed in making out his claim. The strength of his denunciations against the respective parties, and the degree of villany which he imputes to them, is in direct proportion to the strength of their proofs.

"I feel no interest or wish in this matter, except that the truth may be arrived at, and right and justice done; and that I may discharge faithfully the duty which the Senate has imposed on me by the reference, by endeavoring to obtain it, and present it. And it is but fair to say, in the outset, that, after a careful examination of all the allegations and proofs to which I have had access, my mind is made up—my opinion formed on the question—and that I concur with the Board of Trustees of the Massachusetts Medical Hospital in the opinion expressed in their report of January 26th, 1848, and with the two committees of the House of Representatives of 1849 and 1852, that Dr. W. T. G. Morton first discovered and brought into general use a safe, certain, and efficient anæsthetic agent, applicable generally to all dentrical, surgical, and obstetrical cases, and that he is entitled to whatever honor and reward are due to the discovery, and the free and general use of it, by the army and navy of the United States, by the country, and by the civilized world."

The able opinion of Mr. Walker was afterwards incorporated into the report of the committee to the Senate. It gave a review of the whole question, and refuted clearly the calumnious statements advanced by Mr. Smith. "Arguments like these," it says, "which have no foundation save in the positive imagination of their coiner, show the real weakness of the cause they are intended to sustain, backed by gross libels and defamatory charges."

"It is in vain," concluded Mr. Walker, "to attempt success by depreciating the character or capacity of Dr. Morton. He is recognised wherever known, as a man of integrity and honor, of great enterprise and of high capacity. Conscious of his original claim to this

glorious discovery, he has decidedly asserted his rights when necessary, amidst sore buffetings of fortune, and the close-cleaving malignity of powerful adversaries, certain that he would eventually receive a universal recognition of his position. Institutions, learned men, and able jurists, both at home and abroad, have gradually united in awarding to him the glory of a discovery that will solace his declining years, and impart to his memory a hallowed radiance, as a benefactor of the human race. He proposed to the select committee (as his printed memorals on the files of the Senate show) a *projet* of the bill now reported, referring the subject to the decision of a judicial tribunal, and has ever avowed his readiness—in the noble language of De Foe—'to stand or fall by the public justice of his native land.'"

The committee made their report on the 19th of February, and it was ordered to be printed. Taking the suggestion of Dr. Morton, it stated: "That in the opinion of the committee such a discovery has been made, and that the credit and honor of the discovery belong to one of the following persons, all citizens of the United States, to wit: William T. G. Morton, Horace Wells, deceased, or Charles T. Jackson; but to which of these persons in particular the discovery should be awarded, the committee is not unanimous, and consequently the committee is of opinion that this point should not be settled by Congress without a judicial inquiry.

"But the committee has no hesitancy in saying, that to the man who has bestowed this boon upon mankind, when he shall be certainly made known, the highest honor and reward are due which it is compatible with the institutions of our country to bestow.

"The means of safely producing insensibility to pain in surgical and kindred operations have been the great desideratum in the curative art from the earliest period of medical science, and have been zealously sought for during a period of more than a thousand years. At various periods, and in various ages, hope has been excited in the human breast that this great agent had been found; but all proved delusive, and hope as often died away, until the discovery now under consideration burst upon the world from our own country, and in our own day. Then, and not until then, was the time-cherished hope realized that the knife would lose its sting, and that blood might follow its edge without pain.

"But for the committee to dilate upon the importance of this discovery were futile indeed. The father or mother who has seen a child, or the child who has seen a father or mother, upon the surgeon's table, writhing and shrieking from pain and agony—the husband who has seen his wife suffering, perhaps dying, under the undurable pangs of parturition, the extirpation of a breast or cancer, or the amputation of a limb, while she appealed and implored for help and ease which he could not otherwise render—the commander who has seen his soldiers, and the soldier who has seen his companion, sink, nervously shocked, to death from pain, in the absence of this alleviation—and the surgeon who is forced to torture, while, perhaps, he weeps—can all more readily feel the magnitude and blessing of this discovery than the com-

mittee can describe it. Indeed, while the heart of man shall remain human, or possess the power to pulsate in sympathy with human suffering, it would seem that none would deny it the meed of pre-eminence among the discoveries of any age."

The report was accompanied by the elaborate opinion of Mr. Walker, referred to above.

On the 25th of February, the matter came up for discussion, and at the request of the select committee, the Committee on Military Affairs offered as an amendment to the Appropriation bill the proposed measure, by which $100,000 was to be paid to the discoverer of this great boon for the alleviation of human suffering and the saving of human life. The debate was a warm one, many Senators participating, yet it is gratifying to record the absence of all abuse of Dr. Morton, or defamation of his peculiar claim. Most especially effective was the eloquent manner in which Mr. Walker closed his remarks:

"If I could allude (said Mr. Walker) to what brought me immediately to know the value of this discovery, I might express myself with more direct feeling than any other member of the Senate, for I know not whether any other member has had the misfortune of having this great alleviation introduced into his family circle. I have. I have seen a member of my family, now dead, suffering under the surgeon's knife, lying in a calm and peaceful sleep, and yet undergoing one of the most torturing surgical operations in the world. I felt at that day, rising in my heart, the feeling that if God should ever give me the opportunity of manifesting my gratitude to the person who has made this great discovery, I should do so. The opportunity is now offered. Whether the Senate will sympathise with me or not, I know not; but it is now for them to speak, and to decide by their vote."

The objection on this occasion appeared to be one which had been brought up against Dr. Morton, in an opposite direction, previously. He had been denounced because he had patented his discovery in order to restrain it from being used by improper persons; but he was now told that he should enforce his patent. "Let him (said Senator Norris, of New Hampshire,) enforce his patent as other patentees do."

"As to this objection, (said Senator Borland,) that Dr. Morton has a patent and he should enforce his patent-right, I need hardly remind the Senate that this is one of those cases where, from the very nature of the circumstances, the rights of the patentee cannot be enforced. You cannot go into the sick chamber and arrest the surgeon in the performance of his professional duty, and deprive a patient, who is on the verge of the grave, of a benefit from the application of a remedy because it may infringe the right of a patentee. And if you could, it is one of those cases at which the feelings of every man would revolt. It is one of those cases where you cannot enforce a patentee's rights. You would have to go to the bedside of almost every sick man in the country. You would have to follow your Army and Navy surgeons throughout their whole course, upon the land and upon the sea, and examine into every case where they have occasion, in the alleviation of human suffering and the saving of human life, to use this remedial agent."

"I regard the discovery, (said Senator Butler, of South Carolina,) from its very sublimity, as one which cannot be subjected to a patent. Yet it comes clearly within the spirit of the patent laws; and if a man can have a security for his rights for what is tangible, Dr. Morton ought to have some protection for that which is more sublime, and above the tangible mode and subject of patents."

Senator Norris took an opposite view of the subject, concluding by saying: "It is patentable, and a patent has been issued for it under the law."

Quite a protracted discussion ensued, for which we have not space in this work. "Whether this is a matter for a patent or not, (said Senator Hale, of New Hampshire,) the Government is in the actual and positive enjoyment of it—therefore, if it is a great benefit, if it is too sublime for the operations of such a sublunary affair as the patent laws, then let us take a sublime position, and compensate the man whose invention and discovery we are using. If it is not too sublime for that, and if it does pertain to the earth, and is earthy, let us deal with it in that way, and recognise the established fact, that there is a patent-right, and that we are infringing it to-day in the Army and Navy, virtually saying to Dr. Morton, 'you cannot sue us.' No, sir! The United States have received the benefit of this discovery. Everybody admits that it is a great discovery; everybody admits that it is one of the greatest contributions to the cause of humanity which this age or any other has witnessed, and the world accords to this country the honor of the discovery. It seems to me, that if it be such a great benefit, and we are using it, we ought to make compensation for it."

The amendment was agreed to, by a vote of 26 to 23, and on the first of March it came up in the House of Representatives, where the same objection was offered to it that had been raised in the Senate. "Let these parties," said Mr. Woodward, "pursue their rights according to existing laws. Let the patentee prosecute his right if the patent is violated."

But an unforeseen incident, which unexpectedly arose, defeated the amendment. A friend of Dr. Jackson, Mr. Stanly, of North Carolina, moved to give the court power to divide the award, if they thought proper, for distribution to the different parties in such proportions as might be due to their respective merits in connection with the discovery. This proposition Mr. Meade thought Dr. Morton would accede to, but no sooner did he express such an opinion, than members cried out, "a bargain! a bargain!" Mr. Stephens, of Georgia, openly made the charge, and, although it was indignantly denied, yet the impression could not be removed at that exciting period of the session, then about to terminate. It was then after midnight, and everything was in a confused and disorganized state. The amendment of the Senate was non-concurred in, by a vote of 44 to 85. One long day more, and the thirty-second Congress adjourned.

CHAPTER XVII.

Dr. Morton did not confine himself to placing all the evidence upon the question of anæsthesia, before the Congress of the United States. He had a large edition of a work containing it all—both for and against his individual claim to the discovery—printed, bound, and forwarded at his private expense to the principal libraries of both the Old and of the New World. Gratefully was the donation acknowledged by the directors of these storehouses of knowledge. W. H. Smith, esq., foreign secretary of the Royal Society at London, wrote to Dr. Morton, "assuring him that the society duly appreciated this mark of consideration." Signor Dominico Piani, perpetual secretary of the Academy of Sciences of the Italian Institute, at Bologna; James Tod, esq., secretary of the Royal Scottish Society of Arts; Henry Ellis, esq., librarian, in behalf of the Trustees of the British Museum at London; M. Hausman, secretary of the Royal Society of Sciences at Gottingen, and other distinguished Europeans, returning thanks in behalf of the institutions with which they were connected, returned grateful acknowledgments for this mark of attention.

Other letters of thanks were received by Dr. Morton from the secretaries of state of the different states; from the officers of the various scientific, historical, and literary societies, and from the librarians of the various public libraries. He had spared neither pains nor expense in placing this book wherever it would add to the diffusion of knowledge; and it was evident, from the time of the acknowledgments, that the donation was a highly acceptable one. The facts in the case are thus enshrined in the temples of science and of learning throughout christendom.

Other copies which had been placed by Dr. Morton in the hands of friends for distribution among their scientific acquaintances, elicited warm letters of acknowledgment. We have only space to copy one addressed to the Hon. Mr. Faulkner, of Virginia, by Professor Lieber, of Columbia College, the author of "Encyclopædia Americana," "Political Ethics," and other works.

Letter from Professor Lieber.

COLUMBIA, S. C., *Jan.* 15, 1853.

DEAR SIR: I lately received a copy of the report made to your house on the claims of Dr. Morton as discoverer of etherization, a paper so interesting to me that I must beg leave to thank you cordially for having thought of me when you distributed your copies. I live so far out of the way of the moving world, that I don't know whether any appropriation has been made to Dr. Morton, although I am a constant and pretty attentive reader of the papers of the day.

What a different standard people adopt, in rewarding with honors and money the merits of men—take Wellington and Jenner, by merits and demerits—take Columbus and Louis Napoleon.

Your very obedient,

FRANCIS LIEBER.

Hon. CHAS. J. FAULKNER, M. C.

At the commencement of the thirty-third Congress Dr. Morton again repaired to Washington, having been assured that the bill passed by

the Senate the year previous would now meet with no decided opposition in either House. The Hon. Edward Everett, then a Senator from Massachusetts, interested himself in the matter, and advised Dr. Morton to have it referred to a select committee. "I would (wrote Mr. Everett to Dr. Morton) offer to report on it, but I am on four committees and am really overwhelmed with business. It is, besides, quite important for you to have the matter taken up by some administration Senator."

Subsequently, however, Mr. Everett presented the bill, and it was referred to the committee on Military Affairs. They but confirmed the thorough investigation of it which had already been made in both Houses of Congress, and reported it back with some few amendments of a technical character.

The bill was placed on the Senate calendar as No. 210, and was not considered by that body as strictly a "private bill," as appears by a brief debate on the 7th of April, when Mr. Everett made the inquiry.

On the 19th of April, Mr. Everett called the attention of the Senate to the subject, and urged the Senate to reward the discoverer of anæsthesia. But now, that Dr. Morton had generously admitted other claimants to stand with him, (conscious that he must succeed,) a host of interlopers were introduced, one by one. The names of Dr. Long, of Georgia, Dr. Justine, of New York, and a Dr. Dickinson, were added to those of Drs. Morton, Jackson and Wells, besides a general clause covering other claimants.

When all these amendments had been made, (most of them, too, by gentlemen who voted against the bill after it had received their amendments,) the final question was ordered to be taken by yeas and nays.

Previous to this, Senator Brown presented an invincible argument for his vote in favor of it, which concluded thus: "That the importance of the discovery may be known, as it stands in my mind, I will simply remark, that for more than two thousand years the world has been in search of this discovery. At last it has been made. It is the most important boon, I think, which has been given to mankind for many centuries. When the Government has taken possession of it, and is using it without pay, without compensation, and without acknowledgment to the patentee, its acknowledged discoverer, I think we ought to pay for it."

The bill was then passed, by a vote of 24 yeas to 13 nays.

Generally speaking, it is a somewhat difficult matter to have a bill which has passed the Senate called up for immediate action in the House, and only then by the personal efforts of some member who has it in especial charge. Neither Dr. Morton or any of his friends had any idea that the bill would be called up in the House for several weeks, during which time it was hoped that the documents which had had such a convincing effect in the Senate could be laid before each member.

Neither was the bill, in strict parliamentary parlance, a "private" one. This had been actually settled in the Senate on the 7th of April,

when the decision of the president *pro tem.* to that effect had been sustained.

But, on the second morning after its passage in the Senate, and without any intimation, the Speaker of the House of Representatives called it up, and laid it before the House. It was a Friday morning, when scarce a quorum was present, and well did Mr. Clingman, of North Carolina, ask: "How does the bill get in? Is it before us regularly?"

The Speaker replied: "This being private bill day, and the chair *conceiving* it to be a private bill, laid it before the House."

In vain did the few friends of Dr. Morton present, themselves uncertain how to act, seek to have it referred to the Committee on Military Affairs. It has been thus brought up to be killed, and killed it must be. The only objection offered was the multiplicity of claimants: "Messrs. Morton, Jackson, Nicholson, Wells and others (as a member remarked) are scattered over the whole country. There is to be a bill of interpleader filed in the circuit court of the northern district of New York. The Secretary of the Treasury is to be the complainant, as the trustee of this fund, and these gentlemen are to be the defendants. They are to get together their witnesses and counsel there from all sections of the Union, and to litigate this matter to their satisfaction, and then this money is to be awarded to them, and the Government is to pay the costs of that adjudication. I would infinitely prefer that either of the committees of the House should, at once, decide the question, and give the money, right or wrong, for it would be a saving to the country."

Alas, this had already been done by committee after committee; yet now the more judicial decision, which had been quoted as so desirable, was set aside, and Dr. Morton was told, upon the floor, to "maintain his patent-right under the laws of the United States."

What little discussion there was, did not last but a few moments. Debate was strangled, and the bill was laid on the table by a vote of 80 yeas to 46 nays. Not content with this, and to make his opposition doubly sure, a member from Tennessee moved "to reconsider the vote by which the bill was laid upon the table, and to lay the motion to reconsider upon the table." The purpose was accomplished.

Meanwhile Dr. Morton's friends, somewhat annoyed at the capricious conduct of Congress, consulted with the legal gentlemen of eminent reputation, and, by their advice, prevailed on him to take a new course in order to secure that national recognition of his merits as the discoverer of anæsthesia which he had so steadily sought. The great objection brought up against rewarding him by Congress, was the opinion of many members that he should *enforce his patent.* Now, he determined to take an important step towards this, by entering a respectful protest against the violation of his patent by the subordinates of the General Government. It was their open violation of the patent in the Mexican war that had not only rendered it useless as a restraining check, but had involved Dr. Morton in direct pecuniary loss. The patent, which was virtually his property, had thus not only been nulli-

fied, so far as its pecuniary value was concerned, but had been used extensively, without compensation, by the officers of the General Government. Dr. Morton, therefore, not only had grounds of protest against the Government for violating its own patent, but for acting in opposition to that section of the Constitution which declares that "private property shall not be taken for public use without just compensation."

Dr. Morton accordingly issued the following protest, which was endorsed by a large majority of both the Senate and the House of Representatives—thus making, in fact, a Congressional recognition of his position:

PROTEST AND CONGRESSIONAL ENDORSEMENT.

To his Excellency The President of the United States, and
The Honorable The Secretary of War,
The Secretary of the Navy, and
The Secretary of the Treasury of the United States.

The undersigned, Wm. T. G. Morton, M. D., respectfully represents and makes known—That he, the undersigned, is the original and first discoverer of Practical Anæsthesia, and that he holds the letters-patent of the United States for said discovery and for certain means of applying the same; which said letters-patent bear date the twelfth day of November, in the year 1846, and do grant to the undersigned and his assigns, for the term of fourteen years from the date thereof, the exclusive right and liberty of using, and vending to others to be used, the said discovery of Practical Anæsthesia; to which said letters-patent of record in the U. S. Patent Office he respectfully refers.

The undersigned, from motives which must be apparent from the nature of the subject, and relying upon the justice and magnanimity, first, of his own Government, and then of all other civilized governments, has not hitherto exercised his legal rights by suits at law for damages, or injunctions to prevent the use of a discovery which has happily proved so beneficent to humanity. Nor would he now take any step by way of departure from his previous course, but that his forbearance is sought to be turned to his disadvantage, and objection is made to granting compensation by an act of Congress, on the ground that he ought to enforce his right under his patent against the officers of the United States using his discovery in the Military, Naval and Marine service, and against all persons violating the same.

These considerations have determined the undersigned to adopt this course. He therefore with great reluctance respectfully asks, that the encouragement given to private individuals to violate his patent, through the non-observance thereof by the Government itself, may be no longer continued, and that the honorable Secretaries will either purchase the right to use said discovery in the respective branches of the public service, or that they will immediately issue the necessary orders to the medical officers and others under their official control to desist from further infringing his patent-right in the premises.

WM. T. G. MORTON, *M. D.*

Washington, June 15, 1854.

The undersigned members of the Senate and House of Representatives concur in recommending that the right to use Dr. Morton's discovery, commonly called "Practical Anæsthesia," be purchased for the public service, or that the use thereof be discontinued, because the Government is manifestly bound by its own patent duly issued to respect the said discovery as private property, and because "*private property*" ought not to be "*taken for public use without just compensation.*"*

James C. Jones,	J. W. Williams,
Ben. Fitzpatrick,	Philip Allen,
S. Adams,	A. G. Brown,
Jas. Shields,	W. K. Sebastian,
J. D. Bright,	Samuel Houston,
J. P. Walker,	R. W. Johnson,

* Constitution United States, Amendment, article V.

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*Constitution United States. Amendment, article V.

J. B. Thompson,
Chas. T. James,
H. Hamlin,
Charles Sumner,
Julius Rockwell,
James Cooper,
W. M. Gwin,
C. C. Clay, jr.,
J. M. Clayton,
*John B. Weller,
M. S. Latham,
W. R. Sapp,
Hendrick B. Wright,
Jacob Shower,
T. R. Westbrook,
R. H. Stanton,
Alex. DeWitt,
Sam'l P. Benson,
C. M. Straub,
Sam'l Mayall,
John B. Macy,
E. W. Farley,
Wm. Cullom,
John Wheeler,
Wm. Barksdale,
William S. Barry,
James L. Orr,
Em. Etheridge,
Fred. P. Stanton,
H. H. Johnson,
W. R. Smith,
H. L. Stevens,
Thomas B. Florence,
Peter Rowe,
W. S. Ashe,
Wm. M. Tweed,
W. A. Richardson,
James S. Chrisman,
Willis Allen,
J. P. Cook,
J. O. Norton,
P. S. Brooks,
Charles Hughes,
A. B. Greenwood,
C. S. Hill,
John Wentworth,
John C. Breckinridge,
J. R. Giddings,
Sam'l H. Walley,
Ed. Wade,
W. W. Boyce,
J. C. Allen,
L. M. Keitt,
G. Dean,
D. A. Reese,
M. H. Nichols,
John Kerr,
Sam'l Caruthers,
N. P. Banks, jr.,

Arch. Dixon,
Geo. W. Jones,
Jno. Bell,
J. P. Benjamin,
Henry Dodge,
A. C. Dodge,
B. F. Wade,
S. P. Chase,
*S. R. Mallory,
*William H. Seward.
James Knox,
E. B. Washburne,
P. H. Bell,
J. A. McDougall,
W. H. Witte,
C. B. Curtis,
Bernhart Henn,
Geo. Vail,
Asa Packer,
D. Stuart,
James Abercrombie,
D. B. Wright,
F. K. Zollikoffer,
Daniel Mace,
Gerrit Smith,
A. Oliver,
Charles W. Upham,
Thomas D. Eliot,
A. C. M. Pennington,
Ner Middleswarth,
I. Washburn, jr.,
Thomas Davis,
J. Z. Goodrich,
Edward Dickinson,
N. G. Taylor,
Richard Yates,
Henry Bennett,
Roland Jones,
James J. Lindsley,
J. S. Harrison,
John G. Miller,
John M. Elliot,
William Preston,
Wm. M. Churchwell,
J. Wiley Edmands,
Samuel C. Crocker,
B. W. Peckham,
Wm. Everhart,
Thomas Richey,
Joseph R. Chandler,
Alvah Sabin,
A. E. Maxwell,
J. F. Dowdell,
T. S. Russell,
Bishop Perkins,
J. Glancy Jones,
G. R. Riddle,
H. M. Shaw,
T. J. D. Fuller,

*Mr. Mallory, Mr. Seward, and Mr. Weller sign under the following qualification:
I respectfully suggest that the patentee of the anæsthetic agent, known as Dr. Morton's discovery, should receive from the United States a *liberal* compensation for their past and future use of it.

Jared C. Peck,	Lewis D. Campbell,
John Robbins, jr.,	Daniel Wells, jr.,
B. B. Thurston,	A. W. Lamb,
M. Oliver,	J. L. Taylor,
Thos. M. Howe,	George Hastings,
Ben C. Eastman,	O. R. Singleton,
R. C. Puryear,	Thos. W. Cumming,
Sion H. Rogers,	L. M. Cox,
R. M. Bugg,	P. Philips,
W. P. Harris,	A. Harlan.

This document was published, with a mass of sustaining evidence, by Dr. Morton, who was prompted by an excusable pride to show that the subject was a scientific one, and had undergone a far more thorough investigation than attends the assertion of a mere patent-right. They show the opinions of Webster, Choate, Curtis, Carlisle, Whiting and other eminent lawyers as to the validity of the patent-right—the proof of the use of the patent in the Army, Navy and Marine Hospitals, and the great value attached to it by the medical staff of the Army and Navy; the opinions of the medical profession generally, at home and abroad; and, finally, the conclusions of the Massachusetts General Hospital, of committees of both Houses of Congress, after thorough examination of the whole subject. When it is observed, in connection with this, that the memorial to the executive is endorsed by a majority of each House of Congress, it may be considered a conclusive AMERICAN VERDICT.

CHAPTER XVIII.

While Dr. Morton was thus, during ten long years, industriously vindicating his claims to that national gratitude which his friends urged Congress to grant, and which, as we have shown, was only defeated by personal hostility or jealous revenge, his life was one arduous mental struggle. Forced into the turmoil of legislative anxiety, with all its hopes and fears—its display of passions and emotions—Dr. Morton received no pecuniary reward, but the record of Congressional proceedings has many a page (between 1846 and 1857) emblazoned with the story of his self-sacrifices in behalf of suffering humanity. To perfect and extend his discovery was the ruling passion of his soul, to which he dedicated every power of his mind, every pulsation of his heart. Here was the secret of his success in enlisting the sympathy of powerful friends, even when his enemies loaded him with abuse. The unselfish manner in which he had abandoned a lucrative profession, and even risked his life, to introduce a blessing to suffering humanity, had only to be narrated by him to reach the hearts of his auditors. No man who has appeared before the magnates of the land ever displayed more fearless enthusiasm; no man ever possessed the unfeigned friendship of so many of the good and the great, the gifted and the gay, who congregate at Washington.

Yet it is equally evident, that, throughout this decade of Congressional struggle, it was Dr. Morton's delight to retire to the quiet fields of the Etherton estate, and there enjoy the placid solitude of domestic life, out of the turmoil of metropolitan companionship. Agricultural labor was his recreation! In the activity of his body, did the energy of his intellect find its support and its rest. The barren pastures became, under his management, fertile fields and fruitful orchards, while around him were comfortably settled his parents and other relatives. Leaving the stormy arena of the Capitol, he could gaze around upon the quiet loveliness presented by the face of creation, and find calm enjoyment at the home of his affections.

While thus recuperated by the quiet joys of rural life, Dr. Morton brought his high powers of mind to a scientific observation of nature, which enabled him to indulge profitably in the mysteries of modern agriculture. Every process was acurately estimated, and then executed with an exactness, and an exactitude which enabled him to win high premiums, and higher encomiums, from the agricultural committees which sat in judgment on his systems of tillage, his crops, his flocks, and his herds. As a sample of the manner in which these committees had occasion to speak of Dr. Morton's agricultural management, we give the following extract from the report of the committee on farms, submitted to the Norfolk County Agricultural Society, at their annual exhibition in 1855.

"Members of our committee visited the farm of Dr. W. T. G. Morton at West Needham. The statistics, and a very full description of the Doctor's estate, were published in the transactions of last year, and Dr. Morton has evinced his energy and public spirit, by the improvements that he has made upon his place—by the fine stock that he has purchased and bred—by the convenient and comfortable stables and other farm edifices that he has erected, and by the unsurpassed contributions that he makes to our annual exhibitions."

Many pleasant accounts of this rural paradise have been written by literary personages who have enjoyed Dr. Morton's hospitality; but none give so perfect an idea of it as the following, by Mrs. S. J. Hale. Having known Dr. Morton when he was a lad, earnest in the pursuit of scientific knowledge, under difficulties, Mrs. Hale has ever taken a deep interest in his welfare. This is her description of a visit to Etherton Cottage in 1853.

" West Needham, notwithstanding its poor prosaic name, is really a pretty, pastoral-looking place, surrounded by low, wooded hills, protecting, as it were, the fine farms and orchards, and the pleasant dwellings, everywhere seen in the valleys and on the uplands around. In twenty minutes after leaving the bustle of Boston, if the cars make good speed, you will reach this rural scene, where Nature still holds her quiet sway, except when the steam-horse goes snorting and thundering by."

" Here, in the heart of this still life, Doctor Morton, some seven years ago, selected an uncultivated lot, covered with bushes, brambles,

and rocks, and, by his own science and taste, and the strong arm of Irish labor, he has formed a home of such finished beauty as would seem to require, at least, in its gardens and grounds, a quarter of a century to perfect. His grounds slope down to the railroad embankment; but a plantation of young trees, and, on the height above, thick groves of a larger growth, hide the buildings from view as the cars pass on this great route from Boston to the West. From the station it is a pleasant drive through the shaded and winding way as you ascend the rising grounds to the South. Suddenly turning a shoulder of the knoll, Etherton Cottage is before you. The effect was fine, and what made the scene more interesting to us was the presence of another cottage nestled near by, smaller but equally pleasant-looking, where we knew Dr. Morton had settled his good parents. Here they live as one household, and from the windows of Etherton Cottage may be seen the dwelling of another member of the family, a sister, now happily married, for whom the Doctor also cared."

"We might give a long description of these pretty cottages and beautiful grounds, but words are wasted to little purpose in landscape or architectural descriptions. So leaving the walks, arbors, flowers, and fountains, we will introduce you at once to Mrs. Morton, a lady whose attractions and merits we had heard much praised while in Washington last winter. She is, indeed, one of those true women who seem born to show that Solomon's old picture of a good wife and mother may now be realized. The Doctor seems very fond and proud of her, as he may well be; and their children—the eldest a girl of nine, the youngest a boy of three years, with a brother and sister between—formed a lovely group of more interest to us than all the 'superb views' around. So we will just tell you, dear reader, of the family and their home pursuits, as these were revealed to us during that interesting visit."

"We should say here that Doctor Morton has relinquished his profession, and now passes his summers entirely at this country residence, and his winters in Washington, where he hopes soon to gain from Congress some reward for his great discovery of Etherization. When this is granted, he intends visiting Europe, where he is urgently invited by the savans of the Old World. It will be a triumph for Young America to send forth a man so young, who has won such distinction. It seemed but a few years since we first saw Willie Morton, a clerk in the publisher's office where our own magazine was issued; and now we were his guest, in his own elegant dwelling, surrounded by every requisite of happiness."

"His country life is just what it should be, devoted to rural pursuits and filled up with plans of home improvements. You only feel the presence of his inventive genius by its active operation on the material world around. Not a word is heard of "chloroform" or "ether" at Etherton Cottage; but various contrivances for obviating all defects or difficulties in bringing his domain into perfect order he has planned, meet you at every turning, and all sorts of odd combinations appear,

which, when understood, are found to contribute to the beauty or utility of the whole. In short, everything useful is made ornamental, and the ornamental is made useful."

"Then the Doctor has a passion for surrounding himself with domestic animals. This we like; it makes a country home more cheerful when dumb dependents on human care share the abundance of God's blessings. So after dinner we went to the barn to see the "pigs and poultry." This barn, fronting north, was quite a model structure, built on the side of the sloping ground, combining, in its arrangements, rooms for the gardener (an Englishman) and his family, and the barn proper, where the horse and cow had what a young lady called "splendid accommodations." There was also a coach-house and tool-room, a steam-engine room where fodder was cut up, and food—that is, grain of several kinds—ground for the swine and poultry; also a furnace where potatoes were steamed. The water was brought by hydraulic machinery from a brook at the bottom of the grounds for use in the barn, and every thing was managed with scientific skill and order."

"The arrangements for the poultry were very elaborate. Their rooms were the first floor at the back or southern front of the barn; of course, half underground. This lower story had a lattice-work front, and within Mrs. Biddy had every accommodation hen-life could desire. Into these apartments the troop were allowed to enter at evening through a wicket opening in this southern front; but in the morning the poultry all passed out into the northeastern portion of the grounds allotted them, where was a pool of water for the water-fowl, and a fine range for all. Still, the green field at the south, the running brook, and the eventide meal made them all eager to rush in whenever the gate between the two portions of their range was opened. It was this rush we went to witness."

"We stood in the main floor, near the southern or back door of the barn, which overlooked the green field; the little gate opened, and such a screaming, crowing, gabbling ensued, and such a flutter of wings, that for a few minutes it was nearly deafening. A pair of Chinese geese led the way of this feathered community. These geese, a present from the late statesman, Daniel Webster, to Dr. Morton, who prized them accordingly, were entirely brown, of large size, carrying their heads very high, and walking nearly upright; they sent forth shouts that made the air ring. They seemed to consider themselves the Celestials, and all beside inferiors. Next, came a pair of wild geese; one wing cut, and thus obliged to remain in the yard, they had become quite tame; but still, their trumpet-call seemed to tell their love of freedom. These, too, were brown, with black heads, and long lithe necks, that undulated like the motions of a snake, with every movement. Very unlike these were the next pair of snow-white Bremen geese, stout, fat, contented-looking creatures, only making the usual gabbling of geese which are well to do in the world. Among the varieties of the duck genus were several of the Poland species;

snowy white, except the vermilion-colored spots on the head, that look like red sealing-wax plasters round the eyes. These ducks made a terrible *quackery*. But the domestic fowl was the multitude; there appeared to be all kinds and species, from the tall Shanghais, that seemed to stalk on stilts, to the little boatlike creepers that move as if on castors. It was a queer sight, such an army of hens and chickens, rushing hither and thither, to pick up the grain scattered for their supper. And then the pride of the old peacock; he just entered with the rest, then spread his heavy wings and flew up to the ridge-pole of the barn, where he sat alone in his glory. It was, altogether, a pleasant sight."

"But within the barn was a lovelier spectacle. From the centre beam hung a large rope, its lower end passing through a circular board, about the size of a round tea-table; four smaller ropes passed through holes near the edge of this round board, at equal distances, and were united with the large rope several yards above, thus forming four compartments, with the centre rope for a resting-place. In these snug spaces were seated the four beautiful children, like birds in a nest, swinging every way in turn as the little feet that first touched the floor gave impulse."

"It was a lovely picture of childhood made happy by parental care for the amusements of infancy. The father's genius had designed that swing to give pleasure, as it had discovered the elixir for pain, by taking thought for others. With both Dr. Morton and his amiable wife, the training of their little ones seemed the great subject of interest. The children were *well governed*, this was easy to see, and thus a very important point in their instruction was made sure. They were also made happy by every innocent and healthful recreation. Their future destiny seemed the engrossing object of their parents' minds; to bring up these little ones in the fear and love of the Lord, their most earnest desire."

"During the evening, the topic of education was the chief one discussed, and we parted from this interesting family fully assured that the good old Puritan mode of uniting faith in God with human endeavor was there understood and acted on. Miss Bremer might find, at Etherton Cottage, a charming illustration of her 'love-warmed homes in America.'"