ANÆSTHETICS.

BRIEF OF POINTS AND PROOFS

IN SUPPORT OF

Petitions, Memorials, Resolutions and Letters,

FROM A LARGE NUMBER OF THE

AMERICAN MEDICAL ASSOCIATION, SCIENTIFIC SOCIETIES, PROFESSORS AND SURGEONS OF THE PRINCIPAL COLLEGES AND HOSPITALS, SURGEONS, OFFICERS AND WOUNDED SOLDIERS OF THE FEDERAL ARMY, &c.

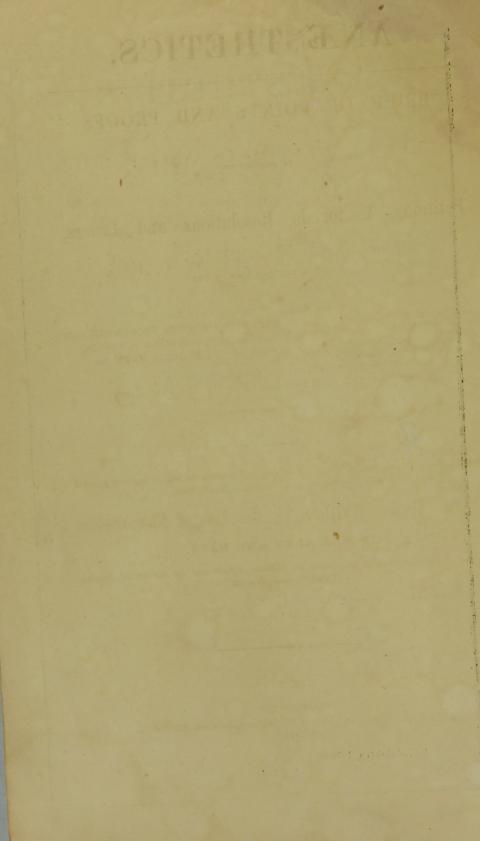
Laid before the Committee of Ways and Means, and to whom the subject had been referred by a joint resolution of the House, March, 1864,

Urging Compensation for the Use of Anæsthetics

IN THE ARMY AND NAVY.

Report of the Committee of the Senate on Military Affairs and the Militia, 3d Session 37th Congress, No. 89.

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DR. WILLIAM T. G. MORTON,

The Discoverer.

As early as 1844, Dr. Morton commenced experimenting upon animals, in prosecuting his search after a preventive of pain. Page 2 of Report.

In 1846, an experiment upon himself produced insensibility. Page 2.

In the spring and summer of 1846, Dr. Morton was prosecuting enquiries and experiments with regard to sulphuric ether, with a view to the discovery of some method of producing insensibility to pain in his operations. He did not, at all times, avow his object. He was anxious to make the discovery, but to keep his secret whilst prosecuting his researches. Page 13.

He held conversations with Mr. Metcalfe, a chemist of Boston, and with Mr. Wightman, since Mayor of Boston, both gentlemen of science, both of whom were impressed with the idea, that he was in search of an Anæsthetic; and, in their testimony, have detailed the conversations held with him. Page 14.

It is in proof by Dr. Francis Whitman and Dr. Wm. P. Leavitt, of Boston, that in the spring and early summer of 1846, Dr. Morton was directing his attention to the discovery of an agent which should produce insensibility to pain, and that he announced to them in July that he had succeeded. *Page* 15.

June 30, 1846, three months before the discovery was made public, it appears by the statement of Richard H. Dana, Jr., attorney-at-law, present District Attorney of the United States, that an article of agreement was entered into by Dr. Morton and G. G. Hayden, by which the latter was to take charge of the practice of the former for a time; Dr. Morton assigning, as the reason therefor, that he wished to give his attention to another matter of great importance, and which, if successful, would revolutionize the practice of dentistry. *Page* 16. Dr. Granville G. Hayden testifies to the same facts, and adds that Dr. Morton told him he had an idea in his head, connected with his profession, which he thought would be one of the greatest things ever known, and he wished to perfect it, and give his whole time and attention to its development. Being pressed by Hayden as to what it was, he finally answered that it was something he had discovered which would enable him to perform his operations without pain; that he had tried it upon a dog, and described its effects, which exactly correspond with the effects of ether on persons. "He urged me to inhale it, saying he had done so himself. This was in June, 1846." Page 16.

From that time he was continually talking to me about his discovery; and towards the last of September intimated to me that, in some particulars, his discovery did not work exactly right, and, in my presence, was consulting his books to ascertain something further about ether. Page 17.

In August or September, 1846, he said to Dr. A. A. Gould, "I will have some way yet by which I will perform my operations without pain,"—to which Dr. Gould replied, "If he could effect that, he would do more than human wisdom had yet done, or that he expected it would ever do." Page 17.

September 30, 1846, having perfected his discovery, he administered the ether to Eben Frost. Whilst under the influence of it, extracted from him a tooth, without pain. Page 18.

This was the first surgical operation, of any kind, so far as known, ever performed under the influence of sulphuric ether, and the first actual demonstration of the entire success of the discovery.

For operations performed by Dr. Morton, at his office, in 1846, and experiments recorded by Dr. Henry J. Bigelow, see pages 20 and 21.

The first surgical operation, other than dental, ever performed under the influence of an Anæsthetic, was at Massachusetts General Hospital, Boston, October 16, 1846. Dr. Morton had requested Dr Warren, of the Hospital, to afford him an opportunity of administering his newly discovered agent to some patient who was to be operated upon. This request was complied with. The ether was administered by Dr. Morton, unconsciousness produced, and in the presence of many scientific but incredulous spectators, the operation was performed by Dr. Warren, with entire success, and without pain, and to the utter amazement of all who were present, except Dr. Morton himself. Dr. Warren says he had been anxious to find something of the kind proposed, and had made repeated trial of articles without any satisfactory result. Pages 23, 24 and 25.

On the first of November, 1846, Dr. Hayward took charge of the surgical department of the hospital, and on the next day informed Dr. Warren that he did not intend to allow the medical patients to inhale the preparation of Dr. Morton during his period of service, unless all the surgeons of the hospital were told what it was, and were satisfied of the safety of using it. At that time the surgeons were all ignorant of the nature of the fluid. Dr. Morton was the sole possessor of the secret. Page 25.

Dr. Hayward communicated this determination to Dr Morton, who

immediately, November 6, 1846, disclosed to the surgeons the properties of the fluid, and addressed a letter to Dr. Warren authorizing its full use in the hospitals. Page 26.

The nature of this disclosure will best be understood by referring to the specifications which the granting words of the patent cover.— He there discloses his preference for sulphuric ether to those of muriatic or other kinds of ethers; but adds that any such may be employed which will properly produce the state of insensibility without any injurious consequences to the patient. This, of course, includes chloric ether or chloric ether concentrated into chloroform. The sulphuric ether was preferred because it is equally efficient, and much more safe than chloric ether or chloroform.

The surgeons agreed it should be used, and that it should be administered to a female patient who was to undergo amputation of a leg.

It was administered by Dr. Morton, and the amputation performed in the presence of hundreds of breathless spectators, including the leading physicians and surgeons of Boston, and the neighborhood, besides distinguished clergymen, lawyers, and others, from the various walks of life.

This was the first capital operation under the influence of the Anæsthetic. Pages 26 and 27.

Dr. Bigelow says, a hundred promiseuous cases rapidly followed. The agent has been adopted in our Army and Navy; and no sum, though told by millions, would compensate for its loss or abandonment at this day. The value of the gift made by Dr. Morton to his country is, indeed, incalculable. But in its results it has involved the ruin of his private fortune. Page 28.

The administration of it was denounced generally, and many articles were written against it in the medical and daily journals. *Page* 29.

Dr. Gould says, physicians and surgeons closed their ears and shut their eyes against it, and in many instances prosecutions were threatened. *Page* 30.

In January, 1847, a leading New York medical journal said of it, "The last special wonder has already arrived at the natural term of its existence. It has descended to the bottom of the great abyss which has already engulphed so many of its predecessors, novelties, &c." Page 30.

In the same month, the New Orleans Medical Jounal said :—"That the leading surgeons of Boston could be captivated by such an invention as this, excites our amazement." Page 30.

Many eminent men in the medical profession opposed it on the ground that pain was salutary, and that its annihilation would be hazardous to the patient.

In Paris, the announcement of the discovery was received with all but indifference. Valpeau, Roux, and Magendie, declined its use. *Page* 30. Dr. Morton was denounced as a quack, and his discovery as a humbug. For a time the tide was turned against him, and even the Massachusetts General Hospital, where many operations had been performed under the influence of the Anæsthetic, as administered by Dr. Morton, and every one a brilliant success, temporarily suspended the use of this great alleviator of pain. *Page* 30.

But, nothing daunted, Dr. Morton stemmed the torrent alone, and leading men of Boston testify that he followed the matter up with wonderful energy, and encountered difficulties which would have crushed any less heroic man. That he has devoted himself mainly to this matter for many years, encountering every discouragement; and that it would not have been in use at this day had he not followed it up as he did. They also state that they regard him as one of the greatest benefactors of mankind of the present age, and that the remuneration he has received for his great discovery is totally inadequate. *Page* 32.

Dr. Edward Warren, of Boston, states that Dr. Morton has devoted the past fourteen years almost exclusively to this discovery. That he has spent nearly all his time, strength and energy, in the most constant and strenuous exertions to introduce it to the public, whereby his business has been utterly destroyed, his health materially impaired, and he greatly involved in debt. *Pages* 32, 33, 34.

In 1861, the physicians and surgeons of Boston, fully appreciating the great value of Dr. Morton's discovery to the human family; recognizing his claim to the discovery; and aware of the time, labor and money he had expended in developing it, and introducing it into general use; and also aware that heretofore he had received no renumeration whatever for the invaluable blessing he had bestowed upon mankind, formed an association for the purpose of raising a testimonial expressive of their gratitude to Dr. Morton, and their sense of the value of his discovery. This association was formed in the city where the discovery was made, and first reduced to practice and announced to the world, by the *elite* of the profession in Boston—by men who were familiar with the entire history of the pain-subduing agent, from the first dawnings of discovery to the full meridian of brilliant success, and who could not be imposed upon by the impudent claims of a pretender.

In an address laid before the public by this association it is said: "While there is not an entire unanimity of opinion as to Dr. Morton's claims to the priority of the discovery, all who have investigated the subject agree, that the pre-eminent merit of first establishing by experiment what was before only a surmise or a conjecture, is his; and that without his courage, energy and perseverance, the discovery would not have been put into pactical operation." Page 48.

 operation, and that he is the one who first succeeded in effecting this result." Page 52.

The medical profession of New York, under the sanction of the names of hundreds of its most distinguished members, also published an address, in which the following testimony is given :---"The first great triumph of placing in the hands of the profession an agent capable of rendering the patient, safely and at will, utterly insensible to the stroke of the surgeon's knife, was in detecting, and establishing by an experiment, the Anæsthetic powers of sulphuric ether. For this discovery, the world is indebted to Dr. William T. G. Morton, of Boston. Whatever may have been the steps preliminary to this remarkable discovery, Dr. Morton's claim to it is established beyond all controversy, and his merit in this respect, with those who have taken the pains to inform themselves upon the subject, can be no longer a question of dispute." Page 57.

The members of the Massachusetts Medical Society memorialized Congress to make a just acknowledgment of, and remuneration for, Dr. Morton's great discovery; and certified to their belief that he "first proved to the world that ether would produce insensibility to the pain of surgical operations, and that it could be used with safety." Page 62.

The President and Professors of Harvard University, the President and Professors of Amherst College, of Williams College, of Bowden College, of Georgetown College, of the University of Michigan, Dartmouth College, and the University of Rochester, Hobert College, Western Reserve College, College of New Jersey, Rutger's College, University of Chicago, Union College, University of Vermont, the surgeons and the officers of the Army and Navy, and hundreds of gentlemen, of all the professions, and all departments of life, have addressed a petition to the present Congress, asserting their conviction, that "Dr. Morton was the first to discover or demonstrate the great physiological fact that the human system is capable of being placed safely in a condition in which it becomes insensible to pain;" and praying that compensation may be made him adequate to the benefits which have been conferred, and the resources of the nation which has received them. See printed petitions.

The Professors and Surgeons of the following Medical Societies, Hospitals, and Dispensatories, have given their autograph signatures in support of the claims of Dr. Morton:—American Medical Association; University of Pennsylvania; Jefferson Medical College; Pennsylvania College, Medical Department; Pennsylvania Hospital; Philadelphia Hospital; Wills Hospital; Episcopal Hospital of Philadelphia; Charity Hospital of Philadelphia; St. Joseph's Hospital of Philadelphia; Children's Hospital of Philadelphia; Pennsylvania Hospital for the Insane; City Hospital of Philadelphia; Board of Health; Howard Hospital; College of Physicians of Philadelphia; Philadelphia County Medical Society; Northern Medical Association; Medical Society of the State of Pennsylvania; Philadelphia Medical Society; Pathological Society of Philadelphia; Biological Department of the Academy of Natural Sciences of Philadelphia; New York Hospital and Bloomingdale Asylum; Bellevue Hospital, and other Institutions under the charge of the Board of Governors of the Almshouse; Nursery Hospital Randall's Island; Quarantine Hospital, Staten Island; Blackwell's Island Hospital; New York Lunatic Asylum; State Emigrant Asylum; St. Vincent's Hospital; St. Luke's Hospital; Jew's Hospital; New York Eye Infirmary; New York Ophthalmic Hospital; Colored Home Hospital; Woman's Hospital; New York Lying-in Asylum; Nursery and Child's Hospital; Demilt Dispensary; New York Academy of Medicine; New York Medical College; New York Pathological Society; Brooklyn City Hospital; College of Physicians and Surgeons; University Medical College; Members of the Massachusetts Medical Society; Massachusetts General Hospital; Massachusetts Eye and Ear Infirmary; Commissioners of Emigration, of the State of New York.

The Massachusetts General Hospital voted to contribute to a memorial in acknowledgment of the "great service which Dr. Mørton had rendered to science and to humanity, in connection with the discovery of the uses of ether." Page 67.

The Massachusetts Eye and Ear Infirmary voted a contribution to a memorial for Dr. Morton, as a "recognition of the greatest discovery of modern times, and an acknowledgment of the great service which that gentleman had rendered to science and humanity, by the discovery of the uses of ether." Page 67.

The Commissioners of Emigration to the State of New York, by a vote of their body, recognized Dr. Morton as the discoverer of the uses of sulphuric ether. *Page* 68.

The Medical Board of Bellevue Hospital resolved, that "to the zeal, perseverence and skill of Dr. W. T. G. Morton, of Boston, in using sulphuric ether to render persons insensible to pain, the world is indebted for the present extended and beneficial use of Anæsthetic agents in the practice of medicine and surgery; and that they are convinced that but for his energy, courage and success, there is no reason to believe that mankind would yet have received that boon from any of the gentlemen whose names have been prominently connected with this subject." Page 68.

Governor Banks, of Massachusetts, wrote to the Governor of New York, urging an "acknowledgment of Dr. Morton's great public service in the discovery, and introduction to common use, of sulphuric ether. *Page* 69.

Dr. James Jackson, of Boston, wrote to George Ripley, one of the editors of the American Cyclopedia:—"To Dr. Morton the world owes, at least, the introduction for useful purposes of sulphuric ether, by employment of which, by inhalation, he *proved* that insensibility might be produced in a human subject with safety, and be maintained during powerful surgical operations. * * * At present the benefit of it is known throughout the civilized portion of the world. Every day the persons that use the article must be counted by thousands." Page 69.

Dr. Jacob Bigelow, President of the Academy of Arts and Sciences, wrote to Dr. Parker :— "I think, from the investigations I have made, that there is no reason to doubt that he (Dr. Morton) is entitled to the exclusive merit of introducing the valuable discovery which he claim to have made; and that the efforts which have been made by others to deprive him of his claim, have been characterized by gross injustice." Page 72.

Professor Willard Parker, of New York, in a letter to Mr. Allsop, said :--- "Dr. Morton has laid the civilized world under an infinite obligation, and exhausted his means by so doing." Page 72.

Dr. John Watson, of New York Hospital, says :---" The discovery is sufficient to entitle Dr. Morton, who first demonstrated the Anæsthetic properties and use of sulphuric ether, to the gratitude of his countrymen, and to give him rank among the benefactors of the human race." *Page* 79.

Dr. Henry J. Bowditch, of Massachusetts General Hospital, says :--"I am convinced that had it not been for the boldness of Dr. Morton, the world, to the present hour, would have been ignorant of the peculiar adaptation of ether to alleviate human suffering. I say boldness now. In former times, however, I said rashness; for I believe i may say, without fear of contradiction, that the medical profession, as a body, would have feared death as the result of experiments such as are now made daily without the least fear. Dr. Morton has convinced us from error." Page 86.

Dr. Thomas P. Jackson, of Boston, considers this second to no discovery in medical science, not even to vaccination; and that we are solely indebted for its introduction to Dr. Morton. *Page* 87.

Professor Simpson, of Edinburg. in a letter addressed to Dr. Morton, November 10, 1847, says:—"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." Page 91.

indebted to you." Page 91. Dr. John Jeffries, Physician to the Massachusetts General Hospital, says:—"The world is indebted entirely to Dr. Morton tor the introduction of this agent to produce insensibility to pain, and it is a phsical blessing not second to any that has been conferred upon suffering humanity." Page 93.

Dr. Oliver W. Holmes, the distinguished poet and physician, says:-"It is a notorious and wholly undisputed fact, that Dr. Morton in person instituted the first decisive experiment at the risk of his reputation, and with a courage and perseverance, without which, even had the idea of the possibility of such effects been entertained, the world might have waited centuries, or indefinitely, before the result was reached." Pages 93-94.

Dr. George B. Loring, of Salem, Massachusetts, in charge of the Marine Hospital, at Chelsea, Massachusetts, says :—" Its credit has been, from the earliest date, almost universally accorded to Dr. Morton, by those of the profession who have given it their careful investigation."

During its development, the surgeons and officers of the Massachusetts General Hospital examined its merits under the special guidance of Dr. Morton, and with a full recognition of his sole agency in the practical experiments which were leading to its establishment. And now that these events have passed into history, the historian of the hospital records, as a fact fixed by all reliable testimony, that Dr. Morton is the discoverer. It should be borne in mind that this is the verdict of the immediate locality in which the discovery was made; and any recognition from abroad of Dr. Jackson's claims to it, is no more than should be expected from the scientific world, towards any pertinacious and untiring claimant holding his high position, be the claims true or false." Page 94.

Dr. Francis Booth, of London :---"I was much interested in the discussion of the ether question, and entirely agree with you in your conclusion. * * * Morton is first and Jackson nowhere." Page 94.

Proofs upon this subject might be multiplied almost indefinitely, but it cannot be necessary. It is not probable that in the history of inventions a case can be found where claims of a discoverer have been better sustained.

DR. HORACE WELLS,

His Claim as the Discoverer of Anæsthetics Examined.

It has been truly said, that "hardly an invention of importance was ever made known that it was not at once claimed, often simultaneously, from a variety of sources."

Dr. Morton's discovery constitutes no exception to this general rule. No sooner had he established the success of his discovery, and secured its acceptance by the world as a great and valuable one, than he was beset by two claimants to the honors of the discovery, who have ever since pursued him with an energy that might have made them discoverers and benefactors, had their exertions been directed in a proper channel.

The first of these is Dr. Horace Wells. To dispose of his claim, it is only necessary to present a summary of the evidence bearing upon it.

His first appearance in connection with the discovery, is by the procurement of Dr. Morton himself. He had once been Dr. Morton's partner in business. He regarded him as his friend; and immediately upon satisfying himself, by actual experiment, that his discovery was a reality, and destined to become as popular as he knew it was valuable, the thought was suggested of giving his friend and former partner an interest in it.

With this view, on the 19th of October, 1846, he wrote to Dr. Wells, then residing at Hartford, Connecticut, informing him of the discovery, and proposing to him to accept an agency—to visit New York, and other eities, and dispose of rights to use the Anæsthetic sharing the profits of all he should so dispose of. Page 97.

On the next day, October 20, Dr. Welles replied to this letter, saying he would visit Boston at an early day; urging upon Dr. Morton to make no arrangement for disposing of rights till he should arrive; and adding, "If the operation of administering the gas is not attended with too much trouble, and will produce the effect you state, it will, undoubtedly, be a fortune to you, provided it is rightly managed." Page 97. R. H. Eddy states, that upon Dr. Wells visiting Boston, a few days after, he met him at the office of Dr. Morton, where Wells witnessed experiments with sulphuric ether, and advised Dr. Morton to apply for a patent. In this interview and conversation Dr. Wells recognized Dr. Morton as the discoverer, and made not the slightest pretension of claim for himself. Pages 98, 99.

But subsequently the idea occurred to Dr. Wells of setting up as a great discoverer himself, and, in furtherance of his purpose, he addressed a letter to the Boston Post, dated April 19th, 1847, in explanation of his letter to Dr. Morton, of October 20th. The awkward and bungling explanation which he gives is, of itself, proof conclusive that his own claim to the discovery was altogether an after thought. To enable him to explain at all, he found it necessary very grossly to misrepresent the correspondence between Dr. Morton and himself, of 19th and 20th October.

He represents Dr. Morton as stating, in his letter of October 19th, that "he had discovered a compound, the effects of which, as described by him, entirely eclipsed those produced by nitrous oxide gas, or sulphurate ether."

There is no allusion in Dr. Morton's letter to gas or ether, nor comparison of the effects produced by them and his discovery.

Dr. Wells continues :—"He also stated that he had obtained a patent for this compound. I accordingly started for Boston to learn more of this improvement on my discovery, with which I had made him acquainted long before." Page 99.

Dr. Morton had made no allusion to a patent—did not intimate that he either had obtained, or intended to apply for one. Dr. Wells had made no allusion to improvement on his discovery—did not intimate that he had made, or ever thought of making a discovery. Dr. Morton's letter announced a discovery which he claimed as his own. Dr. Wells' letter, in reply, recognized whatever there was as Morton's cautioned him to be circumspect in disposing of it, and advised him that if its effects were what he stated them to be, he ought to realize a fortune out of it.

It is incredible that such a correspondence should have occurred, if Dr. Wells then believed himself to be the discoverer—if Morton's discovery was only an improvement upon his, and if he (Wells) then intended to assert a claim as the discoverer.

The history of Dr. Wells' discovery, if it can be called such, is given by his witness, S. A. Cooley, and constitutes a somewhat ludicrous chapter in the history of scientific researches and discoveries.

In December, 1844, in Hartford, Conn., Cooley inhaled the nitrous oxide or laughing gas. It produced the usual and well-known effect. He became turbulent—overturned some benches, and bruised his knees without present consciousness of pain.

Dr. Wells was present, and remarked that "he believed that a person could have a tooth extracted while under its influence, and not experience pain." Several persons present then went to Wells' office : Wells inhaled the gas, and whilst under its influence Dr. Riggs extracted a wisdom tooth from his mouth, and, when the effect of the gas had subsided, Wells exclaimed, "a new era in tooth-pulling." Page 100.

This is the entire history of the *discovery*. It disclosed nothing new. It had long been well known that a person in a state of high mental exaltation, or when fully under the influence of stimulants or narcotics, might be wounded or surgically operated upon without sense of pain. What was wanted was a convenient and reliable agent, which could at all times be trusted: which would produce *certain* and uniform results; inducing, with entire safety to the patient, at the will of the operator, a physical condition favorable to surgical operations, continuing the requisite length of time, and then passing off without injurious effects. This Dr. Wells did not accomplish. He made a few experiments in the extraction of teeth, and then abandoned the pursuit of what he concluded to be an unattainable object.

Cooley's statement is corroborated by Drs. Olmstead and Ellsworth of Hartford. *Page* 101.

About this time, 1844, Dr. Wells alleges that he extracted thirteen teeth, without pain, from persons under the influence of the gas. He then went to Boston to test his discovery in the medical college, in presence of its professors, and failed. The witnesses of his experiment discouraged him. He abandoned the pursuit as impracticable; and there is no evidence, and no assertion on his part, that he ever used the gas from the time of his visit to Boston until Dr. Morton's discovery was promulgated, and had attracted the attention of the world. Pages 102, 103.

Hon. James Dixon, United States Senator from Connecticut, in relating a conversation he had with Edward Warren, makes this statement :—"As near as I can recollect, that, about two years before, he heard that Dr. Wells was making some experiments with nitrous oxide gas, to prevent pain in extracting teeth; that having a severe tooth-ache, he called on him; proposing to take his gas; but Dr. Wells informed him that, after giving it to thirteen or fourteen patients with only partial success, he had abandoned its use as dangerous, and dissuaded him from resorting to it." Page 102.

Dr. Ellsworth, speaking of the failure in Boston, in the winter of 1844-'5, says :---"He presented it to Dr. Warren, who laid it before his class, but the experiment first attempted partially failing, and no one seeming willing to lend him a helping hand, he ceased making any further personal efforts." Page 103.

Dr. Wells himself afterwards said to George Brinley, of Hartford: "He was stupid, or a jackass, that he had not pursued it." Page 103.

Howell Olmstead, Jr., of Hartford, says :—"I considered that he had abandoned the thing entirely, as he expressed himself to me; that the operation in some cases proved a perfect failure, and spoke of his unsuccessful trial in Boston, in 1845. He expressed himself as being very sorry that he had not prosecuted his experiments to a successful termination." Page 104.

Dr. Cooley, of Hartford, says that he administered the gas for surgeons and dentists in Hartford, but that it was after the discovery of the ether, in 1846; being an attempt by them all to renew the experiments, as the public had lost confidence, and doubted the practicability of the thing until after the successful introduction of ether. That the last time he exhibited it, it in a great measure proved a failure, and then ether and chloroform assumed the place of gas. He further says, that he had a conversation with Dr. Wells, after his visit to Dr. Morton, in Boston, in 1846, and that Wells then made no claim of the discovery being his; but, on the contrary, expressed regrets that he had not continued his experiments to a successful termination. Page 104.

Dr. Cooley further says, in detailing a conversation with Dr. Wells, after the failure of his experiments at Boston :—"He then said to me that he was disappointed in the effects of the gas, and that it would not operate as we had hoped and thought it would, as there was no certainty to be placed upon it, and, consequently, he should abandon it, as he had so much other business to attend to, and as the gas would not operate in all cases alike, and therefore could not be trusted." Page 105.

Dr. Wells' experiments were all with nitrous oxide gas. Sulphuric ether and chloroform were neither of them in his theory nor pratice. The gas is totally abandoned, and ether and chloroform are now the universal agents.

If all be conceded which is claimed for Dr. Wells, it will not in the least militate against Dr. Morton's claim as the discoverer of the Anæsthetic properties of sulphuric ether, for Dr. Wells has never asserted for himself any such claim; as before remarked, all his experiments were with the nitrous oxide gas.

J. Gaylord Wells, one of Dr. Wells' principal witnesses, says:--"I inhaled the *exhilarating gas*, and, under its influence, had six teeth extracted without the least pain." Page 105.

F. C. Goodrich says :---" He has no knowledge of Dr. Wells ever using any other Anæsthetic agent than gas, and that he never knew or heard of his extracting teeth under the influence of *any* Anæsthetic after his return from Boston, in January, 1845, and before October, 1846. *Page* 106.

Dr. Wells himself, in a pamphlet published by him, says :---" I have confined myself to the use of nitrous oxide gas, because I became fully satisfied, from the first, that it was less injurious to the system than ether." Page 106.

Dr. Beresford, of Hartford, in his examinations, says :---"Dr. Wells never perfected, and brought into general use, the nitrous oxide gas as an Anæsthetic agent in surgical operations, and that he prefers other Anæsthetics to thus." Page 111.

Dr. Crane, of Hartford, says, it is not a valuable and efficient Anæsthetic. Page 111.

Dr. Greenleaf, of Hartford, witnessed its administration on one occasion. Produced vomiting, and was a total feilure. Page 112.

Dr. Bullock, of Hartford, had it administered once, but it was a failure, making the patient wild and restless, and he could not operate. *Page* 112.

Dr. J. Mason Warren :--- "My belief is that it is not to be compared, in ts effects, with sulphuric ether." Page 112.

Dr. Hayward :--- "In my opinion, the use of nitrous oxide gas is not altogether safe, and is by no means efficient, or convenient. * * * The effects produced by its inhalation are very uncertain, and very different in different subjects, and, therefore, it cannot be relied on for the purposes of surgeons." Page 112.

Dr. Henry J. Bigelow :--- "Nitrous oxide is not of much value as an Anæsthetic agent. * * It is not anywhere used, at the hospitals, or elsewhere, in surgical operations, nor in obstetric cases, to my knowledge." Page 113.

See also, upon the same subject, the statements of Drs. Marcy and Van Buren, and Dr. James R. Chilton, an eminent chemist of the city of New York. Page 113.

The French Academy of Sciences rejected the claim of Dr. Wells, remarking that the nitrous oxide was dangerous and improper, and did not produce the effects alleged by Horace Wells. *Page* 113.

Influenced by *ex parte* statements, and by the representations and solicitations of Hon. Truman Smith, Drs. Mott, Francis and Parker, eminent surgeons of the city of New York, made an affidavit, in December, 1852, asserting their belief that Horace Wells, of Hartford, was the original discoverer of the Anæsthetic principle, as applied to the removal of pain in surgical operations.

They were afterwards induced to investigate the matter; and, in December, 1858, published a card, in which they say, in reference to their former affidavit:—"We feel it to be our duty to state, that a subsequent and careful examination of the facts in the history of the discovery of Anæsthesia, have led us to a different conclusion. The undersigned coincide in the belief, that the first great triumph of placing in the hands of the profession an agent capable of rendering the patient, safely, and at will, utterly insensible to the stroke of the surgeon's knife, was in detecting and establishing, by experiment, the Anæsthetic powers of sulphuric ether. For this discovery the world is indebted to Dr. Wm. T. G. Morton, of Boston." Page 114.

Surely, it cannot be necessary to enlarge upon this subject.

Dr. Wells can hardly be considered any longer a competitor for the honors of the discovery.

An impartial consideration of the foregoing testimony must satisfy even his warmest partizans, that his claim is without the slightest foundation in truth.

DR. CHARLES T. JACKSON.

His Claim Examined.

Dr. Jackson seems to be laboring under as unaccountable a hallucination upon the subject of Anæsthetics as he did in regard to the discovery of the magnetic telegraph. His claim as a discoverer in this case is, if possible, less substantial and plausible than that of Dr. Wells; yet the vigor with which it has been pushed has heretofore occassioned some embarrassment to Dr. Morton, and subjected him to no little labor and expense in repelling it.

On the 29th January, 1849, Dr. Jackson addressed a memorial to Congress, in which he states:—" That the said discovery was made by the undersigned, without the knowledge of the said Morton, and without the co-operation or assistance of any person whomsoever; and was communicated by him to various persons from the spring and autumn of 1842, to the 30th September, 1846, inclusive, and on the said 30th September, was also communicated by him to Dr. Morton he (Morton) previously being wholly ignorant of the Anæsthetic properties and effects of sulphuric ether; and that on the said 30th September, he caused an experiment to be made by Morton, in the extraction of a tooth, and that he afterwards caused the discovery to be further verified by the surgeons of the Massachusetts General Hospital, in the first painless capital operation ever performed under the influence of the ether vapor." Page 116.

This is an extraordinary statement, and requires to be well sustained by evidence before being made the basis of a decision which shall settle so important a controversy as is here involved. If true, it is easily susceptible of proof. If untrue, it might and probably would be very difficult to disprove any part of it, and impossible to contradict some of its material statements.

There were two witnesses present at the interview between Morton and Jackson, on the 30th September, 1846, when, Jackson says, he communicated his discovery to Morton, and caused him to verify it by an experiment.

They have both been examined. One of them, Barnes, corroborates Jackson's statement that when he advised the administration of sulphuric etner, he avered that it would render the operation painless, and that it was safe, and he would be responsible for its consequences. Page 119.

The other, McIntire, a student of Dr. Jackson, and testifying with a strong prepossession for him, does not support him in either of these importants points. He says Dr. Jackson advised the use of sulphuric ether, said it was safe, that it would make the patients insensible, and that the operator could do what he had a mind to with them. But he states no assumption of responsibility, and no opinion or assurance of Dr. Jackson, that the vapor of sulphuric ether would render the patient insensible to pain. Yet the statement of a fact, so novel and interesting in surgery, made by his preceptor, could hardly have failed to attract his attention, and fix itself strongly in his memory. But it could not have been so, and Dr. Jackson and his witness, Barnes, are manifestly bota mistaken. Page 119.

On the 23d of October, 1846, Dr. Jackson related to Mr. Eddy the conversation he had had with Morton on the 30th September. Eddy in giving an account of it, says: —"After Dr. Jackson had related the above, I said to him, 'Dr. Jackson, did you know at such time that after a person had inhaled ether, and was asleep, his flesh could be cut with a knife without experiencing any pain?' He replied, 'No, nor Morton either; he is a reckless man for using it as he has; the chance is, he will kill somebody yet." Påge 119.

Hon. E. Warren, in narrating a conversation between him and Dr. Jackson upon the same subject, says—"Dr. Jackson told me, in substance, that the so-called discovery was not his, but that Dr. Morton was responsible for it; that the use of ether was dangerous, and would, he feared, be attended with fatal consequences; that he was not answerable for the results, and that, therefore, he would refer me to Dr. Morton for further information." Page 119.

But Dr. Jackson says he caused a further verification of his discovery by the surgeons of the Massachusetts General Hospital, in the first painless capital operation ever performed under the influence of ether.

If this be so, nothing can be easier than to prove it. It is hardly possible that the officers and surgeons of the hospital should either forget, or mis-state the facts connected with so interesting and remarkable an event in the history of the institution.

Hear, then, what they have to say upon the subject.

Dr. Townsend, one of the surgeons, says:

"Dr. Jackson presented himself, for the first time, on the 2d of January, 1847, and brought with him a bag of oxygen gas as an antidote to asphyxia."

"On that day I amputated the leg of a female. Dr. Jackson then appeared in the operating room with a bag containing oxygen gas under his arm. He stated to me there, that we should always have oxygen gas prepared and ready, in case of accident in the employment of the ether, and he feared that some accident would take place in the use of it." Page 120.

In a long letter addressed by Dr. Jackson to Baron von Humboldt, dated November 22, 1851, he makes some curious statements. Among others-"That I did first discover that the nerves of sensation could be and were paralyzed to all sensation, temporarily and safely, by the inhalation of ether vapor, is admitted by all scientific men who have examined the evidence. That 1 did first prescribe the administration for the purpose of preventing all sensation of pain in surgical operations, with the guarantee, on my medical and scientific responsibility, of its entire safety, if my directions were strictly obeyed, and did thus introduce the use of pure sulphuric ether, mixed with air, into surgical practice, is fully proved by abundant testimony; and this is admitted by all persons who have examined the evidence that I have caused to be printed. The only point contested by my opponents is, that, in their opinion, I had not sufficient reason for drawing the inference that I did, as they admit, draw from my data; and that I could not have known the full extent of the insensibility to pain of a surgical operation, and that this remained to be verified by actual trial." Page 122.

Now, what Dr. Jackson calls the only point contested by his opponents, is a point that has never been raised at all; whilst the points which he says are admitted by all, are not only not admitted, and never have been admitted, nor have they been proved by him, although it was perfectly easy to prove them, if true; but have always been denied, and over and over again disproved by Dr. Morton. So far from either of these two points being conceded to him, as he claims, they were both adjudged against him, long before the date of his letter from which the above quotation is made, by the Massachusetts General Hospital, in their report of January, 1848, and most distinctly and emphatically so by the report of the Committee of the House of Representatives, of February 24, 1849.

The Hospital report notices this subject as follows:—" Down to September 30, 1846, Dr. Jackson had discovered nothing that had not been known and in print in London for some years. It was known that ether would produce insensibility; that such an insensibility, though sometimes fatal, was sometimes safe; and that one of the properties of ether was its power to obviate the ill effects of an inhalation of chlorine gas. The discovery of the safety and efficiency of the inhalation of ether in surgical operations had not yet been made; the only experiments which Dr. Jackson had tried, or caused to be tried, being those already prescribed by the text books. Page 123.

* * * Dr. Morton administered it to a patient, and, by so doing, he made this discovery. On learning this result, Dr. Jackson very naturally suggested to Dr. Morton, that he had better get the ether tried by the surgeons of the hospital, which a witness of Dr. Morton's, however, alleges that he had previously determined to do. But all the subsequent steps were taken by Dr. Morton himself, without the slightest sympathy or co-operation on the part of Dr. Jackson, who, from the alleged fear of his recklessness, withheld from him all countenance and encouragement. * * * * * *

Dr. Morton, by consenting to permit Dr. Jackson's name to be united with his in the patent, with the right to receive one-tenth part of its profits, has shown himself disposed, fairly and honorably, to recognize the amount of his indebtedness to Dr. Jackson's advice." Page 124.

In the report of the committee of the House of Representatives, in 1849, where these questions are carefully examined, the conclusion is against the claim of Dr. Jackson on both these points. The following passages from the report are worthy of attention :---" Had Dr. Jackson made the discovery, and felt that it was his, he could not have failed to be at once aware of its vast importance, and the world-wide reputation it would give him; and he would not have trusted it, for a moment, in the hands of a man less skillful and scientific than himself. Indeed, would he have entrusted it with any one? But would he not himself have seen that it was administered in a proper manner, and under proper conditions to make it safe and effectual? Would he not have stood by and watched the sinking pulse of his first subject, until insensibility was complete, and have been careful to withdraw it when he saw it was likely to endanger life, and have done all that science and skill could do to avoid a failure or a catastrophe? But there was nothing of this. Having given the information which he did give in the conversation with Dr. Morton, he turned neither to the right nor left, nor troubled himself farther on the subject, until he was advised by Dr. Morton that the experiment had been successful. He expressed no surprise, no emotion. Page 125.

* * * He advises Dr. Morton to get permission to try it in the hospital, and does not propose to be present, and, in fact, is not present when the trial is made, though the hospital was but five minutes walk from his door. That operation was successfully performed, and another was noticed to take place the next day, about which Dr. Jackson gave himself no concern, and at which he was not present. The committee feel that his conduct during this time was wholly inconsistent with the fact that he recognized the discovery as his own, and that these were his experiments." Page 126.

"The evidence of Francis Whitman, Mr. Caleb Eddy, and Hon. Edward Warren, shows that, prior to and up to the 23d October, Dr. Jackson spoke doubtingly of the effect of ether, and condemned its use; and there is no proof whatever, that, within that time, he lent the slightest countenance to Dr. Morton to sustain the discovery, and all his remarks, except those stated by Mr. Hitchcock to have been made to him on the 2nd and 3rd of October, tend to create distrust, and destroy confidence both in the operator and the agent used." Page 128.

Mr. Peley W. Chandler says:---" Dr. Jackson regarded this affair not as a settled thing, or not as a discovery that was to be anything remarkable in itself, or one that was likely to be applied beneficially, in itself considered. * * 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 expressions 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." Page 128.

Dr. Morton demonstrated the value of his discovery by actual experiment, and unaided and alone, against the organized and persistent opposition of the entire dental profession, and the great body of the medical profession, and without countenance, encouragement, or sympathy from any quarter, fought its way to public favor and confidence, and literally *forced* it into general acceptance. The only aid Jackson gave him, during this gloomy period, and through this unequal and discouraging struggle, was to indulge, continually, in a course of depreciating remarks, calculated to bring Dr. Morton into contempt, and his new agent into ridicule. Nothing could have been more ungenerous than this, except the attempt subsequently made by Dr. Jackson to seize upon, and appropriate to himself, all the honor and all the glory of the great discovery, the moment it was recognized as a great scientific triumph, which was certainly to bring fame, and, perhaps, fortune to somebody.

Dr. Jackson now claims to have made the discovery in the winter of 1841-'42; but it was never heard of until it was brought forward by Dr. Morton, in 1846, and even then not claimed by Jackson till it had become an acknowledged success in Morton's hands, and when reputation was no longer jeopardized by being connected with it.

Since then he has devoted time, talent and money, and written much, and caused much to be written, to establish his claim and secure to himself the fame of the discovery. In 1841-'42, he had no competitor. He had only to announce his discovery, and present it to the world, to secure, without question or controversy, what he has now wasted years and expended thousands in a vain attempt to filch from another. If he did discover it, as he now says, in 1841-'42, he had not the courage to make it known; but left the world to groan on in pain and misery, till Dr. Morton's energy and research re-discovered it and his heroism promulgated it, and secured its acceptance by the world.

But, it is incredible that, in the winter of 1841-'42, Dr. Jackson did, in fact, make the discovery, and in earnestness, and in faith, and enthusiasm, was possessed with it, and with an animating desire to give it, and to give his name with it, to mankind; and that no cotemporary written paper or pen mark, by himself, or any one of his numerous friends or pupils, can be found to attest it. The thing is too preposterous to be believed, and is only a pretext and a subterfuge with those who are unwilling to reward a great benefactor of their race.

Dr. Jackson's first claim to the discovery, which appears on paper, is in a letter addressed by him to M. Elie Beaumont, dated Boston, November 13, 1846, and opened and read to the Academy of Arts and Sciences at Paris, at their meeting, January 18, 1847. Page 130.

This paper was written after the discovery had been, in fact, made; after the first capital operation had been successfully performed under the superintendence of Dr. Morton; and after Dr. Jackson had nearly, but not quite, made up his mind to claim the discovery as his own; was enclosed to Beaumont with directions to file it in the Academy of Arts and Sciences of Paris; but not to break the seal until thereto directed. He wanted further verification of the safety and efficacy of the Anæsthetic agent, before taking the decisive step of announcing it as his own. He, therefore, directed the letter making the claim to the discovery to be deposited, *sealed*, in the Academy of Arts and Sciences, at Paris, not to be opened till he should direct.

The success of the pain-subduing agent between that day and the first of December, 1846, removed all doubt. The discovery was established; it already stood first in rank of the discoveries of the century; and fame, and honors, and rewards, awaited the discoverer. On that day, and under these circumstances, Dr. Jackson wrote another letter to Beaumont, directing him to open the sealed packet, and publish him to Europe as the discoverer. *Page* 134.

On the 30th of September, 1846, the day on which Dr. Morton made his first experiment of an operation under the influence of the Anæsthetic, he called on Dr. Jackson to consult with him as to the proper preparation and purification of sulphuric ether, and Dr. Jackson gave him his advice. This is, in fact, the only connection Dr. Jackson ever had with the discovery, and so he, himself, for some time regarded it.

After Dr. Morton's experiments had proved successful, he (Jackson) called on Morton and informed him he should charge him \$500 for the information he had given him respecting sulphuric ether, on the 30th Septen ber; and accordingly, on returning to his office, he entered the charge in his books. He afterwards united with Dr. Morton in procuring a patent, but only for the purpose of securing the payment of the \$500 he had charged for his advice, and stipulated for 10 per cent. on the proceeds of the patent, if it should amount to so much as \$500. Dr. Jackson now pretends that the discovery was his, and the experiments to verify it his, and that when Morton administered it at his own office, and extracted a tooth, and that when he subsequently administered it at the hospital, and the surgeons amputated, he was acting by his (Jackson's) direction and procurement, and under his advice, and as his agent, and for his benefit. This being the relation of the parties to each other, Morton would have been the one to claim compensation, and Jackson the one to pay it; but instead of this, the singular and unprecedented spectacle is exhibited of Morton performing an operation for Jackson, at his request, and in accordance with his directions, and Jackson charging him \$500 for the directions by which he required him to govern himself in the execution of his (Jackson's) business. The story won't bear telling. Page 140.

But again, if, at that time, the thought had occurred to him of claiming the discovery, and all its honors and emoluments as his own, he would hardly have consented that another should become the patentee, with the right to appropriate nine-tenths of the profits.

Dr. Henry J. Bigelow. Professor in Harvard University and Surgeon in the Massachusetts General Hospital, says: —"He (Dr. Jackson) not only exercised no superintendence at the hospital, assumed no responsibility, but actually did not come there for more than two months after ether was regularly in use in that institution. * * * He never saw a single surgical or dental operation with ether, until long after it was a confirmed discovery. * * * It is well known that he kept aloof, for a long time, from any public connection with Dr. Morton, or with ether, while physiological papers were written by the dozen by other people. * * * Dr. Morton instituted the experiments; he had the sole control; he took the responsibility of them, while Dr. Jackson kept out of the way." Pages 152, 153.

In an article published in the Medical and Surgical Journal of July 7, 1847, Dr. Jacob Bigelow, President of the Academy of Arts and Sciences, Professor in Harvard University, &c., says:—"In the case of Dr. Jackson, if he did make the discovery in 1842, as asserted, or even later, he stands accountable for the mass of human misery which he has permitted his fellow creatures to undergo, from the time when he made his discovery to the time when Dr. Morton made his. In charity we prefer to believe that up to the latter period, he had no definite notion of the real power of ether in surgery, having seen no case of its application in that science." Page 91.

But Dr. Jackson appeals to the Academy of Arts and Sciences, at Paris, and claims that that learned body has decided the question of discovery in his favor by awarding him the "Monthyon Prize for the greatest medical discovery," and that their decision ought to be taken as final and conclusive.

If it were true that they made such a decision, and made it with full knowledge of all the facts, it would certainly be entitled to great weight. It is enough to say that Dr. Jackson is mistaken in his assumption. The award to him was "one of the prizes of medicine and surgery of the Monthyon foundation," and this was expressly made in consideration of "a fact observed" by him, which aided Dr. Morton developing his own idea into discovery. Page 157.

The award by the French Academy was made in January, 1849, as appears by Minority Report, No. 114, 30th Congress, 1848-'9, February 28.

At that time Dr. Morton's evidence in support of his exclusive right had not reached the Academy. They had, in part, been suppressed by one who had been prejudiced against him, and was in the interest of Jackson.

The following evidences are submitted in support of this statement:

"The Compte Rendus of the Academy (a copy of which is in he Smithsonian Institution) contains, under date of March 24, 1848, the following:

'M. Morton announced the sending of documents destined to establish in his favor the priority relative to the discovery of the effect of the inhalation of the vapor 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.'

Littell's Living Age, No. 201, contains the following:

"Now, at that time even the evidence which had been forwarded by Dr. Morton had not reached them. Dr. Morton also met with another misfortune. All his pamphlets consigned for distribution to the principal journals and the chief surgeons and men of science in Great Britain, got into the possession of a person who had become committed and prejudiced against Dr. Morton, and they were suppressed."

These evidences had been forwarded to the Academy through Harnden & Co., of Boston, who, in March, 1849, two months after the award had been made by the Academy, addressed Dr. Morton the following letter upon the subject:

' BOSTON, March 14, 1849.

'DEAR SIR: By a letter received from our Paris agent while you were in Wasington, we learn that your pamphlets, addressed to the French Academy and others, owing to a wrong impression, have not as yet been received. They remained at the French custom-house from May 6th to December 16th. The duties on them have now been paid, and they are in the hands of an agent at Paris awaiting your further instructions. Please give us your orders in season for transmitting per next steamer from Boston.

'We remain your obedient servants,

'HARNDEN & Co.

'W. T. G. MORTON, M. D.'

Thus, this report, so vaunted by Dr. Jackson, was made on his *ex* parte showing. The Academy had Dr. Morton's memoir, with a fragment of his testimony, but the bulk of his evidence had not reached them. Dr. Morton, himself, was wholly unknown to them, and was depreciated before them by Dr. Jackson's representations, whilst he and his pretensions were supported by his friend, M. Elie de Beaumont.

In this state of things all that Dr. Jackson could procure was such a report as we have seen. See Mr. Poor's letter, page 469 of Statements supported by evidence of William T. G Morton, M. D., on his claim to the discovery of the Anæsthetic properties of ether; submitted to the Honorable the Select Committee appointed by the Senate of the United States, 43d Congress, 2d Session, January 21, 1853. Presented by Mr. Davis, of Massachusetts, and referred to the Select Committee to whom had been referred the petition of sundry Physicians of Boston and vicinity, in support of the claim of W. T. G. Morton, M. D., for the discovery of Etherization.

Under these circumstances, Dr. Morton declined to receive the joint award; protested against the decision of the Academy; and, in 1852, received the large gold medal—Monthyon Prize of Medicine and Surgery.—American Cyclopedia. See also page 157 of Report.

IS THE DISCOVERY OF ANY VALUE?

It seems almost needless to make or answer this enquiry.

It is not believed that there has ever been a discovery or improvement in medical science which secured a more unanimous approval of the profession, or was more universally accepted by all classes and conditions of society.

It may not, however, be improper to call attention to some portions of the testimony upon the question of value.

Dr. A. Gould, of Boston, says :---" It is invaluable. I am unable to fix a money value upon it." Page 28. Dr. Jacob Bigelow, Boston :---"If it was only to be purchased with

Dr. Jacob Bigelow, Boston:—"If it was only to be purchased with money, millions of dollars would readily and properly be paid by persons who are subjects of the pain it is competent to avert or relieve." *Page* 28.

Dr. J. Mason Warren, Boston:—"Its value is beyond all money; it is beyond computation." Page 28.

Dr. H. Q. Brigham, Boston, says:-" Five hundred thousand dollars." Page 28.

Dr. E. B. Warren, Northern Dispensary, New York; Dr. John H. Grisson, New York; Dr. Robert F. Weis, Surgeon New York Hospital; Dr. Godfrey Aignes, New York Dispensary; Dr. J. Henry Watts, New York Dispensary; all concur in saying its value is incalculable, and cannot be estimated in dollars and cents. *Page* 29.

John Torrey, Chief Assayer at the United States Assay Office, and Consulting Chemist, says :---" It is extremely difficult to estimate its value in money. I have said that Dr. Morton ought to have a monument of gold as high as Trinity Church steeple, and I see no cause to alter my opinion." Page 29.

Dr. Jonas P. Loines, House Physician to the Eastern Dispensary, New York City:—"The discovery of its use, as Anæsthesia, worth in the neighborhood of one million and a half of dollars, so far as can be known, in this country." Page 29. Surgeon Wheelan, Chief of the Bureau of Medicine and Surgery in the Navy Department, said, in a report to the Secretary of the Navy:—"I regard the discovery as one of more importance, in many senses, than any of those triumphs of genius which have conferred immortality and fortune on their authors; for it alone interests every condition and calling of humanity, and is as wide spread in its application as the primal cause of pain, which it so effectually destroys."

"I believe there is scarce an intelligent physician or surgeon, in either hemisphere, who has not had occasion to use these agents, and whose judgment does not indorse their value."

"To estimate the pecuniary value of such a discovery, if I am called upon to do so, is not so easy a matter." Page 44.

In a publication made by the most learned and eminent men of the medical profession in New York, it is said:—"The introduction of this agent * * * has done more for the mitigation of human suffering than any other discovery, with the exception, perhaps, of vaccination, for which the world is indebted to medical science in either ancient or modern times." Page 57.

Dr. James Jackson, of Boston:—"If the knowledge of it could be lost, millions and millions of dollars could be raised for the recovery of it." Page 69.

Dr. Wheelan, again speaking of it in a letter addressed by him to the chairman of a committee in Congress, says :---"Anæsthetics have come into such general use that a surgical operation performed without such agents may be regarded as the exception to an almost universal rule in this as in other countries." Page 76.

Dr. Lawson, who, at the time, was Surgeon General of the United States Army, in a letter addressed to Dr. Morton, said :----"I regard it 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. * * * Operations can now be performed with much more safety than heretofore. * * * 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." Page 77.

Dr. George Hayward, Professor in Harvard University, says :--"I certainly regard this discovery as one of the greatest of the age, and think that Dr. Morton is entitled to a liberal grant from our country for the benefit that he has conferred on the human race." Page 87.

Dr. John F. May, Professor of Surgery, National Medical College, Washington, D. C.:—"I believe that the medical faculty throughout the civilized world, where Anæsthesia has been introduced, considerit to be one of the greatest boons that has ever been given to suffering man; and believing Dr. Morton to be its discoverer, I trust he will receive from government a compensation commensurate with the immense benefit it has conferred upon the human race." Page 89.

Dr. A. H. Steevens, of New York :-- "1 consider it the greatest discovery in medicine since that of Jenner." Page 90.

Dr. Hugh H. McGuire:—"I regard the discovery of Anæsthetic agents the most important discovery made in surgery for the last century. It is also entirely American; for although attempts have been made, for a long time, to destroy sensibility to surgical operation, no approximation was made to it until it was discovered, in Boston, that sulphuric ether would produce total insensibility. * * * It would be just and proper to make him a liberal pension for it." Page 90.

Dr. Parkman, of Boston,—"In private practice, in this city, Anæsthetic agents are in universal use in all surgical operations, and also in all operations of midwifery. They are in quite general use in all diseases requiring an antidote to pain and spasm, as one of the means to allay them, and some practitioners use them in all cases of child-birth." Page 91.

Dr. Townsend, of Boston, says the same thing, adding:—"I believe it diminishes mortality. * * * In cases of midwifery, it prevents the sensation of pain, without retarding delivery." Page 91.

Dr. S. Mason Warren, Dr. John Ware, Dr. J. S. Jones, and Dr. Z. B. Adams, all of Boston, bear the same testimony to the value and efficacy of the agent. *Pages* 92, 93.

Drs. Paris and Anderson, of Alabama; Dr. Blanding, of South Carolina; Dr. Ellis, of Georgia; Drs. Ayer, Crane, Dix, and Morse, of Boston; and Dr. Appleton, of Massachusetts; all bear testimony, in the most emphatic terms, to its great value and very general use.— *Pages* 94, 95, 96.

HAS THE GOVERNMENT USED AND HAD THE BENEFIT OF THE DISCOVERY!

Dr. Wheelan, Chief of the Bureau of Medicine and Surgery in the Navy Department, states that "Sulphuric ether was adopted in the Navy soon after the discovery of its peculiar properties; it still continues to be largely used, and for some years has formed an item in the allowance table of medicine." Page 44.

Dr. Lawson, then Surgeon General of the United States, reported to the Secretary of War that the Anæsthetic agent is regularly supplied to and used by the medical officers of the army; that he considers it one of the greatst boons ever given to suffering man, and that the government is bound to pay Dr. Morton for its use, or desist from its further employment. Page 45.

The Surgeon-in-Chief, Dr. Calvin Cutter, of Sturgis Field Hospital, and his operative staff, Drs. Leonard, Hossack and Webster, in a communication to Dr. Morton, immediately after the battle at Fredericksburg, state—" That they could not have performed so many needful operations, and so well, without Anæsthetics. Their use not only entirely prevented or greatly mitigated the sufferings of patients, but very materially lessened the embarrassment of the operating surgeon.

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* * Permit us to return thanks for the administration of Anæsthetics to the patients by yourself. It was essential aid to our surgeons." Page 73.

Surgeon General Hammond, in a letter addressed to the Chairman of the Committee on Military Affairs in the Senate, dated February 24, 1863, states that in ninety-nine out of every hundred cases of amputation in the military hospitals and on the battle-field, Anæsthetics are used. *Page* 76.

As long ago as 1852. Dr. Lawson said :— "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." Page 76.

Letter of like import from Dr. Harris, Chief of Bureau of Medicine and Surgery in Navy Department, 1852. Page 78.

In 1852, sixty army and navy surgeons testified that Anæsthetics were used in surgical operations in the army and navy—several of them adding that its use tended greatly to diminish mortality. *Pages* 80, 81, 82, 83, 84, 85.

A petition signed by several hundred surgeons and officers of the Army, and laid before Congress at its present session, attests the universality of the use of Anæsthetics in the Army. The petitioners say that, "in their opinion, the introduction of Anæsthetics would have been worth millions of money to the country during the present war, could they have been no otherwise obtained; and that it is due to the character of a great people, whose soldiers have been so signally benefitted by this discovery, that their representatives should express to Dr. Morton their gratitude for the benefit he has conferred upon his fellow countrymen, as well as upon all mankind, by some testimonial of a value adequate to the benefits which have been conferred, and the resources of the nation which has received them.

HAS DR. MORTON BEEN COMPENSATED FOR HIS DIS-COVERY ?

It is shown by testimony of the most satisfactory character, that Dr. Morton has expended, in money and time, and sacrifice of professional business, more than two hundred thousand dollars in discovering, defending the discovery, and his right thereto, and in perfecting, introducing into use, and giving to the nation this great alleviator of suffering. *Pages* 5. 39, 40.

In a publication made by an association of gentlemen of Boston, it is said:—"So far from being a gainer, he has been a loser to a very large amount, by the sacrifices and expenses incurred by him in introducing his discovery and vindicating his claims. Page 50.

The poet and physician, Dr. Oliver W. Holmes, states that:—"It is well known that Dr. Morton, instead of profiting by his discovery, has suffered in mind, body and estate, in consequence of the time and toil he has consecrated to it." Pages 93-94.

He had hoped, and had a right to expect a generous pecuniary compensation for the sacrifices he had made, and the inestimable blessing he had bestowed upon mankind; but thus far disappointment has met him at every turn. The fortune predicted for him by Dr. Wells has not been realized, and he is still struggling with the embarrassment of debts incurred in making and perfecting his great discovery, and in pursuading the world to accept it.

In 1846, he procured from the Government a patent of the exclusive right to use, and send to others for use, his Anæsthetic; but this resulted in no pecuniary advantage to him, for the Government has habitually and systematically infringed its own patent by introducing etherization into the surgery of the Army and Navy, on shipboard, upon the battle field, and in the hospitals, and by its example encouraging all others to disregard his patented rights.

In the very nature of the discovery it was impossible for a patent to secure to him, as to other discoverers, the benefit of pecuniary results. He, therefore, applied to Congress for compensation.

This claim was investigated by committees of both houses, and favorable reports made; but no bill was ever passed to carry out the recommendation, though a bill has twice passed through one house of Congress for that purpose. Pages 3, 40, 41.

In 1854, he petitioned the President to purchase his patent, or to restrain its further violation by the government. Page 42.

One hundred and fifty members of the Senate and House of Representatives united in advising the acceptance of his proposition. Page 43.

At this stage of the case, the President advised him to bring suit against some one of the medical officers of the government, for an infringement of his patent; get a judicial determination of his right, and that then compensation should be made. The suit was brought. After much delay and expense, judgment was recovered; but, in the mean time, a new administration had come in which refused to carry out the promises of its predecessor, and he was as far from obtaining justice as ever. Page 46.

Dr. Thomas P. Jackson, of Boston, says :---- "My opinion is that no compensation Congress can confer on Dr. Morton will equal his deserts; and I really hope that for once a deserving man may receive his recompense during his life, instead of having a monument erected over his grave." Page 87.

See also letters from Dr. Gould, Dr. Dudley, and Dr. Pierson, of Boston, testifying to the value of the discovery; to Dr. Morton's undoubted claim to the discovery, and his right to compensation. *Page* 88.

Numerous letters written by surgeons of the Army, establish the fact that mortality from surgical operations during the present war, has been diminished one half by the use of Anæsthetics—that they contribute to the more rapid recovery of the patient—that one surgeon can do more with Anæsthetics than four without them—that they increase the daring of the soldier on the field, diminish objections in the minds of many to enlistment; and finally, all agree that if the knowledge of the discovery had to be purchased now, for the use of the Army and Navy alone, the people would demand of their representatives to do so though it should cost millions. Is it not wonderful, and as unjust as wonderful, that whilst the government is daily and hourly availing itself of the vast benefits of the Anæsthetic in its military and naval service, in its camps and hospitals, and saving thousands of lives, and millions of dollars by its use, that it should refuse to make adequate, or even any compensation to the man to whom it is exclusively indebted for the priceless boon, and who is made and kept poor by this very infringement of his patented rights and use of his discovery? For what sum would the government now consent to forego its use in the hospitals in sight of the Capitol, for a single year, or even after a single battle?

What the compensation shall be must be determined by Congress. The case of Jenner, the discoverer of vaccination, is one of the closest analogy. The British government appropriated to him one hundred and fifty thousand dollars, and as much more was raised by a national subscription. The one discovery is the glory of English, and the other of American medicine.

The inventor of the screw was paid a hundred thousand dollars by the British Parliament. Daguerre, for his discovery, seventy-five thousand dollars by the French government.

Alike honorable to themselwes and to our countryman, Prof. Morse, several of the principal governments of Europe joined in presenting to him an honorary testimonial of eighty thousand dollars for the telegraph discovery Several European governments have also sent Dr. Morton signal recognitions.

There are many precedents in our own legislation of compensation to inventors, a few only of which can be cited.

Boulton, Wright, and Fisher, were paid five thousand dollars each for their machines for making and charging percussion caps.

Capt. Ottinger ten thousand dollars for the use of life and surf cap, &c.

For the right for elevating and pointing heavy cannon, twenty thousand dollars; and for the right to use patent anti-attrition metal twenty thousand dollars. We paid to the heirs of Rob't Fulton for the benefits conferred by his improvements in steam navigation, seventysix thousand three hundred dollars. We paid to McCullough & Boothe for the right to use the improved method of refining our argentiferous gold bullion, twenty-five thousand dollars.

We paid to E. N. Kent for

We paid to D. Myerle for

twenty thousand dollars. twenty thousand dollars.

The government has also purchased the Coston night signals, at a cost of \$30,000; the patent right to manufacture and use Cross's brush ferrules; the patent right to use Buckley's patent dry kiln for seasoning lumber; the right of making and using Sickles' improved patent cut off; the right to use Allen & Noyes' patent metallic packing for engines; the right to use Crawford's steam water gauge; the right to make and use Blanchard's patent lathes; the right to make and use patent self-acting blow-off valves; the right to make and use improvement in boilers; the right to use Pierson's patent condensers; the right to make and use Blanchard's improvement for detaching boats from their tackle; the right to use Martin's boilers; the right to use Mont-

gomery's patent propeller band; and many other inventions quite too numerous to be mentioned.

Since the commencement of the present war, millions have been paid to test discoveries, for the privilege of making patented articles, and for secret inventions.

The estimate of the medical profession, several years ago, as to what would be just compensation to be paid by the government for the use of the Anæsthetic, ranged from one hundred thousand to a million and a half of dollars. With the experience we have since had of its value, and the great benefits resulting to the country from its use, all will no doubt agree, that two hundred thousand dollars would be not one tithe of what has been saved to the government, and only a meagre remuneration to the discoverer.

In almost all other cases, inventors and discoverers aggrandize themselves by means of monopolies under patents.

The inventor of the telegraph realizes thousands of dollars by his inventions, and sees his patent extended, by which he will realize hundreds of thousands more. The introductor of the sewing machine receives half a million, and his patent is extended, that he may secure still more. The invention of the Vulcanized India Rubber fabrics, has put millions in the pockets of those who have enjoyed the benefits of the monopoly, and a renewal of the patent was given, by which their gains would be duplicated.

So with the inventor of the reaping machine, and so in hundreds of other cases which might be mentioned.

But in this case such monopoly is neither practicable nor desirable; hence the discoverer has thus far been without pecuniary reward.

Yet this discovery is as much more valuable, than any and all others which have been made in this country, than the relief of human suffering and the preservation of human life, is more valuable than any mere product of man's hands.

These considerations cannot, surely, be overlooked by a just and magnanimous government.

PRETENDERS TO INVENTIONS AND DISCOVERIES.

That Dr. Morton's claim to this discovery should be contested is neither new nor suprising.

It always has been thus, and always will be, whilst men are emulous of the fame of inventors and discoverers, without the ability to become such. "And the witness, before the House of Commons, probably did not overstate the matter when he gave it as his opinion that if a man were to show that he had found a road to the moon, his neighbors would testify that, if they had not been there themselves, they knew several individuals who were familiar with the road in question."

Wm. Harvey's discovery of the circulation of the blood was disputed by several old writers, and more recently by Wm. Hunter and J. R. Cox.—American Cyclopedia. Several of his medical brethren endeavored to rob Edward Jenner of the merit of the discovery of vaccination.—*American Cyclopedia*.

Very many other instances of the same sort have occurred, which it is not deemed necessary to cite.

One, however, at no very remote period, occurred in this country so strikingly analogous to the present case, that attention is called to it.

After Professor Morse had invented and perfected the Electric Telegraph, a pretender attempted to rob him of the honor.

The same Dr. Jackson, who now claims to be the discoverer of the Anæsthetic, imagined himself the inventor of the telegraph, and brought forward and urged his claim to it precisely as he has done to etherization.

He wrote a letter, as in this case, to a member of the French Academy of Sciences, in which he said :—"I regret to see in the public paper, that Professor Samuel F. B. Morse has appropriated to himself my Telegraph Electro Magnetic. I explained to him this instrument long ago, on board the packet ship Salley, when I returned to America, in the month of October, 1832. I am pained at the undeserved patronage which the French philosophers have awarded to Mr. Morse.

The invention which he has shown them, belongs exclusively to me. Since I have known what were his pretensions on the subject, I addressed him my protest, but I see that he perseveres. I pray you to inform the Academy, that Mr. Morse has not invented the New Telegraph, and that I gave him the description in 1832."

It will thus be seen that Dr. Morton, in having his claim contested, has only shared the fate of all the great discoverers of the world, and that that fact should not stand in the way of his recognition by a most liberal reward from the Government.

