X The late Dr. J. N. Borradaile, characterized this as "the earliest and best pamphlet on the Ether discovery."

LONG ISLAND HISTORICAL SOCIETY

SOME ACCOUNT

OF

THE LETHEON;

OR,

WHO IS THE DISCOVERER?

BY EDWARD WARREN.

Presented to the
LONG ISLAND
Historical Society
BY
Edward Warren
of Brooklyn N.Y.
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THE PROPERTY OF THE LONG ISLAND HISTORICAL SOCIETY

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HISTORICAL SOCIETY
OF THE
LONG ISLAND

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PREFACE.

The Writer of the following pages deems an apology due to the Public for the desultory manner in which this pamphlet has been prepared. The first forty or fifty pages were written some weeks ago, on the shortest possible notice, and were immediately put to press. At that time, no definite plan was formed, or could be formed, as to the nature or extent of the facts ultimately to be submitted; and now, when these pages have assumed a somewhat formidable appearance as to numbers, it is found to be impossible at present to re-write or re-arrange them.

And, while but little order has been observed in the design, controlled as the writer necessarily has been by circumstances, still it is not deemed advisable, even if possible, to divest the pamphlet of that sketchy and fragmentary character to which alone it should make pretensions. The writer's main—indeed, his only—object has been, to state facts; to arrive at the truth; to serve the cause of justice. Most certainly, he has no selfish ends in view, having no pecuniary interests involved in the matter, receiving no remuneration whatever for his services and efforts in this behalf, and only desirous that justice may be rendered to a person who, if he be not distinguished for his scientific attainments, is, nevertheless, a benefactor of his race!

With the learned and eminent individual who sets up counter-claims to the honor of this great discovery, the writer has been acquainted for the last ten or twelve years; and, during all that time, there have existed the most friendly relations between them. Soon after the writer's attention was called to the importance of the new discovery, he called on that gentleman; and it was the conversation that then and subsequently ensued which led to the opinion that he was not *the* discoverer, or *one* of the

discoverers. From the impression firmly made, he then asserted no such claim; his only desire being to receive a certain (small) pecuniary interest in the sale of rights. Being anxious to learn something explicit as to the business arrangements of the parties concerned in the matter, he sent the writer to R. H. Eddy, Esq., and to Dr. Morton, for such information. Up to this time, the latter was an entire stranger to the writer, he never having seen him or heard his name mentioned, as he recollects, until this discovery was made known. So much for the parties claimant.

The writer has been accused of espousing this cause too warmly. To this it may be replied that, while the person who was at first only "joint-discoverer" was—by means at least somewhat equivocal—bearing off the whole honor abroad, no half-way measures would answer the emergency; and that nothing could counteract this accidental and unfortunate state of things save the most decided and thorough course of procedure. And in this way, with the assistance of the full and ample statements of Caleb Eddy, Esq. and Mr. R. H. Eddy, (to which the reader's attention is particularly directed,) it is believed that a fair and just decision may be gained.

Boston, *May* 30, 1847.

WHO DISCOVERED THE NEW PROPERTY OF

SULPHURIC ETHER,

AND INTRODUCED IT INTO SURGERY?

Wm. T. G. Morton, the fortunate discoverer of a means of annihilating so vast an amount of human suffering, was born in the town of Charlton, in Worcester county, in the State of Massachusetts. He is still a young man, being but about twenty-seven, although few men, even in a long life, have been able to accomplish so much for humanity. Like most New England boys, he was, at an early age, thrown upon his own resources, to work out his destiny as he might. Wherever placed, however, he seems to have been equal to the emergency, always exhibiting the most extraordinary mental activity, with great diligence and perseverance. Having chosen dentistry for his profession, and determined that no one should excel him in his business, he at once bent the whole powers of his mind to his calling, and pursued it with a zeal which could but ensure success.

On arriving at a maturer age, and wishing to give a greater range to his mind, he commenced the study of medicine in the office of *Dr. Charles T. Jackson*, and entered his name, as a student of medicine and practical anatomy, in the Massachusetts Medical College, where he manifested his usual energy of character in the prosecution of his studies, and particularly in anatomy. Having continued in attendance at this institution during two courses of lectures, he closed his connection with it, and returned fully to his profession, to which he has since devoted himself with the greatest assiduity.

About this time, he enjoyed the full benefits of the instructions of *Dr. N. C. Keep*, Vice-President of the American Society of Dental Surgeons, with whom he was subsequently a partner, until the health of that distinguished dentist compelled him to retire to a less active business.

Content with no common success in his business, he aspired to reach the head of the profession he had chosen, and, therefore, sought to make such improvements in the mechanical, as well as other departments, as would render his establishment one of the most perfect to be found. And, with what results his labors have been crowned, his numerous patients can testify. Soon after his return to his business, having many orders for whole sets of teeth, which required that many others should first be extracted, it became a matter of great moment with him to devise some means of reducing the pain attendant on such operations, in order to induce his patients to submit to them. And, at length, after having often spoken of his desire to discover such an agent, the great necessity of finding some way to mitigate pain was forced upon him still more strongly by a refractory patient, who fully declared that she would have nothing done unless she could first be put into such a state as that no pain would be felt from the operation. This induced him to redouble his efforts and inquiries, and led him finally to make the fortunate and brilliant DISCOVERY which has crowned his researches with such signal triumph and success! He had now reached the *Ultima Thule* of his hopes and expectations, and conferred upon his race, and the world, a blessing, the extent of which few seem adequately to have estimated.

As was to be expected, this piece of good fortune, on the part of Dr. Morton, awakened the envy and excited the jealousy of some of his professional brethren. Among these, *Dr. J. F. Flagg* stands, and probably ever will stand, 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 dentists was called; a committee of seven—*the immortal seven*—with Dr. Flagg at its head, appointed; and measures taken to suppress the growing evil! In due time, Dr. Flagg and his brother committee-men brought out their great manifesto, which will remain an enduring monument to perpetuate their malice and envy.

The next dentist who has rendered a most essential service to his race, by exposing the dangers of Dr. Morton's discovery, is *Prof. A. Westcott*, now connected with a dental college in Baltimore. His opposition has been most energetic and persevering. From the first,

he seems to have deemed it his 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 gentleman, is this sentence: "If he 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!

To leave the dental profession, we come to another class of persons who object no less stoutly to the use of ether. *Robert M. Huston, M. D.*, editor of the Philadelphia "Medical Examiner," puts in his veto in this wise:—"A certain Dr. Morton, a practising dentist in Boston, is advertising, in the newspapers of this city, that he has received a *patent* for what he calls 'his improvement, whereby pain may be prevented in dentistical and surgical operations;' and he now offers to sell 'licenses to use said improvement,' to dentists, surgeons, and other suitable persons. Looking upon this as nothing more nor less than a new scheme to tax the pockets of the enlightened public, 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 states his objections:—"By-and-by we may see 'Morton's Anti-pathetic 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," father 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 the auspices of a *patent right*, 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?"

Prof. D. T. Mütter, of Philadelphia, has also to receive a share of the credit due to those who endeavored to suppress Dr. Morton's discovery in its youth. The chairman of a committee of Congress, to whom the matter was referred of introducing the use of the Letheon into the army and navy, addressed Prof. M. 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 he 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 peculiar method of Dr. Morton is, consequently, of no value, since others accomplish the same ends without the use of his patented apparatus. 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." And I have cited these passages in order that Prof. Mütter shall receive full credit for his sagacity and foresight, in thus pointing out the evils and dangers attending the use of the vapor.

Nor would I withhold from the editors of "The American Journal and Library of Dental Science," published in Baltimore,—*Drs. Chapin, A. Harris, Amos Westcott,* and *Edwin J. Dunning,*—the meed of praise that should be awarded them for their timely warning against the new monster! They say :—" Great interest has been excited, both in professional circles and in the public mind, by an announcement, in the Boston Medical and Surgical Journal, that a Mr. Morton, of Boston, has discovered a gaseous preparation of a nature so exquisitely anodyne as to fulfil the great desideratum in surgery." Also :—" The effects resulting from, or at least liable to result from, the inhalation of the vapor of sulphuric ether, are, in our opinion, more to be dreaded than the pain of almost any surgical operation. We would, therefore, caution our professional brethren against the use of an article capable of producing such sudden, powerful, and dangerous effects."

Thus has assault upon assault been made against this discovery, and sometimes, as in the case of Dr. Flagg, and the watchful "Committee of Seven," who may justly be denominated the *seven wise men of Boston,* it has been aimed at Dr. Morton personally, and always coupling him with it. Indeed, praise and spleen have been lavished upon his head, and on his discovery, in about equal proportions; but never, to any extent, has Dr. Jackson shared in this contumely and opprobium. O no! he always took good care to keep his skirts clear of the sin of this monster, until the storm had, in a great measure, passed over, leaving Dr. Morton to fight the battle and receive the knocks, while he himself stood aloof, ready to rush in "at the death." He never raised his voice in the defence of the discovery; he was never considered the principal, nor, for some weeks, known at all in it; he has sustained no injury in his business and character; nor has he shared any of the odium heaped upon the head of Dr. M., but contented himself with

denouncing the discovery as a "humbug," and saying he "did not care what was done with it if his name was not drawn in with it!"

The only object the writer has in this matter is, to serve the cause of truth and justice. He has no pecuniary interests whatever involved in the discussion, but aims simply to establish the right. It is admitted, on all hands, that a great blessing has been conferred upon the world; and the question recurs, Who is the discoverer? and, to settle this query satisfactorily and justly, is a matter of very great moment, else what inducement is there to ingenious minds to labor and wear themselves out in conferring favors upon mankind, when even the *credit* of their toils is wrested from them? It is a disgraceful historical fact, that almost all great discoverers and inventors have been robbed of all pecuniary advantage arising from their services; and in many, too many cases, alas! has the fame of their achievements also been suffered to be seized by others.

In this particular case, it is the boast of those who are inimical to its success, that it is free to all; that Dr. Morton has no legal rights peculiar to himself in the matter; and that all are using his invention who may choose! And this boast is made in America, over an American citizen, an enthusiastic, persevering young man, who has labored long, run great personal risks, suffered in his reputation, and been almost ruined in his professional business, to achieve and bring out a discovery which has already elevated the American name, and which shall add lustre to his native country "long after the dust of his enemies shall have been changed into vile worms!" The discoverer, therefore, is to derive no pecuniary benefit from his great achievement, even on the admission of those who oppose him; and now the question comes up, with still greater force, Shall the honor also be iniquitously torn from him? Every young man, every great inventor or discoverer,—in fact, every one who is aiming at any human distinction whatever,—is concerned in a just and equitable adjustment of this question.

But, thanks to the cause of justice, we have it in our power, as we think, to furnish such additional evidence on this subject, as must, in the minds of all candid men, place the question beyond a doubt. This additional testimony shall be forthcoming in due time; and, until then, *we have to ask the public to suspend their decision*, assuring them that they shall not be kept long in doubt, if what we have to offer further shall be deemed conclusive, as we trust it will, in substantiating Dr. Morton's claims to the discovery.

And here I will introduce the following communication, although, in doing so, I may be chargeable, in some degree, with repetition. The article originally appeared in the *Boston Daily Advertiser*, and is, in some measure, a summary of Dr. Morton's claims, and of the arguments refuting those of Dr. Jackson :—

There appeared, in the columns of the Advertiser of March 1st, an article, signed by *Charles T. Jackson*, which contains statements wholly new to me, and probably to many others—statements, which I propose in a brief and candid manner to discuss. And in doing this, a succinct history of the matter therein involved—the discovery of the new use of Sulphuric Ether—will not, I trust, be deemed irrelevant. This is a subject which is now engrossing much attention, both in the eastern and the western hemisphere; and one may safely conclude that, from present prospects, this interest in what is termed, in Europe, "the greatest contribution to medical science from the new world," is not to diminish, but rather to increase, until the real merits of the discovery are fully established.

In the communication in question, Dr. Jackson sets out with a singular misrepresentation, by giving to the public a paper addressed to the Academy of Arts and Sciences, and purporting to have been submitted to them, which, in fact, had never been laid before them, and of which they knew nothing, save through the public journals. If this paper had been submitted to the Academy for their action, it was no longer the property of the writer, until that action was had. But if it had not been so submitted, then a fraud has been perpetrated in making it public as a document that has received the sanction of that learned body.

In the next place, great injustice has been done to another individual, by making this publication at all, without consulting all parties interested. It is well known in this community, if not throughout the country, and in Great Britain, that the chief credit of the discovery in question belongs, not to Dr. Charles T. Jackson, the Chemist, but to William T. G. Morton, the Dentist. But, before going into this matter, it may be stated, that, after the discovery became somewhat notorious, and *a man of science* thought it no longer dangerous to his reputation to be named in connection with it, the friends of both claimants met together, and settled the relative merits of each, Dr. Jackson and Dr. Morton both expressing themselves fully satisfied with the result. By this agreement, Dr. Morton was to continue to have the sole management of the invention, by paying the other party a fixed per cent.

on the net receipts, and Dr. Jackson binding himself to make no publication, and to say nothing further about the matter, not in keeping with the spirit of this understanding.

But as the matter spread and increased in interest, Dr. Jackson became again uneasy, throwing out many threats of "blowing the whole thing up," &c. &c., thinking, that he was either not likely to get his share of the credit, or of the profits arising from the discovery; so he addressed several letters to distinguished men in Europe, and particularly to some French *savans*, in one of which, to M. Elie de Beaumont, and published in Galignani's Messenger of about the 25th of January, he says:—"I request permission to communicate to the (French) Academy, through you, a discovery *which I have made*, and which I regard as important to suffering humanity." And in the same letter: "*I have latterly turned this discovery to use, by inducing a dentist of this city to administer the vapor of ether to persons whose teeth he was going to extract;*" and other similar passages.

Now it will be observed, that not only has Dr. Jackson failed to adhere to his pledges, as before referred to, but he has, with the most extraordinary effrontery, carefully avoided even mentioning the name of the man to whom he had yielded up his whole interest in the discovery for *ten per centum* of the net proceeds! And this, too, in the face of the statements contained in the preamble of the Letters Patent, which are as follows, namely: "Whereas, Charles T. Jackson, and William T. G. Morton, Boston, Mass., have alleged that *they have invented* a new and useful improvement in surgical operations, (the said Jackson having assigned his right, title, and interest in said improvement to the aforesaid Wm. T. G. Morton) which, they state, has not been known before their application; have *made oath*, that they are citizens of the United States; that they do verily believe, that *they are the original inventors* or discoverers of the said improvement, and that the same hath not, to the best of their knowledge and belief, been *previously known or used*," &c. And also in the paper before referred to, in which Dr. Jackson released his whole interest in the same discovery to Dr. Morton, which release begins as follows: "To all persons to whom these presents shall come: Whereas I, Charles T. Jackson, of Boston, in the State of Massachusetts, chemist, have, *in conjunction with William T. G. Morton*, of said city, dentist, invented or discovered a new and useful improvement in surgical operations on animals, &c. &c.: I have, therefore, in consideration of one dollar to me in hand paid, the receipt whereof I do hereby acknowledge, as-

signed, set over and conveyed, and by these presents do assign, set over and convey to the said Morton and his legal representatives, all the right, title, and interest whatever, which I possess in the said invention or discovery, a specification of which I have this day (the 27th October, 1846,) signed and executed in conjunction with him for the purpose of enabling him to procure a patent thereon. And I do hereby request the Commissioner of Patents to issue the said patent to the said Morton *in his name*, and as my assignee, or legal representative, to the extent of all my right, title, and interest whatever in the said invention or discovery." I say he has, in the face of his agreement before referred to, in disregard of his assignment in the Letters Patent and in his release last above given, and contrary to the sense of justice and right, privately made the publications referred to, and various others, which no feelings of propriety or equity will justify.

In the letter to M. Beaumont, from which I have already made extracts, Dr. Jackson says: "Five or six years ago, I remarked the *peculiar state of insensibility* into which the nervous system was plunged by the inhalation of the vapor of pure sulphuric ether," &c. Previously to this, he had stated, *under oath*, in the preamble to the specifications, that "the same hath not, to the best of his knowledge and belief, *been previously known*." Now, Dr. Jackson either did know previous to this time, (the 27th of October, 1846,) that sulphuric ether would produce insensibility to pain, or he did not. If he did, as stated in his letter to M. Beaumont, then I have to remind him of his oath, under the solemnity of which he states that, according to the best of his knowledge and belief, *the "fact had not been before known;"* but if he did not, then I remind him of his other statement to the same person, in which he says that he *had known it for "five or six years."* And the learned doctor can take either horn of the dilemma he may prefer.

It is not known that Dr. Jackson ever made more than one experiment in inhaling ether; and then he used it as an antidote to the vapor of chlorine, which he had accidentally breathed. But from his own statement in the Advertiser, it did not answer the purpose, the deleterious effects returning with the return of consciousness. But supposing he had known of it six years or six months before Dr. Morton applied it in practice; is it not inexcusable in him to have withheld from suffering humanity this inestimable boon so long—a boon by the gift of which, such an incalculable amount of misery might have been saved? Or, is it within the limits of probability that, if he had been

so long in possession of a discovery which, if made known, would, in four months, call down blessings on his head from ten thousand hearts, and from all civilized lands, and which, from present prospects, would make him to be remembered and cherished, by the side of Jenner, by all coming generations, and to all coming time,—I say, is it probable, had he known of this noble gift, that he would not have been most zealous in publishing it to the world? If he did make this discovery, is it not a remarkable coincidence, that Dr. Morton should have made it at the same time, and still more remarkable, that Dr. Jackson should leave the honor to another to make his discovery known?

But let us suppose that Dr. Morton, in making his experiments, had caused the death of one or more of his patients; would Dr. Jackson then have come forward and assumed the whole responsibility, and, in publishing an account of this untoward accident in the *French Journals*, taken the whole fault upon himself, suppressing *even the name* of the immediate agent in the unhappy affair? Or, to adduce a case in point: When Dr. Flagg and his coadjutors came out against Dr. M., calling him "Mr." Morton (!), denouncing the use of the ether, and citing a long list of "accidents" that had, as they said, already happened in his practice, and thinking it their duty to *suffering humanity* to strangle this Hercules of a discovery in its cradle, thereby, for a time, greatly injuring the reputation and practice of Dr. M.;—at this critical moment in the history of the young discovery, who came forth to its defence? Dr. Jackson, who knew these allegations to be false, and who could have satisfied the public that the ether could be administered with safety? Certainly not; but he also joined in the cry, pronouncing the new invention a "humbug," and Dr. Morton "reckless," for using it!

Dr. Jackson, in the extract from his letter to M. Beaumont, already given, says, that he had turned this discovery to use by inducing a dentist to use it in the extraction of teeth. Now it is well known, that, for ages, it has been the desire of the humane, in all countries, to discover some method of alleviating the suffering of those who were about to submit to severe and cruel surgical operations. And, amongst others who had given direct thought and attention to this subject, Dr. Morton may be named.

For more than two years, he had bestowed much thought upon this important inquiry. At the commencement of that period, he was a student of Dr. Jackson, with whom he often conversed on this and similar topics. But it was not till September, 1846, that a direct trial

was made with sulphuric ether. About that time, Dr. Morton called on Dr. Jackson, to get some information in furtherance of his researches; and, during the conversation that ensued, in which the old topic of the inhalation of sulphuric ether and nitrous oxide gas by the students at college came up, Dr. M. inquired why he could not give the ether to his patients. Dr. Jackson said he could, and advised him to get some, of Burnett, highly rectified, at the same time explaining to him the nature of sulphuric ether, and its effects, so far as known, on the system, assuring him it might be safely applied, although the next morning he declined giving a certificate to this effect.

Dr. Morton procured the ether, and, returning home, locked himself in his room, when he saturated a sponge with it and began to inhale, noting down accurately when the inhalation commenced. Soon, he recollects beginning to grow dizzy, when, letting the sponge fall, he reclined back in his chair, after which he seems, for a time, to have been totally unconscious. On coming to himself, he again looked at his watch, and found, to his inexpressible delight, that he had been *insensible eight minutes!* He then left his room, anxious to try the ether upon one of his patients, when fortunately a stout healthy man appeared, to have a tooth extracted. The ether was administered and the tooth taken out, the man avowing a total unconsciousness of its removal! And *this is the first painless operation ever performed by similar means in surgery!*

Subsequently, attempts were made by the same method, but without any satisfactory results, until, at length, after many trials to produce a proper apparatus, and finding the one recommended by Dr. Jackson entirely useless, Dr. Morton arrived at a result, which seemed to be what he desired. And from that day the importance of the discovery began to develop itself, and the experiments were perfectly, or nearly perfectly, successful.

Dr. Morton, let it be observed, inhaled the ether on the 30th September; but it was not until the 21st November following, it is believed, that Dr. Jackson witnessed an operation, which was on that day performed at the Bromfield House, at which he, with several others, was invited to be present; nor has he, from that day to this, or ever, by his own recent admissions, made any experiments himself to test the importance of the discovery, or whether a state of insensibility sufficient to admit of a severe surgical operation being performed without pain, could be induced by the inhalation of sulphuric ether.

In Dr. Jackson's letter to M. Beaumont, he says:—"It was observed,

that no unpleasant consequences attended the administration of the ether, and *I then advised this dentist to go* to the General Hospital of Massachusetts, to administer it to a patient who was about to undergo a painful operation."

Now it is well known, in this community and to all of his acquaintances, that Dr. Jackson is a gentleman, whose moral character is unimpeached and unimpeachable, a gentleman than whom no one has more warm personal friends. And this renders it doubly painful to say that he has perverted the truth, although believing, as I do, that it must have happened through forgetfulness alone that he made such a statement,—a statement which, as its errors have been pointed out to him since its appearance in this country, he has had ample time to correct. The whole tenor of the letter referred to, is to give the impression that Dr. Morton was under Dr. Jackson's advice and direction, than which nothing could be more unjust and erroneous. From first to last, it is well known that Dr. Morton has acted wholly on his own responsibility; and that at no time did he ask Dr. Jackson for his advice or *directions*, for he seldom saw him. This is too absurd a position to be refuted, and would not have been alluded to, had not this letter to M. Beaumont produced a most unfair and erroneous impression in France, wholly opposed to truth, and had not all the communications in the Paris papers on this subject, ascribing the credit of the discovery to Dr. Jackson, originated from that and other letters, written in dereliction of positive promises, and in the face of his written release to Dr. Morton, in which the most he claimed was to be considered a "*a joint-discoverer*," while, in this letter, he takes the whole credit, and does not so much as mention the name of Dr. Morton.

He claims to have advised Dr. Morton to go to the Hospital, and give the ether to a patient. Dr. Morton went there on invitation from the house surgeon, at the request of Dr. Warren, and it is not known that Dr. Jackson had any knowledge of such an invitation being given, or that the operation was to be performed. It is unaccountable, that a man of Dr. Jackson's standing, and general high sense of honor and justice, could have been capable of so much assurance—to call it by no harsher name—as to say that he had "latterly turned this discovery to use, by *inducing* a dentist of this city to give the vapor," &c. In his communication, published in the Advertiser of March 1st, he says he "was *desirous* of testing it (the ether) in a capital operation," &c.; and that Dr. J. C. Warren "politely consented to have the trial made," &c.; whereas, Dr. Morton called on Dr. H. J. Bigelow, who spoke to

Dr. Hayward on the subject of the further use of the ether, the latter objecting until he knew what the vapor to be given was; but, on learning this, gave his consent, and Dr. Morton went accordingly, never knowing Dr. Jackson in the matter any way. On arriving at the Hospital, a consultation was had among all the surgeons present, as to the propriety of continuing to use the new anodyne process, when it was determined to do so. It was not for several weeks, and even months after, that Dr. Jackson was present at the Hospital to witness an operation—certainly not until more than two months after the discovery had been made. For a long time previous to calling on Dr. Jackson, and previous to the 30th September, Dr. Morton had been firmly possessed with the thought—he had the *idea* indelibly fixed in his mind—that he could produce the desired state of insensibility by the inhalation of some kind of gas or vapor, and had tried various experiments to ascertain what would do it. In furtherance of this purpose, he called several times on Mr. Wightman, philosophical instrument maker, Cornhill, to procure an apparatus. These calls extended through two or three weeks prior to the 28th of September, 1846, as appears by Mr. W.'s books. Mr. Wightman says he recollects about these calls perfectly; that Dr. Morton wished to procure an inhaling apparatus; that he then *smelt the ether about Dr. Morton's clothes*, and that Dr. Morton inquired, if "it would do *to put ether in an India-rubber bag;*" and, on being answered in the negative, he again inquired, if it would do to put it in a silk bag, upon which Mr. W. replied, that he did not know, but advised Dr. M. *to go to Dr. Jackson.* Other persons can bear similar testimony; but this would be irrelevant here, and must be left for a more befitting occasion.

But, to settle this whole matter—and it might have been done in the outset, to the satisfaction of any candid mind—after Dr. Morton began to use the ether in his practice, and for some weeks, it is well known to a large number of our most respectable citizens, that Dr. Jackson clearly and distinctly repudiated and washed his hands of the whole thing. He, on many occasions, as is well known to his friends, disclaimed all connexion with the discovery, or use, of ether in surgery. A gentleman of high standing asked Dr. Jackson, in presence of several others, if he "knew that, by the inhalation of ether, such a state of insensibility could be produced, as that the knife could be applied, and the patient feel no pain." Dr. Jackson replied, "No, nor Morton either, nor any one else; *it is a humbug*, and it is reckless in Morton to use it as he does." In speaking to two other persons, at

different times, on this subject, he said, "I don't care what he (Morton) does with it (the discovery) if he does not drag my name in with it." At another time, he said, he "did not know how it would work in pulling teeth, but knew its effects at college, upon the students, when the faculty had to get a certificate from a physician, that it was injurious, to prevent them from using it." The above, and other statements even stronger, can be verified by affidavits.

But it seems there is another Richmond in the field; for I see that "Galignani's Messenger," of Feb. 18th, contains a letter from Dr. Horace Wells, of Hartford, Conn., then in Paris, in which he claims to be the original discoverer of the fact, that the vapor of sulphuric ether, taken into the lungs, will produce insensibility to pain. Here, certainly, nothing is thought of these absurd pretensions, or only thought of to be ridiculed; but, lest any should be misled in this matter, I herewith submit a copy of a letter from him to Dr. William T. G. Morton, the real discoverer, written before the idea of laying claim to the discovery in question entered his head—an idea which was altogether an after-thought. The communications published in the New York Journal of Commerce, and used by Dr. Wells, in Paris, were written by a medical gentleman who had heard Dr. W.'s story, and who, perhaps, honestly believed it. If Dr. Wells wishes to maintain his claims to his pretended discovery, that nitrous oxide gas will produce insensibility to pain, no one thinks to deprive him of the credit; most certainly the discoverer of the new application of sulphuric ether does not. But this letter will speak for itself:—

"*Hartford, (Conn.,) Oct.* 20, 1846.

DR. MORTON:

Dear Sir,—Your letter, dated yesterday, is just received, and I hasten to answer it, for fear you will adopt a method, in disposing of your rights, which will defeat your object. Before you make any arrangements whatever, I wish to see you. I think I will be in Boston the first of next week—probably Monday night. 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.

Yours, in haste, H. WELLS."

But, corroborative of what I have said above, and showing where a leading member of the medical faculty of Boston bestows the honor of this great discovery, I will give the following note:—

"*Boston, Jan. 6th,* 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. W. T. G. Morton, in the latter part of October, 1846.

JOHN C. WARREN,
Professor of Anatomy, and Surgeon of the Mass. Gen'l Hospital."

I would also submit the following notes, which go, as I conceive, to show who was known as the discoverer of the Letheon.* They bear date only two or three weeks after Dr. Morton made the first successful experiment, in performing a painless operation, ever published to the world, or ever performed by similar means. The earliest of these is as follows:—

"*Boston, Oct. 17th,* 1846.

I hereby certify that I have twice seen the administration of Dr. Morton's application for the prevention of pain; that it had a decided effect in preventing the sufferings of the patients during the operation, and that no bad consequences resulted.

J. C. WARREN."

The next in order of date is here submitted:—

"On Saturday last, at the Hospital, I removed a tumor from the arm of a patient who had immediately before inhaled something prepared by Dr. Morton, of this city. The operation lasted seven minutes; the patient gave no indication of suffering. She assured me, afterwards, that she did not suffer, nor has she, to the present time, experienced any inconvenience from the inhalation.

GEO. HAYWARD.

Tuesday, Oct. 20th, 1846."

The next and last I shall give, dated two days later, is as follows:—

"I certify that I assisted in the administration of Dr. Morton's Preparation to two patients, operated upon by Drs. Warren and Hayward at the Mass. General Hospital, on the 16th and 17th of October; that, under its influence, both these individuals submitted to operations, lasting from five to ten minutes, without suffering, and that they speedily recovered from its effects.

C. F. HEYWOOD,
House Surgeon Mass. General Hospital.

October 22d, 1846."

In a statement of this discovery, drawn up by Dr. J. C. Warren, and published in the Boston Medical and Surgical Journal, on December 9th, 1846, is the following:—

* See Appendix, A.

"Application has been made to me by R. H. Eddy, Esq., in a letter dated November 30, in behalf of Dr. W. T. G. Morton, to furnish an account of the operations witnessed and performed by me, wherein *his new discovery for preventing pain* was employed. Dr. M. has also proposed to me to give him the names of such hospitals as I know of in this country, in order that he may present them with the use of *his* discovery."

And again in the same paper:—

"Two or three days after these occurrences, on meeting with Dr. Charles T. Jackson, distinguished for his philosophical spirit of inquiry, as well as for his geological and chemical science, this gentleman *informed me that he first suggested* to Dr. Morton the inspiration of ether, as a means of preventing the pain of operations on the teeth. He did not claim the invention of the apparatus, nor its *practical application;* for these, we are indebted to Dr. Morton."

He, Dr. J., claims only to have made a bare suggestion of the fact, that ether could be used in alleviating pain. But, as will appear in the affidavits of Dr. G. G. Hayden, Wm. P. Leavitt, Thos. R. Spear, Jr., and Francis Whitman, Dr. Morton had been making constant experiments for months before, with sulphuric ether, and only went to Dr. Jackson to procure a retort, or other apparatus, to aid him in his inquiries. If Dr. Jackson spoke of ether, it will be observed that Dr. Morton called on him at the time the suggestion was made, for the very purpose of making inquiries as to its effects on an India-rubber bag; and, as I have already said, to procure some kind of apparatus from his laboratory, from which ether might be administered. Had Dr. Jackson made the discovery in question, why did he not give it to the world, and not endeavor, clandestinely, to wrest from Dr. Morton one in which he (Dr. J.) had no more share than many others? Dr. M. arrived at his discovery by the best process in the world—an inductive one—and he is indebted to Dr. J. no more than to several others from whom he derived like accidental hints. The initiative was not made by Dr. Jackson. He did not come to Dr. Morton's office and request him to bring out a discovery that had been already elaborated by another. He never talked of any great blessing that he was soon to bestow upon the afflicted of his race. On the contrary, after weeks and even months of patient, persevering labor in making experiments, during which he gave up his business to another, let his practice suffer, and often endangered his health and very life; and when hope had dawned upon his mind, and he could exclaim, "I have it;" when the greatness of his wonderful discovery seemed to have taken possession

of his whole soul, and was, in part, apprehended by his keen, inquiring intellect; after going to several distinguished philosophical instrument-makers, Mr. Wightman, of Cornhill, and others, to aid him in an apparatus; after all this, Dr. Morton went at last to Dr. Jackson,—not to ask him what would prevent pain in surgical operations, for that he seems to have been already in possession of,—but to borrow from his laboratory some instrument to assist him in making his agent available. Thus all, even Dr. J.'s best friends, must admit, that the initiative in this great matter was taken, not by Dr. Jackson, but by Dr. Morton; and to him future ages will ascribe the honor, and on his head lavish out their blessings for the discovery, so long as misery and suffering are known to man!

Dr. Jackson has an unfortunate *mania* for appropriating to himself the discoveries of others,—a kind of *idiosyncrasy*,—which detracts very much from his great merits as a scientific man; for, by wishing to deprive others of the merit that really belongs to them, he injures his claim upon what is justly his own. A most unfortunate *contre-temps*, of this nature, was the affair of claiming the electro-magnetic telegraph. In a note signed by him, and published in the Boston Daily Advertiser of the 8th March, he says:—"Those who know me, I confidently believe, can never suspect me of *wishing to appropriate a discovery which is not my own;*" the last clause of which I have italicized. Now, if this be so, how is it that Dr. J. so often gets into controversies with other discoverers? Whence originated the disputes about the electro-magnetic telegraph, gun cotton, &c. &c. of which the public have heard so much during the last ten years? But I will not go into these matters in detail, contenting myself with a brief history of the discovery of the telegraph.* And, so far as this goes to substantiate Dr. J.'s assertion above, I will freely concede it to him.

In 1832, Dr. Jackson, Prof. Samuel F. B. Morse, Hon. William C. Rives, (then on his return from the embassy to France,) and Joshua Fisher, Esq., of Philadelphia, were fellow-passengers on board the ship Sully, commanded by Capt. Pell, returning to the United States. In a general conversation amongst these gentlemen, the then recent discovery of obtaining the spark from the magnet was the subject, in which conversation allusion was made by Dr. Jackson to the experiments of Franklin across tbe Schuylkill River, and along its banks. This allusion was made to satisfy the question, asked by one of the party, whether, in a distance occupied by the coil of the magnet,

* See Appendix, B.

(some hundreds of feet,) there was not an appreciable interval of time in the passage of the electricity. This distance, at that time, was deemed very great. Dr. Jackson alluded to Franklin's experiments, to show that there was no appreciable time in the passage of the electricity. This experiment of Dr. Franklin must have been familiar to Prof. Morse from his youth, as it is to every person of even ordinary reading; but it was thus brought up to his recollection, and the idea of the possibility of making electricity the means of communicating intelligence at a distance at once flashed across his mind, and, in his remark upon the fact, he observed that *he thought it would not be difficult to construct a system of signs by which intelligence might be sent by electricity.* This was the first thought of his telegraph, which he immediately proceeded to carry into execution; and the plan now in successful operation was elaborated, in all its essential characteristics, before the close of the voyage. Dr. J. had nothing to do with any part of it, nor did he give a single available hint which has been used in any portion of Prof. Morse's invention.

A correspondence between those parties, on the subject of this invention, commenced from the following circumstance:—Prof. Morse had completed his invention in its practical parts, and, in 1836–7, had it in operation; and, two or three months afterwards, the first announcement of the European telegraph was made in the papers of the United States. To secure to himself and the country the honor of priority, he wrote to the captain of the ship, to Mr. Rives, to Mr. Fisher, and to Dr. Jackson, for their testimony to the fact, that he invented the telegraph on board the ship Sully, in 1832. All but Dr. Jackson freely gave this testimony, (which may be found in Vail's larger work on the telegraph, pages 152, 153;) but, instead of according his testimony, he surprised Prof. Morse, in *his answer*, by laying claim to be *mutually interested* (mark this,) in the invention. In 1839, while Prof. Morse was abroad in France, Dr. Jackson had the courage—shall I call it?—not only to claim to be the *sole inventor* of the telegraph, in a publication made in the Boston Post, but he also sent a communication to the Academy of Sciences in Paris, in which he made the same claim, but of which latter fact Prof. Morse knew nothing, as I am informed, till about a year since. He, Dr. Jackson, referred, for evidence in his favor, to the master of the ship, (Capt. Pell,) to Hon. Mr. Rives, and to Mr. Fisher. On Prof. M.'s return from Europe, in 1839, he at once publicly called on Dr. Jackson, in the Boston Post, either

to retract or substantiate his claims. To this challenge, made seven years ago, he has never replied.

The gentlemen to whom he referred each wrote Prof. Morse, it appears, recognizing him only in the invention, and one of them expressing the greatest indignation that Dr. Jackson should have appealed to him in a matter where it was so notorious, on board the ship, that Prof. Morse only had the least claim to the invention.

Such is a brief, but, it is believed, a correct history of this affair. And the striking analogy between this history and the controversy now going on respecting the discovery of the Letheon will be most obvious. In the first place, from 1832 to 1839, Dr. Jackson seems to have thought his share in the invention,—or the invention itself,—of so little importance, as to pay no attention to the subject *during seven years*, and then only when another and a most meritorious man had brought it to great perfection and into extensive use, when he steps forward and claims to be *mutually* interested in the invention. Not content with this, however, he next claims to be the *sole* inventor. And, to substantiate his claims, he sent, in 1839, to an American gentleman, then in Paris, a statement directed to M. Elie de Beaumont, to be laid before the French Academy! In like manner, in the face of the most positive assurances to the contrary, after Dr. Morton had given to the world the discovery by which painless operations may be performed in surgery, Dr. Jackson privately forwarded to the same M. Elie de Beaumont his claims to be considered the sole discoverer in this matter, and that, too, after he had, for some weeks, as is well known, clearly and distinctly denounced the whole thing as a "humbug."

And here, I wish to point out two or three statements of Dr. Jackson, made public, going to show how little he really knew of, or had reflected upon, the effects of ether on the system, and how little importance he attached to his knowledge of the discovery which he claims to have kept so long from the world. In a letter dated January 6th, 1847, and published in the Journal of Commerce, he says:—"I would also beg leave to call attention to the fact, that the effect of highly rectified ether vapor, when inhaled in the manner employed in this city, does not act *as an excitant*, but *as a sedative* of a most decided character, diminishing the pulsation of the arteries, and producing a deep sleep or stupor." In his communication, improperly addressed to the American Academy, he says:—"We are aware that ether ranks, in the pharmaceutic books and dispensatories, as a *diffusible stimulant*,

and that its fumes or vapor produce intoxication of a short duration And, in a letter of his now before me, he says :—" He " (a person before alluded to in this letter,) " imagines the effect to be merely excitant, or *intoxication*, while no such effect is produced by the application of ether vapor, such as we use in this city,"—a statement which seems to contradict the one above, in which it is said, that it *does* produce intoxication.

These passages are quoted to show, that Dr. Jackson really had no more knowledge of the effects and operation of ether upon the system, than was shared in common with the whole medical world.

And now, I come to a matter, which I would pass over in silence, did not stern justice require that it should be set right. On Monday morning, the first of March, Dr. Jackson published a statement in the Boston Daily Advertiser, purporting to have come from, and received the sanction of, the American Academy of Arts and Sciences. The same day, at noon, the British steamer sailed, bearing to Europe a large number of papers containing this statement, apparently with the additional sanction of the names of Dr. Warren and President Everett. Now these gentlemen, being desirous of having a scientific account of the discovery in question furnished to the world, and believing that no person was more competent than Dr. Jackson to draw up such an account, addressed to him the notes bearing their names, little thinking that he was to make use of them to aid him in passing off upon the public a statement most erroneous and unfair, and calculated to do much injustice to a very meritorious and deserving man.

On Tuesday evening following the publication of this paper, the Academy had an informal meeting, at which Dr. Jackson was present, and presented a paper, already far on its way to Europe, bearing the fraudulent stamp of the Academy! This, Dr. Jackson read, and made a motion to have it printed, which was declined by the members of that learned body, and the doctor rather severely catechised for making public a statement, as coming from them, which they had never before seen, or heard of. What his surprise was, at the reception his paper and the course he had pursued in relation to its publication met with, those present only know, and others must surmise! It is understood, that the Academy are about to publish a disclaimer to this fraud or forgery, and to show, that they are not to be used to foist on the public an erroneous, or rather materially false, statement.

And it may be asked why Dr. Jackson has been known in the discovery at all, when he really rendered no essential aid in making it,

and when, after Dr. Morton had brought it out, he so carefully and particularly repudiated it, and declared, distinctly, that he had nothing to do with it, nor was responsible for its effects. To this very natural inquiry I reply, that Dr. Morton associated Dr. Jackson with him in the affair, at the earnest request and on the advice of the friends of both parties, in order that he might avail himself of the great scientific attainments of the latter in perfecting the arrangements necessary properly to bring his discovery into general use. At first, Dr. Jackson claimed no part of the invention, rather disclaiming the whole; and after it had been several weeks before the public, he only demanded the trifling sum of *five hundred dollars* for his whole interest in the thing, and was subsequently contented to be named simply as joint-discoverer, in the Letters Patent, as a full remuneration for his advice and trouble in what had been done. This is the whole secret of Dr. Jackson's share in the discovery under discussion, all of which we shall be able to show by the best proof possible, namely, by Dr. J.'s own friends themselves, or by the one who was principally instrumental in bringing it about.

And I would here allude to a person, who has been, from the first, most active in making Dr. Morton's discovery known. I refer to Dr. John C. Warren. Since the great blessing in question was given to the public, he has resigned his connexion with the Medical School. In his valedictory, on this occasion, he says:—"And here he might notice the invaluable means of preventing pain in surgical operations—a discovery which every medical man, and especially every practical surgeon, must hail with unmingled satisfaction." As it was before this school that he had often alluded to this discovery, defended it against hasty, inconsiderate attacks, pointed out its vast importance, and thus given it his high sanction and aided in conferring it upon the world, so there was it most appropriate that, in summing up the work, which for a long term of years he had accomplished, he should thus have it in his power to say that he had added this new but crowning blessing to his labors. How appropriate that he should close his connexion with the Medical School, by aiding in the introduction of "this last best gift to man!"

The following "History," appended to an account of some of the cases in which the vapor has been used in the Massachusetts General Hospital, was prepared by that rising, and already eminent surgeon, J. Mason Warren, and published in the Boston Medical and Surgical

Journal of March 24th, 1847. In this history, by one who has been conversant with all the facts connected with the discovery, and who has been most active in bringing it before the world, it is stated, that "Dr. Warren met Dr. Charles T. Jackson, *who informed him*, that he suggested the use of ether to Dr. Morton." A similar statement was published, by Dr. J. C. Warren, in the Boston Medical and Surgical Journal, of Dec. 9th, 1846. And this seems to be about all that they, or the other eminent surgeons and physicians, Dr. Hayward, Dr. Bigelow, Dr. Gould, and others, who have been so prominent in introducing the discovery to the public, know, respecting Dr. Jackson's claims or agency in the matter; he *informed* them as to what he had done, or rather *said;* for he does not profess ever to have *done* any thing.

If I am accused of espousing this cause warmly, I reply, that I did not do so until I had seen Dr. Jackson's letters to the French Academy, and his statement, published in the Daily Advertiser, in which he *affects to recognize no one in the discovery*, but claims the *sole honor* as his own! The most glaring injustice thus done to Dr. Morton seems to require equally prompt treatment.

Having been conversant with the principal facts relating to the introduction of the inhalation of ether into surgical operations, it may not be considered inappropriate to connect, with the above cases, a slight sketch of their early history, so far as I am acquainted with them.

In the early part of October, 1846, Dr. W. T. G. Morton called at the house of Dr. J. C. Warren, and stated to him that he was in possession of a means for preventing pain in surgical operations, and that he should be glad to have the application made by Dr. W. in a surgical case. Having made some inquiry as to its safety and mode of exhibition, this gentleman agreed to afford him the earliest opportunity for employing it.

A few days after, on October 13th, a patient at the Massachusetts General Hospital, having to undergo an operation for removal of a tumor of the neck, was brought into the operating theatre, all the arrangements made for the operation, and Dr. Warren was about to begin, when he arrested his hand, saying—"I now recollect, that I promised Dr. Morton to give him the earliest opportunity of trying a mode for preventing pain in surgical operations, and, if the patient consents, I shall defer this operation to another day, and invite Dr. M. to administer his application." The patient consenting, the operation was accordingly postponed to the following Friday, October 16th, and Dr. W. having requested the house surgeon to invite the attendance of Dr. Morton, that gentleman was present, and made the first application of the inhalation of ether.

On the following day, a patient requiring the removal of a tumor from the arm, and being rendered insensible by Dr. Morton's application, Dr. Warren requested Dr. Hayward, who was present, to perform the operation.

A few days subsequent to this, Dr. Warren met Dr. Charles T. Jackson, who informed him, that he had suggested the use of the ether to Dr. Morton.

On Nov. 6th, Dr. Morton addressed a letter to Dr. Warren, to be communicated to the surgeons of the Hospital, in which he professed himself ready to disclose the composition of this agent to them, and also to permit as liberal a use of it as was reasonable under existing circumstances.

On the following day, it was exhibited to a young woman, who was to submit to an amputation of the leg, by Dr. Hayward ; being the first amputation performed under the use of ether. At the same time, Dr. Warren operated on a female, for the removal of a portion of the lower jaw. In both these cases, the inhalation was quite successful, but most perfectly in the amputation.

On November 9th, Dr. H. J. Bigelow read a paper on this subject to the Boston Society for Medical Improvement, which he had previously read before the Academy of Sciences.

On December 3d, Dr. Warren communicated, to the Boston Medical and Surgical Journal, an account of the first surgical operations under the ethereal inhalation.

The preceding operations at the Hospital, by Drs. Warren and Hayward, were followed by a variety performed by the other surgeons of that institution, Drs. Townsend, Parkman, H. J. Bigelow, and myself. Among them may be mentioned the reduction of two dislocations of the humerus, by Dr. Parkman, one of which was easily managed without having recourse to the ordinary powerful apparatus.

To these in the Hospital, succeeded operations in private practice, by myself, the above-mentioned gentlemen, Dr. Peirson, of Salem, and, at length, in various parts of the country.

In Europe, it has been received with the greatest enthusiasm. Amputations of the limbs and breasts, the removal of stone in the bladder, and the Cæsarean section, have been performed, all with immunity from pain ; it has even been given to mitigate the sufferings of labor without arresting the contractions of the utérus.

The most striking part of the history of this valuable remedy remains to be mentioned ; which is, that, notwithstanding the general and almost indiscriminate use of a means apparently so powerful in its nature, not a single case has thus far been recorded, in which it has produced fatal consequences. It is to be hoped, therefore, that, by a better experience in its use—an experience we shall soon be able to obtain from the examples constantly afforded—it may be rendered as safe as any other article of the materia medica.

As was to have been expected, various claimants have arisen for the honor of the discovery, and one or two persons in France have certainly approximated very closely to it—without having carried their investigations, however, to a sufficient length to render any practical benefit to humanity. A consent almost unanimous, both in England and France, has conceded this honor to our fellow-townsmen, Dr. W. T. G. Morton and Dr. Charles T. Jackson.

Since writing the foregoing pages, I have seen a pamphlet by Dr. Horace Wells, embodying his claims to the discovery, now the subject of no little controversy. I have, therefore, hastily collected a few facts as to these claims—which, were they not put forth with such an imperturbable air of seriousness, I should suspect of insincerity. But, as it is, and from private letters received by the last steamer, from Paris and London, I have no doubt but that he will urge these claims to their farthest extent.

As Dr. Wells rests his merits in the discovery upon his experiments with nitrous oxide gas, the following facts will show what those merits really are, and how much there is novel, and before unknown, in his researches: in fact, whether he, or some one before him, is entitled to the credit of suggesting the use of this gas in surgical operations. That his claims must depend upon this alone, and not upon the use of sulphuric ether, no one can fairly deny. But to the facts:—

The nitrous oxide gas (known to chemists as the *gaseous oxide of azote* or the *protoxide of nitrogen*,) differs from atmospheric air only in the proportions of its ingredients, air being composed of 27 parts of oxygen and 73 of nitrogen, while the nitrous oxide consists of 37 parts of oxygen and 63 of nitrogen. Sir Humphrey Davy first discovered that this gas could be safely inhaled, and that for a short time it would support respiration. He was surprised to learn, as he did by experiments on himself, that it produced a species of intoxication. In breathing it, he says:—"The first inspiration caused a slight degree of giddiness. This was succeeded by an uncommon sense of fulness in the head, accompanied by loss of distinct sensation and voluntary power,—a feeling analagous to that produced in the first stage of intoxication, but unattended by pleasurable sensations."

Sir Humphrey also says, (in his Researches, p. 465,) that, on two occasions, the inhalation of nitrous oxide *removed headache.* Furthermore, he found that it greatly *mitigated, or wholly removed*, the pain he experienced while cutting a wisdom-tooth. And, in the same work, (p. 556) he says:—"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."

Now, even admitting that there are good reasons for Dr. Wells's preference of nitrous oxide over sulphuric ether, in abolishing the pain of surgical operations, I submit to the public to decide, how far the

above extracts militate against his claims to the discovery of this new property of his favorite exhilarating or nitrous oxide gas!

But if so much superior to ether, why are not further experiments made with it, and why does it not take the place of ether at once? It may be true that Dr. Wells used it in thirteen or fourteen cases, in Hartford, as he asserts; but his statement, in the London Lancet, that he had applied it more than *fifty times*, would seem to suggest some doubts as to his former statements.* Which is true, or whether either, it matters not, since Dr. Wells found it dangerous, not applicable in dental and surgical operations, unsatisfactory, and wholly discontinued its use more than two years and a half ago. He was a dentist, and could make a fair experiment on his patients, besides having every opportunity afforded him, by surgeons in Hartford and Boston, to test the utility of his pretended discovery. If he failed to demonstrate its importance to the world, certainly he cannot blame the public for his want of success, but must attribute his failure rather to his pseudo-discovery itself.

And here I will make some extracts from a communication made to the London Lancet, of March 6th, by "*Henry Bennet, M. D.*" "I have," he says, "lately had the pleasure of receiving a visit from Mr. Horace Wells, of Connecticut, United States, who, as will appear from the documents which I enclose, is the original inventor of the plan of producing insensibility by inhalation during surgical operations. Mr. Wells was introduced to me by my friend, Dr. Brewster, of Paris,

* When Dr. Wells first laid claim to this discovery, he stated that he had performed *ten or twelve* operations under the effects of nitrous oxide gas. Soon, however, the number had increased to *fifteen or twenty;* next, it went up higher, and, after reaching the intermediate stages, is finally set down, in the London Lancet, at *fifty*. This reminds me of the dialogue, in King Henry IV., in which Falstaff gives an account of the number he had slain the night before. "I have peppered *two* of them—two rogues in buckram suits." And soon after he says, "*Four* rogues in buckram let drive at me."

P. Henry.—What, four? thou saidst but two, even now.

Fal.—Four, Hal; I told thee four.

Poins.—Ay, ay, he said four.

Fal.—These four came all afront, and mainly thrust at me. I made no more ado, but took all their *seven* points in my target, thus.

P. Hen.—Seven? why, there were but four even now.

Fal.—Seven, by these hilts, or I am a villain else.

P. Hen.—Pr'ythee, let him alone; we shall have more anon.

Fal.—These *nine* in buckram, that I told thee of—

P. Hen.—So, two more are added already.

Fal.—Began to give ground; but I followed them close, came in, foot and hand; and, with a thought, seven of the *eleven* I paid.

P. Hen.—O monstrous! eleven buckram men grown out of two!

who, along with all the Paris physicians to whom the facts of the case have been made knowu, is convinced of the justice of his claims to priority. Indeed, there does not appear to us any room for doubt on the subject; and it can only be a matter of regret that these claims should have been allowed to remain so long unknown to the medical profession in Great Britain.

"Mr. Wells, however, explains his silence in the following manner:—He had left America for Europe *before Drs. Jackson and Morton asserted a right to the discovery;* and it was only some time *after his arrival in Paris* that he heard of these gentlemen having, in the most unjustifiable manner, assumed the credit of the discovery!"

Now, doubtless this Dr. Bennet is an honorable man, which makes me regret the more the unfortunate dilemma he has placed himself in, thus to give his countenance and endorsement to the statements above. But this is no affair of mine. If he has espoused Dr. Wells's cause for the honor its defenders are to reap, he is heartily welcome to his share.

Dr. Bennet says, above, Dr. Wells was introduced to him by his friend, Dr. Brewster, of Paris. But, to show how the latter was converted over to the espousal of this nitrous-oxide cause, I will quote his own words, as follows:—"I had seen Drs. Ellsworth and Marcey's letters, and sent to Dr. or Mr. Wells, begging him to call on me. I then asked him, 'Are you the true man?' His *answers*, his *manner*, convinced me *that he was!*" If Dr. Brewster is thus easily persuaded, one must conclude, that he is more credulous and incautious than before he departed from his native state of Connecticut.

But let us examine, or rather reply to, the last statement, by Dr. Bennet, that Dr. Wells left the United States for Europe before he heard of Drs. Morton and Jackson's claims. Dr. Wells's own letter to Dr. Morton, written some time before he set out on his journey, will show Drs. Bennet and Brewster, "along with all the Paris physicians" who have espoused his cause, how far Dr. W.'s "answers and manner" are to be relied upon. This letter was dated, and begins, as follows:—

"*Hartford, December* 10, 1846.

Dr. Morton:

Dear Sir,—*I have just seen a copy of your claim*, and find that it is nothing more than what I can prove priority of discovery [to] by at least eighteen months. When in Boston, at your room, I was well satisfied that the principal ingredient was ether, and, to all appearances, it had just the effect of this

alone upon the patient to whom I saw it administered in your office. Now, I do not wish, or expect, to make any money out of this invention, nor to cause you to be the loser; but I have resolved to give a history of its introduction, that I may have what credit belongs to me. Although it is in my power to *invalidate your patent* by a word, yet, so long as we remain on good terms, I shall not aim to do it," &c. &c.

The above extracts from this long letter prove conclusively, it seems to me, that Dr. Wells must have known of the claims of Drs. Morton and Jackson prior to his departure for Europe. The only chance to escape such a conclusion is, to suppose that, while under the effects of an over-dose of *nitrous oxide gas*, Dr. Wells, in his wild reveries, dreamed the contents of this letter, and wrote them down before the gaseous spell was off!

But, to be serious,—the fact is, Dr. Wells was written to when Dr. Morton first made his discovery; was invited to aid in bringing it before the public; came to Dr. Morton's office; saw the application of his "preparation;" but, afraid of its effects, gave his verdict against it, and went home, little dreaming then (whatever he may have dreamed since,) that he should one day set up claims to this discovery, as his own!

Regardless of the date of experiments successfully made by others, with sulphuric ether, in annihilating the pain of surgical operations, Dr. Morton claims to have succeeded in his attempts to discover the grand desideratum only in September, 1846; and the following is the certificate of the first person to whom sulphuric ether had ever been given in such a way as entirely to prevent pain in a severe operation:—

"*Boston, September* 30, 1846.

This is to certify that I applied to Dr. Morton, at 9 o'clock this evening, suffering under the most violent tooth-ache; that Dr. Morton took out his pocket-handkerchief, saturated it with a preparation of his, from which I breathed for about half a minute, and then was lost in sleep. In an instant more I awoke, and saw my tooth lying upon the floor. I did not experience the slightest pain whatever. I remained twenty minutes in his office afterwards, and felt no unpleasant effects from the operation.

EBEN H. FROST,
42, *Prince Street, Boston.*"

—

"We witnessed the above operation, and the statement is, in all respects, correct—and, what is more, the man asked where his tooth was, or if it was out.

A. G. TENNY, *Journal Office.*
G. G. HAYDEN, *Surgeon Dentist.*

Boston, September 30, 1846."

Although Dr. Morton had been, for a long time, experimenting with different gases, for the avowed purpose of finding the means of abolishing pain, he was by no means successful, and claims priority to no discovery made before the date of the certificate above. It is upon that experiment, and those immediately following, that he rests his claims of priority in the discovery in question. If others can show that they were successful in the use of ether at an earlier date, then his claims must fall to the ground: otherwise, others must yield the palm to him. I see not how we are to escape from this conclusion.

But there is a way of setting this matter for ever at rest, both as regards the claims of Dr. Jackson and Dr. Wells, and those of all others, however and whenever made. It is in the power of the surgeons of Boston, and particularly those connected with the Massachusetts General Hospital, who first heard of the new application of sulphuric ether from Dr. Morton, and from him alone, to disabuse the public mind, as to the pseudo-statements of Dr. Jackson and Dr. Wells, as well as others. They never heard that such a discovery had been made, until Dr. Morton applied to them, to demonstrate its utility on a patient about to submit to a severe surgical operation. They do not know, I am confident in saying, that Dr. Jackson had any thing to do with this discovery, aside from his own statements made long after Dr. Morton had given it to the world. I am aware they may justly feel some reluctance in volunteering in this matter; but now, it seems to me, truth and justice absolutely require them to unite in publishing to the world a full and fair statement of the matter in controversy, not giving as facts what they *understood* from Dr. Jackson, or his friends, to be his share in the matter; but only what they absolutely know. Dr. Morton, doubtless, is perfectly willing to submit his claims to this arbitrament, and will abide by its decision. But, possessing no distinguished foreign correspondents, and having no influential friends abroad, (*where*, it seems *this question is to be settled*,) and not being able, like Dr. Wells, to go in person to substantiate his claims, he must rely upon his own countrymen to do him justice. And, although others differ with me, it seems most proper, after all, that this question should be adjusted at home, and those who, like Dr. Morton's opponents, are not willing to submit their claims to such an umpire, certainly give us very strong grounds to doubt their cause.

Here, I apprehend, the true history of this discovery is to be written, let the French or English, or any others, decide as they please. Nothing of this kind will affect the truth, which must be known some time,

disguise or misrepresent it how much soever one may. And Dr. Morton is the last one, I doubt not, who has any thing to fear from the decision of this question on principles of equity and justice, or where it is properly understood. It is only those who fear this tribunal who say that they "care nothing for the honors this country has to bestow," and are only anxious to secure those of Europe! This is the declaration of one of the pretenders, as I am informed; and certainly the course of both those, who are trying to wrest the credit from him to whom it belongs, seems to warrant one in classing them together in this respect.

Those who have espoused, and who now advocate, Dr. Wells's claims, give, as a reason for his not making *his* discovery available and establishing those claims for himself, that he did not wish to realize any thing by it, but preferred, rather, to bestow it gratuitously upon the suffering of his race. But how does this harmonize with the principles he discloses when, during his visit to Boston, in October, he advised Dr. M. to sell all the rights he could, and to make all the money out of the discovery in his power? Or, how does it agree with a passage in his letter of October 20th, in which he says, "I hasten to answer it, (Dr. M.'s letter,) for fear you will adopt a method, *in disposing of* YOUR *rights, which will defeat your object.*"

And similar principles are avowed throughout his two letters of Nov. 20th and Dec. 10th, to Dr. Morton; from which it would appear, that he considered *his* discovery of so little value, that he was willing to give it to the afflicted and suffering of his race; and that, appreciating the immense superiority of Dr. Morton's over any and all others before made, he advised Dr. M. to adopt such a "method in disposing of his rights," as would secure him a "fortune." Noble and disinterested generosity this, of which but few examples are on record! Certainly, the possession of such virtues, if nothing else, fully entitles Dr. Wells to the awards and honors of the public!

The following extracts from the "Account" of the discovery in question, by a distinguished surgeon, conversant with it from its earliest promulgation, ought, certainly, to have some weight with our transatlantic friends in establishing the honor of giving this noble gift to the race—unless, indeed, as seems to be their determination, we are to have no voice in the matter. From present appearances, the Parisians have taken the whole subject under their own patronage, and manifested a disposition to award the credit and honors wherever

they please, regardless of the testimony of our own surgeons and scientific men, who, from the first, have aided and advised Dr. Morton in bringing the discovery before the world.

The writer of this history of the matter, like Drs. J. C. Warren and J. Mason Warren, does not admit that he knew of Dr. Jackson having had any thing to do in making the discovery, further than what he learned from Dr. J.'s own statements. His claims were wholly unknown to others, I believe I am justified in saying, *until the matter was placed beyond the chance of failure.* If Drs. J. C. Warren, Hayward, Townsend, Heywood, Bigelow, or J. Mason Warren, who performed the first successful operations on record, will state that they heard of Dr. Jackson's claims at all until some weeks after Dr. Morton had been to them to have his discovery tested in the hospital,—or if they had ever heard his name even mentioned in connexion with this use of ether, before Dr. M. had suggested it to them, and, in fact, administered it to a hospital patient,—then, he would show some reasons for the pretensions which he has so unjustly set up.

On the 14th of December, Dr. Morton addressed a note to the government of the hospital, presenting them the right to use his discovery in that institution, in answer to which he received the following reply:—

"*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."

From this note it will be seen that, at the hospital, where the discovery was first made available after Dr. Morton had tested its utility in his own practice, and where the surgeons first heard the subject mentioned, and so late as the 21st of December, nothing definite was known of Dr. Jackson's claims, and no importance whatever attached to them; while Dr. M. makes the tender of this discovery to the hospital in his own name, and receives the thanks of the Trustees for his boon.

But I will now submit the following extracts from Dr. Hayward's paper, read before the Boston Society for Medical Improvement, April 12th, 1847:—

It is well known that surgeons have, for a long time, sought to discover means of lessening, in some degree, if they could not altogether prevent, the pain of surgical operations; but their efforts were unsuccessful, and the world is indebted to individuals, not strictly of the surgical profession, for a discovery that will do more than any other to lessen human suffering. I believe I am warranted in saying, that this remarkable property of ether, when taken into the human system by inhalation, of rendering surgical operations painless, was discovered in this city, *and that the first successful application of it was made here in September last by Dr. Morton*, a distinguished dentist. He extracted teeth from several individuals, who were made insensible and unconscious in this way, without any subsequent ill effects.

It is understood that Dr. C. T. Jackson, well known by his great attainments in geology and chemistry, first suggested the use of the ether; *but to Dr. Morton, I think, must be awarded the credit of being the first who demonstrated, by actual experiment on the human subject, the existence of this wonderful property.* Having satisfied himself that teeth could be extracted, without pain, from those who had previously inhaled the ether, he was desirous of having it tried on patients who were to undergo longer and more severe surgical operations. For this purpose, he applied, about the middle of October last, to have it used at the Massachusetts General Hospital, and Dr. J. C. Warren, the attending surgeon at the time, at once consented.

The ether was administered at the Hospital by Dr. Morton, on the 16th of October, to a man upon whom Dr. Warren was to operate for a tumor on the face. The effect, in this case, was not complete; the suffering, however, was very much less than it would have been under ordinary circumstances, and the result was, on the whole, so satisfactory, that a second trial was made on the following day.

The patient, to whom the ether was administered on the 17th of October, was a female with a fatty tumor on the arm, between the shoulder and the elbow. At the request of Dr. Warren, I did the operation. The patient was insensible during the whole time, and was entirely unconscious. The operation lasted about seven minutes, but could not be regarded as a very severe one.

These are the first surgical operations, except those of dentistry, that were ever performed on patients while under the influence of the ether.

On the 1st of November, I took charge of the surgical department of the hospital, and, on the following day, in conversation with Dr. Warren, I stated that I did not intend to allow the surgical patients to inhale this preparation of Dr. Morton (for we were then ignorant of the precise nature of it,) during my period of service, unless all the surgeons of the hospital were told what it was,

and were satisfied of the safety of using it. Dr. Warren agreed with me as to the propriety of this course.

On the 6th of November, Dr. Morton called at my house, and asked me if I was willing to have his preparation inhaled by a patient whose limb I was to amputate on the following day. I told him of the conversation I had had with Dr. Warren on the subject. Dr. M. at once said that he was ready to let us know what the article was, and to give to the surgeons of the hospital the right to use it there when they pleased. He added, that he would send me a letter, in the course of the day, to this effect. I requested him to address it to Dr. Warren, as he was the senior surgeon, and told him that I would submit it to my colleagues at a consultation to be held on the following morning. He wrote the letter accordingly; the subject was maturely considered by the surgeons, who were unanimously of opinion that the ether should be inhaled by the individual who was to undergo the operation that day.

The question has arisen to many why, if Dr. Jackson really had no share in making the discovery, his name has been joined with that of Dr. M. in the letters patent, and elsewhere. This question, which has been often put, and which few have heard answered, is nevertheless easily disposed of.

As has been before stated in these pages, Dr. Morton had been a student in Dr. Jackson's office, and boarded in his family; so that he was acquainted with the scientific attainments of the latter, and his great skill as a chemist. When, therefore, Dr. M. had perfected his discovery, in order to avail himself of this knowledge and skill, and agreeably to the advice of R. H. Eddy, Esq., and others, he finally consented to offer Dr. J. a pecuniary interest in it, little dreaming that such an act would be equivalent to a *felo de se*,—at least, if his new associate in the discovery should succeed in his plans.

Some time after this,—and on the 16th of November, I think,—Dr. Jackson had an interview with Mr. Eddy, accepted ten per centum of the net sales, and pledged himself, in the presence of several persons, not to send to Paris certain letters by the steamer to sail that day—letters which he had with him, and which he had threatened to dispatch unless this compromise was effected. In the sequel, it appears how well he kept this promise; for the February steamer brought back papers containing one of these letters, dated prior to the interview above, or on the 13th November, it having been laid before the *Académie des Sciences*, and subsequently published in the *Compte Rendu*. This may be set down as the first breach of good faith.

The second is of a more reprehensible nature, but is not altogether chargeable to Dr. Jackson. As I have said, the February steamer

brought back this and other publications of his, in which he lays claim to all the honor of the new discovery. Of course, the scientific part of this community, and particularly our surgeons, were thunderstruck at such astonishing audacity; and we can only conceive of Dr. Morton's surprise at such a course, after he had consented to give Dr. Jackson a pecuniary interest in his discovery! But no one—I believe I am justified in saying—was more astonished, than Dr. J. himself, thus to find the whole credit of bestowing so great a blessing upon the world accorded to him. And how was this brought about? Fortunately, we have, as I am informed, the authority of Dr. J. himself for the truth of the answer I give to this query. If I am incorrect, let him refute or deny it. The letters above referred to, in which Dr. Morton's name is either not mentioned at all or only casually, originally conceded a part, at least, of the credit due him; but, before they were read to the *Académie des Sciences*, and finally published, the person who had them in charge, M. Elie de Beaumont, *was instructed to say as little of Dr. Morton's claims as possible. Accordingly, before they were read to the Académie, that distinguished savan* (who had received these letters several weeks prior to this time,) *struck out Dr. M.'s name entirely, and all allusion to his claims!* This, of course, made Dr. Jackson *sole* discoverer; and the whole French press, for a time, united in saying that all future ages must, for this great boon, pronounce with honor the name of "Jackson."

Well, in due time, this unexpected piece of good fortune was wafted across the Atlantic, and, finally, reached Dr. Jackson. But what did he do on hearing of this extraordinary injustice? Repudiate it, as he had before done the use of the vapor of ether? By no means; but, fearing an exposure, and justly dreading the reproaches of his former student, and unwilling to retreat from this false and accidental position, he sent his attorney, F. B. Hayes, Esq., to open negotiations with Dr. Morton anew, for an adjustment of all the difficulties. This was the last week in February. True to his orders, Mr. Hayes saw Dr. M.; assured him of their wish to accommodate matters; had frequent interviews with him; and all the while pretending the greatest friendship for him, and the sincerest regret at the misunderstanding that had arisen! This continued through the week, and up to Saturday night, the steamer sailing the next Monday. On Sunday, Dr. Morton, at the request of Mr. Hayes, called on Dr. Jackson; and, during their interview, they had considerable conversation on the subject then, as now, engrossing much of their attention: when Dr. J. remarked,

"Well, I have prepared an article, to appear in the Daily Advertiser to-morrow morning, which will satisfy you, and set the matter for ever at rest;"—or words to this effect. Dr. M. asked to see a copy, but, being refused, he impatiently waited for the forthcoming paper, which was thus to settle his claims for ever. The morning came; the Advertiser was procured; and the article, which was to make or mar his future fame, hastily perused. And then it was that the whole scheme of duplicity practised on him flashed upon his mind. He at once saw that he had been duped, and made the victim of a trick, the enormity of which others must define. He saw that all this pretended desire to settle the difficulties was only to gain time to prepare this paper, and to prevent him, Dr. M., from drawing up, and forwarding by the steamer of the 1st of March, such a statement as would expose Dr. Jackson's unjust claims. And how well he succeeded has been already shown in a paper, under the signature of "E. W.," published in the Daily Advertiser of the 5th of March.

But this was too late to counteract the influence of the unfair and unwarrantable document thus dispatched to Europe—carrying, as has been already elsewhere shown, the implied approval and endorsement of the American Academy, and of the names of two of our most distinguished citizens.* And this paper was drawn up principally by Dr. Jackson, as Mr. Hayes himself admitted, during the very time Dr. Morton was kept in town from his family, who were sick in the country, while Dr. J. was pretending the greatest anxiety to adjust all difficulties, and while Dr. Morton honestly supposed that there was to be an end to the troubles which he has ever shown the strongest possible disposition to accommodate.

But, in the face of all this, Mr. Hayes addressed Dr. Morton a note the same day this deception was thus made manifest, inviting Dr. M. to call at his office, or to name an hour when he would be at home. Towards evening, he came in, and endeavored to explain away the *ruse* that had been apparently played upon Dr. M., but to no purpose, Dr. M. having, in the mean time, been advised to hold no more intercourse with him on the subject.

And thus things remained until about a week before the sailing of the April steamer, when the friends of both parties made another attempt to arrange matters. At the request of Mr. Hayes, by note, Dr. Gould called on him at his office, when the importance of an adjustment, and the probability of effecting it, were conversed upon. It was

* See Appendix, C.

thought that a statement might be drawn up which both could sign, and the basis of such a statement was arranged. It was also agreed that Dr. G. should write what he regarded as a correct history, and Mr. Hayes promised that he would cause the same to be done immediately on his part; and that from these papers a final statement should be derived. In order to be ready on his part, Dr. Gould spent the greater part of the night preparing his paper, Mr. Hayes having promised to have his completed by the next morning. The time came, but not so Dr. Jackson's attorney, Mr. Hayes. Neither did he nor his paper afterwards make their appearance. On the other hand, Dr. G. submitted his paper to Mr. Hayes, to Dr. Jackson, and two or three of his friends, none of whom made any material objection to the statement, but thought, with a few alterations, it would answer. Dr. Morton expressed the same opinion. But, though the effort was invited on the part of Dr. J., no reciprocal attempt whatever was made for its success. And thus was a second attempt made, on the part of Dr. J., to blind Dr. Morton and his friends, in order that they should send out no refutation to the unjust and unfair statements Dr. Jackson had made in Paris and elsewhere.

But all these efforts on the part of Dr. Morton and his friend, as well as the friends of both parties, failing, Dr. Morton might have well been excused from another attempt at an arrangement of these difficulties. Nevertheless, he was willing to make one more trial, and determined, this time, to appeal directly to Dr. Jackson himself. Accordingly he wrote and addressed to Dr. J. the following note :—

"Charles T. Jackson, M. D.:

Dear Sir,—Being desirous that the misunderstanding between us, as to the discovery of the fact that sulphuric ether will produce insensibility to pain, may be speedily and satisfactorily adjusted, I now propose to you to refer the whole matter to some disinterested umpire, before whom all the testimony on both sides as to the matter in controversy shall be submitted, and whose decision shall be perpetually binding to both parties.

An answer to this proposition, made with the anxious desire for a full settlement of our difficulties, is expected to-day, or early Monday morning.

Respectfully,

Your obedient servant,

W. T. G. MORTON.

Saturday, March 27, 1847."

To this note, Dr. Jackson called on Sunday at Dr. Morton's rooms, and left the subjoined reply :—

"*Boston, March* 28, 1847.

W. T. G. MORTON, *Esq.*:

Last evening, I received your note of yesterday, and now reply that it will be as agreeable to me as it can be to you to avoid any further dispute as to the claims of you and myself in the discovery of the application of sulphuric ether by inhalation to surgical purposes.

All I require is impartial justice, and therefore I cheerfully accept your proposition to refer the question to a suitable umpire.

Respectfully,

C. T. JACKSON."

Highly gratified with this new and favorable aspect of the case, Dr. Morton lost no time in expressing the pleasure he experienced from the foregoing note, and he immediately returned the following:—

"*Boston, March* 29, 1847.

C. T. JACKSON, M. D.:

Dear Sir,—Your note of the 28th inst., accepting my proposition to refer our difficulties to a disinterested umpire, has this moment come to hand, and I hasten to express my satisfaction at this favorable feature in the controversy.

It only remains for us to select the person or persons to whom the matter in debate shall be referred. If we can agree—and I trust we can—upon some one gentleman, I shall be perfectly satisfied; or, if not, then you may select one person or two, as you prefer, and I will do the same, leaving them to choose another,—whose decision shall be forever binding. Please inform me what is your choice in the matter, and oblige,

Most respectfully,

Your obedient servant,

W. T. G. MORTON."

This was dated, let it be observed, on the 29th of March, and the steamer was to sail on the 1st of April, which made it desirable to Dr. Morton that all the conditions should be settled, and the matter fully referred, before that time. He, therefore, with past experience in view, and the "Punic faith" of his opponents before him, waited impatiently for an answer. But again he waited in vain, and the steamer sailed. During the month of April, Dr. Jackson said, more than once, that the whole matter was in course of adjustment, and he said this in such a way as that Dr. Morton should hear of it, and be led thereby, we must presume, to infer that things could still be amicably arranged, although he neither saw nor heard directly from Dr. J. all this time. But the May steamer having sailed, and there being no immediate opportunity

to send to Europe, Dr. J.'s claims having meanwhile had time to be fully known and established, he thought it safe to write the following note, to wit :—

"*Boston, May* 3, 1847.

Mr. W. T. G. MORTON:

Sir,—I have lately received a pamphlet, entitled, "Some Account of the Letheon," &c., published, as I am informed, by your consent, and would now inform you that, by this procedure, and especially by the publication of such a pamphlet, you have absolved me from all obligations to submit our relative claims upon the subject to an arbitration, as was formerly agreed upon between us.

Your obedient servant,

CHARLES T. JACKSON."

And thus, Dr. Jackson having gained the time he required, and accomplished his ends by the delay, all hopes of a compromise, from which so much had been expected, at once vanished into thin air. Nothing is now left for Dr. Morton but to present his claims fairly and justly before the public, trusting that their sense of justice will award him the credit that is his due. And here it may be asked why Dr. Morton has manifested so strong a desire to refer the dispute to a third party. To this I reply, that many persons, on whose judgment he could rely, strongly urged him to pursue such a course, as being perfectly fair, and as the best means of drawing out all the facts in the case. Having nothing to suppress in the matter, and only desirous the whole truth should be known, he was always ready to pursue such a course as ought to be satisfactory to Dr. Jackson, and convince the public that he was not unwilling to have his claims thoroughly investigated. He has now, as all must admit, shown the strongest disposition to pursue a just and honorable course in endeavoring to adjust this unfortunate misunderstanding; and if he and his friends have been thwarted in the matter, the public should blame others and not them.

To several communications, setting forth, as the writer was able, some of Dr. M.'s claims, Dr. Jackson has contented himself with a simple denial, promising to bring forward the proof of their error; but up to this time, on this subject, he has observed a "masterly inactivity." If, however, he has such proofs as will overthrow all other claimants, especially Dr. Morton, why are they not produced? The public have a right to expect and ought to see them, and I would here, as I have elsewhere, demand their publication, feeling that, as he has pronounced my statements "malicious misrepresentations," and as he avers

that he has the evidence to prove them such, I have a right to make such a demand, and that he cannot with propriety refuse to exhibit it.

One statement which Dr. J. controverts, and which he deems material to his cause, is, that Dr. Morton went of his own accord to the surgeons of the Hospital for permission to give his "preparation" to a patient about to submit to an operation. And as this is a point of some moment, I shall be pardoned in submitting the subjoined notes, going, as they do, to set this matter entirely at rest. The first bears date only two weeks after the discovery was made, and about the same time before Dr. Jackson's opposition to the discovery ceased, and, of course, cannot be supposed to have originated with any suggestions of his. Or, if he did, as he states on several occasions, suggest such a step, was it not a strange way to effect his object first to ask Dr. Warren to request Dr. Heywood to invite Dr. Morton, whom he claims to have been under his direction, to be present at the Hospital and administer his preparation to a patient! This note is as follows:—

"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, and 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. HEYWOOD,

House Surgeon of Mass. Gen. Hospital, Oct. 14, 1846.

DR. MORTON, *Tremont Row.*"

Other similar notes were addressed to Dr. Morton, but I will only submit another, which was written in December, and which goes to show where the surgeons placed the credit of the discovery at that time. The subjoined is a copy:—

"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. HEYWOOD,

Mass. Gen. Hospital, Dec. 11, 1846.

DR. MORTON, *Tremont Row.*"

And here, as evidence bearing upon this subject, I cannot resist giving two other notes which go to prove that, at the time of their date,

Dr. Morton was considered by the writers not only the true discoverer, but the person who was alone to be consulted by those who wished to avail themselves of its application. And, furthermore, one of them certainly clearly shows that Dr. Morton was not under Dr. Jackson's directions, and did not go to the Hospital by his advice, as he states.

The first of these is from Dr. Brown, and was addressed to Dr. Warren, whose influence with Dr. Morton was solicited to gain permission to use his preparation in the Orthopedic Institution :—

"Dear Doctor :—I wish Dr. Morton to give the privilege of using *his preparation* to the Orthopedic Institution. My operations are not severe, and I shall have no great use for it; but still I should like to have *his consent to use it*, and I think it would be to his credit to give it. I shall give notice of the gift. My institution is almost a charitable one. Nearly half my patients are charity patients, and I have few or none who could afford to pay for the preparation.

Yours truly,

J. B. BROWN."

This note, with the one following, was sent to Dr. Morton by Dr. J. C. Warrren :—

"Dr. Morton :

Dear Sir,—I enclose 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*, *Dec.* 11, 1846."

And here I may be permitted to express the belief that the foregoing evidence, as to the question, who introduced the use of the ether into the Hospital and to the world, will be a sufficiently conclusive refutation of Dr. Jackson's statements, that Dr. Morton acted under his direction in bringing out the discovery, and that he caused the matter to be made known, not only to the Hospital, but, by means of Dr. Morton, to the public generally. This evidence will also be a sufficient reply to Dr. Jackson's statement before me, that "Mr. Morton was associated with me *as joint-inventor* on account of his having *performed the experiments directed by me*, and having made some modifications in the apparatus."

And, as to this statement, I will only add, that, for Dr. Jackson's

cause, it certainly proves too much. For how can I make oath that the agent I employ to carry out the details of my invention is a co-discoverer? Or, with still more pertinency, I inquire how that person is a "joint-inventor" with me, in one thing, who makes some modifications in something else quite different? This looseness of expression savors very little of that scientific exactness which a man of Dr. J.' s celebrity ought to observe.

In the former part of this paper, I have glanced at the reasons why Dr. Morton consented to have Dr. Jackson joined with him in the Letters Patent, or elsewhere. But I now feel at liberty to make some statements on this subject which may further elucidate the matter.

When Mr. Eddy was applied to by Dr. M. to assist in procuring a patent, having heard from Dr. Jackson and his family all that he knew respecting Dr. J.'s claims, and believing, from their statements, that Dr. Morton had been assisted in his discovery, he induced the latter to associate Dr. J. with him, assuring him that *he could not otherwise procure a patent.* In this Mr. Eddy acted conscientiously: but he was, as a subsequent examination soon convinced him, under erroneous impressions. At that time, but little importance was attached to Dr. Morton's discovery, and Mr. Eddy, as did several others, advised Dr. M. to concede something to Dr. J. in order to gain his coöperation and advice in giving it to the world under as favorable auspices as possible,—thereby insuring its success, so far as could be done. And another reason that induced Mr. Eddy to give Dr. M. this advice was, solely *to gain some share of the credit and emoluments arising from the discovery to Dr. Jackson.* But he has since, I believe I am fully warranted in saying, entirely changed his views, and now acknowledges that he had been misinformed as to Dr. Jackson's having any thing to do in making the discovery, more than many others. Indeed, I feel confident that, were Mr. Eddy to publish what he knows of this matter, it would not only settle the relative merits of the two claimants, but place the claims of the real discoverer beyond any chance of dispute. No one is so thoroughly conversant with all the bearings of this question as he, and no one has it so completely in his power to give a full, satisfactory, and convincing history of the matter in controversy. And could he deem it consistent with his duty, at this stage of the investigation, to publish a full account of the matter, the public would certainly be under lasting obligations to him. Such a history, joined with the testimony of Caleb Eddy, Esq., would, I think, place the credit of the discovery where it belongs, and settle the question, "Who is the discoverer," beyond a doubt.

But there are many other persons familiar with the origin and progress of the discovery, almost any one of whom could, were they ready to state all they are cognizant of, convince the public mind, and terminate the dispute. Are they not called upon to speak out plainly on the subject at this juncture, when the question is up, and while the facts are full in their minds? As I have before said, without doubt, Dr. Morton is ready for, and will abide by, this decision. He has ever shown a disposition to accommodate matters, while his opponent, as appears by the foregoing correspondence, is unwilling to trust his cause but to those who know nothing of his claims, aside from what they gather from his own statements; and these, through the ardent temperament of Dr. J., may sometimes be a little colored,—not to say, as he has of mine, that they are "malicious misrepresentations."

But, before closing this account, I will adduce the testimony of *Dr. Jacob Bigelow*, as I have already done that of several other eminent surgeons, to show who was deemed to be the discoverer, and the *sole* discoverer, so late as November 28, 1846,—two months after the discovery was announced. This gentleman, too widely and too favorably known to need any encomium from me, in a letter of the above date on this subject to his friend Dr. F. Boott, of London, says, "*The inventor is Dr. Morton, a dentist of this city;* and the process consists of the inhalation of ether to the point of intoxication." Is not this explicit and conclusive? or will it be said that Dr. Bigelow, notwithstanding he was, like the gentlemen above alluded to, perfectly conversant with the whole matter, is yet not a competent witness? And will Dr. Jackson undertake to invalidate the testimony of all the high authorities I have cited by his single *ipse dixit*, and without a word by way of corroboration? If he does, he will need a more potent agent, even than "Aladdin's Lamp," to give him success,—great as that success was in Paris, before others appeared to overthrow it.

If the foregoing statements do not satisfy the public, and even Dr. Jackson's friends themselves, then would they not be convinced, though one should rise from the tomb and proclaim Dr. Morton *the* discoverer,—even from that tomb into which Dr. Flagg and his companions have so untimely hurried scores of Dr. Morton's patients!

And here I would say, that I should not be doing justice to my own feelings, nor properly representing this matter to the public, not to give all credit to those from whom Dr. Morton has received important aid and advice in bringing his discovery before the world. In the earlier part of these pages, allusion has been already made to the important

assistance rendered by Drs. J. C. Warren, Geo. Hayward, and J. Mason Warren; and it now remains for me to advert to the other names which, equally with those just given, will be remembered with gratitude and respect, so long as human suffering remains to be assuaged.

And, amongst those to whom Dr. Morton and the public are greatly indebted in this way, stands *Dr. Augustus A. Gould.* He clearly perceived, from the first, its vast importance to mankind, and was a zealous advocate for its employment. About three weeks after the first successful experiment, on the 30th of September, and on the evening preceding the first operation at the Hospital, Dr. Gould suggested, in a conversation with Dr. Morton on the subject, the application of the system of valves to the inhaling apparatus which was employed on that occasion, and has ever since been used in this country and in Europe. Being thus concerned in the invention, and learning that Mr. Chamberlain, of School Street, was claiming to have devised this arrangement, he consented that his name should be associated with that of Dr. M. in the specifications to the Letters Patent; and this for the sole purpose of securing the rights of Dr. M., and for no other consideration.

To Dr. *Henry J. Bigelow*, also, must be awarded the credit of being one of the earliest friends and promoters of this great blessing. His paper, which was read, Nov. 9, 1846, before the Boston Society of Medical Improvement, being the first authentic announcement of this discovery ever published, does him credit for great foresight,* as well as for a talent for scientific inquiry and investigation. When we consider with what reluctance professional men espouse a new, untried, and somewhat doubtful cause, and reflect upon the odium which is generally thrown upon new discoveries, (which, from the first, has been heaped with an unsparing hand upon this,) we are constrained to admit that he has no ordinary share of fearlessness and independence. Indeed, it has ever been a matter of surprise to me that, so early in the history of this discovery, Dr. Bigelow had the courage to publish such a paper, when even now,—as in the case of the Medical Faculty of Philadelphia,—many still oppose it. And it is equally surprising that, at so early a period, he could have grasped the matter so clearly, as that the *types of almost all subsequent cases are found in his report.* That one, taking this bold stand in favor of the ether vapor, should come in for a liberal share of the abuse of Dr. Flagg, and the other guardians

* Dr. Bigelow, immediately after witnessing the first operation at which he was present, on meeting another physician, and speaking of what he had just observed, exclaimed, with much emphasis and animation, "*I have seen something to-day that will go round the world!*"

of the public health and safety here and elsewhere, is only a natural consequence. Indeed, when these envious, querulous people pronounce against an individual, or a measure, it is the strongest *prima facie* evidence that this particular individual, or measure, is right. These men, who oppose every thing that comes up of utility because they had no voice in the matter, or were not consulted,—such men take the opposite side, from instinct and from a constitutional tendency to the wrong, and forcibly illustrate the doctrine of natural depravity. They gravitate downwards, according to a law of their nature. But fortunately, as amongst the lower animals, so with men, those who make the loudest outcry do the least harm: the one brays, but bites not, while the other deafens you with his loud threatenings, which no one regards.*

To *Drs. S. D. Townsend, C. F. Heywood,* and *O. W. Holmes,* likewise, as well as to many others, and indeed to the whole *medical* profession,—with a very few exceptions,—is Dr. Morton suitably grateful for that uniform kindness and countenance which they have courteously shown him throughout, and which have incited him to persevere amid the discouragements and abuse of the *dental* profession, which the meanest of all the passions, envy, has arrayed against him. And, whatever may be the result of the efforts of a distinguished scientific gentleman, backed by the *prestige* of a wide-spread fame, to rob Dr. M. of the honor of his great discovery, he will not, in any case, I trust, be forgetful of the high obligations he is under to those who have so kindly and unwaveringly lent him their advice, encouragement, and support.

And, in contradistinction to the noble course pursued by the Profession to which he *does not* belong, I cannot refrain from mentioning the ignoble course of the Profession of which he *is a member*;—a member, too, of good standing, his certificates from Dr. N. C. Keep, Dr. Jackson,† and others, and the fact that he has recently been a partner of Dr. K. and antecedently to that, of Dr. Horace Wells also, being a sufficient proof. I have already several times adverted to the fierce and bitter assaults that were made upon him and his discovery at its first promulgation; and I have now only to allude to a species of contemptible and petty annoyance, to which his (no longer open) enemies have since

* Since writing the encomium on the 27th page, *et passim*, I am happy to learn, as I do on the *very highest authority*, that some of those, at least, who signed Dr. Flagg's manifesto, extremely regret taking the hasty step, into which they were hurried, almost without reflection, by their seniors in years and in their profession.

† See Appendix, D.

resorted, to malign and injure Dr. Morton. Overt acts and open assaults failing to silence Dr. M. or to kill his discovery, and finding that, out of evil intentions, good was educed, they determined to change their mode of warfare,

> "And out of good still to find means of evil,
> Which oft-times may succeed:"

therefore,

> ——————"our better part remains
> To *work, in close design, by fraud or guile,*
> What force effected not."

They now commenced sending anonymous letters, circulating villanous libels, and resorting to such means of accomplishing secretly what could not be done openly. If a stranger inquired for Dr. Morton's office, they would pretend not to know such a person. "Dr. Morton—Dr. Morton?" they would say: "We don't know any *Doctor* Morton;" and then, perhaps, recall the different persons of that name whom they recollected, taking care not to give the one desired. But, on being questioned as to *the* Dr. Morton who discovered the new property of ether, they would exclaim, "O yes; there is a *Mr.* Morton, in Tremont Row somewhere, who lays claim to that honor, but who had no more to do with making it than you or I." This is an actual fact, and there are many more like it that could be given. And it was the same spirit that dictated the contemptible anonymous communication published in the Medical and Surgical Journal of May 12th, over the signature of "A.," in which, although compelled to place the credit where it belongs, yet he says it is thus "due undoubtedly to Dr. M's *talent of recklessness;*"—"the same credit is due to him that should be awarded to *another* distinguished *quack*," &c.;—"reckless quacks have done considerable, in all ages, to advance the science of medicine and surgery;" and like passages. Now, if Dr. Morton is a "quack," as he is here styled, or a "mountebank," as he is named by some other vilifier, then are all other dentists quacks and mountebanks; then have Dr. Keep and Dr. Wells been the associates and partners of a quack and mountebank, and Dr. Jackson has endorsed his pseudo-pretensions in giving him a certificate. The truth is, Dr. M., having studied dentistry with the two first-named —— "quacks," (according to this interpretation,) and the science of medicine with Dr. Jackson, they are all either guilty of educating and countenancing a quack, or are themselves equally entitled to that cognomen. But as this is a nice point, and "doctors may disagree" about it, I will not undertake to

decide. I may here say, however, that mean, indeed, must be the spirit that is unwilling to bestow upon "Mr." Morton the title of Doctor,—the cheapest, poorest, and most easily obtained of all titled wares, and ordinarily conferred upon the veriest driveller who ever mixed a dose of calomel and jalap, and never before, to my knowledge, denied to the most humble, unless, perchance, he attained to some distinction by which the hatred or envy of the "doctors" *par excellence* was excited. Then, instead of bestowing the title that every ass may wear by sitting half an hour in any apothecary's shop and imbibing its peculiar airs, their paucity can afford only the opprobrious prefix of "Mister."

These little attempts to annoy, although they show the quality of the spirits whence they emanate, do not in the least answer their desired end, only in so far as they injure the business and reputation of the person at whom they are aimed. Undoubtedly, when the winds, which such traducers are now letting loose, have done their utmost upon the head of him whom they were untied to destroy, they will return to complete the shame and overthrow of those who gave them liberty. He who sows the wind will reap the whirlwind.

And before leaving this subject, I ought to say that I am aware I may seem to have dwelt too long on this matter; but the public cannot be aware of the immense injury these repeated attempts upon Dr. Morton's reputation and business have really done him. As a proof of this, however, the manifesto put forth by Dr. Flagg, and others, has been circulated *all over this country*, and has absolutely prevented Dr. M. from *making sales enough to meet the expenses* of bringing out his discovery and getting up the apparatus, besides frightening away his patients, so that his business, for some time, fell off to an alarming extent. This manifesto has been broadcast, as it were, insomuch that, wherever Dr. M.'s agents went, they met with, and had to contend against, its exaggerated and alarming statements. In many, very many places, these agents were insulted for daring to offer this "humbug," this poison, this bane of mankind,—and the result was that, out of more than twenty agents who have been sent out, only two or three have failed to bring him in debt. This is a matter of fact. And had not this manifesto,—bearing so many names distinguished in the dental profession,—been issued, nor the other opposition from the same quarter made, or had Dr. Jackson ever raised his voice in defence of *his* discovery, I do not hesitate to say that, at the lowest estimate, Dr. M. would have cleared *hundreds of thousands of dollars* for the gift of a

boon, at least, as valuable to man as the Æolian attachment, the addition of a new globe to our solar system, and last, though by no means least, *gun-cotton!* And what has been gained to Dr. Morton's opposers, by their attempts to prevent his discovery from coming into general use? What, by their endeavors to throw doubt and discredit upon this discovery, and to invalidate his Letters Patent? Why, simply the right (or rather wrong,) to use the ether in their practice *without paying for it.* It now appears, that they were not fighting *pro bono publico,* but *contra bonum publicum,* and for their individual good. This seems to be all they aimed at, whatever more they may have done. And here I must leave these disinterested "doctors," where Mr. Webster left one of the same envious *genus,*—to their own company!

The following extracts are too curious to withhold. The first is from a communication made to the Journal of Commerce, by Dr. E. E. Marcy, in December:—

"During the same month, (October, 1844,) the writer of the present article, while witnessing the experiments of the gas, suggested to Dr. Wells the use of the sulphuric ether as a substitute for the nitrous oxide gas. Being familiar with the effects of both these agents, and knowing that their operations upon the system were analogous, I first urged upon him the use of the sulphuric ether, as being equally efficacious and less troublesome to prepare. Upon reflection, and a more full discussion of the matter, I advised Mr. Wells to abandon the use of the ether and confine himself to the exhilarating gas."

In another communication, of January 8, made to the same paper, Dr. Marcy says, "One fact is incontrovertible, viz:—that inhalation of the vapor of the rectified sulphuric ether, for preventing the pain of surgical operations, *was suggested to Mr. Wells by the writer of this article* more than two years since."

In the first article quoted from, Dr. Marcy also says, "In the month of October, 1844, a dentist of Hartford, Ct., Horace Wells, Esq., first made use of inhalations of the nitrous oxide gas in extracting teeth." And from these premises, he makes the following deductions, viz:—

"1st. The discovery of the inhalation of *a gas*, which would prevent pain during surgical operations, *was first made by Mr. Wells*, of Hartford, Ct., in October, 1844.

2d. That the use of the vapor of sulphuric ether *was suggested to him* a short time afterwards, and that its properties, as well as those of the gas, were, at that time, fully discussed and appreciated.

3d. Simple justice should induce the public to *give the credit of these discoveries to the men* who first made known and demonstrated to the world that the inhalation of a gaseous substance would render the body insensible to the pain of surgical operations."

From the foregoing, it appears that Dr. Marcy is preparing the way to announce his own claims to the discovery in question! I had before given him the credit of disinterestedness, but I now see the object which he has in view: He is to establish Dr. Wells's claims, thus shutting out all others, and then to come in himself for the honor, by reason of having suggested the use of ether to Dr. Wells, thus pushing the latter aside. This accounts, also, for his having taken so much pains to settle, in advance, the principle on which alone Dr. Jackson's pretensions are based, by withholding all the credit from Morton, on the assumption that the former made the *suggestion* to the latter; for, this principle settled in his favor, and Dr. Wells admitted to stand in the same relation to him that Dr. Morton—according to his version—does to Dr. Jackson, and it becomes an easy matter for him to apply it to his secondary, in the same way he has already applied it to Dr. M., and thus carry off the palm of being the *sole discoverer!*

And, apropos to the foregoing, I cannot refrain from giving the most curious specimen of medico-legal special pleading I have ever come across. An affidavit, made and sworn to by Dr. Marcy, for the purpose of establishing his protégé—Wells's—protoxide claims, has the following deductions and reasonings from the premises he had before laid down. "In conclusion," says he, "I beg leave to offer it as my opinion,(!) *that the man who first discovered the fact, that the inhalation of a gaseous substance would render the body insensible to pain during surgical operations, should be entitled to all the credit or emolument which may accrue from the use of any substances of this nature.* This is the *principle*—this is the *fact*—this is the *discovery*." The italics are Dr. Marcy's, and the passage will speak for itself,—although it is not a full endorsement of Dr. Wells's pretended claim to great disinterestedness in wishing to *give* his discovery to the public.

Dr. Marcy likewise says, in this certificate or affidavit, "I gave it as my opinion, that nitrous oxide gas was the safest, inasmuch as the after-effects of the gas are not so unpleasant as from the ether vapor." And both he and Dr. Wells always state the same preference. How far they are correct in this, will be seen by the passages I have translated below.

Dr. Wells lays much stress upon an interview, in 1844, with Drs.

Morton and Jackson, during which he pretends to have made certain suggestions, which led to the present discovery. In answer to this, I will quote a passage from a letter of Dr. Jackson, now before me, and which I received from Dr. J. while at Washington last January. He says, (and I submit it for what it is worth,) "I wish you to state in my behalf to Mr. Dixon, that Mr. Wells never said a word to me about the use of sulphuric or other ether vapor, nor ever mentioned the word 'ether' in my presence."

It is known that, while in Paris the past winter, Dr. Wells made a communication to the *Académie des Sciences*, claiming priority of discovery in using sulphuric ether in surgery, although, at the same time, he states he had used nitrous oxide gas, which he still prefers. To show how these claims were received by the *Académie*, I have translated the account of their proceedings thereon, which I beg leave to submit.

"*Académie des Sciences*—Sitting of Feb. 23d. Dr. Wells, (of Hartford, Ct., U. S.) addressed a communication to the *Académie* claiming the priority of the discovery of ether vapor, and its application to practical surgery. He had, he said, communicated to Drs. Jackson and Morton his experiments and their results, who have, since that time, appropriated his idea. In conclusion, he says that it is no longer ether, but the protoxide of azote, (exhilarating gas,) which he employs to prevent pain. M. Orfila does not believe that this gas *can be used with impunity*, instead of the vapor of ether; he believes himself warranted in concluding, in fine, from the numerous experiments made by Vauquelin, by Davy, and by himself, *that this is a dangerous gas*. It otherwise appears, that there has formerly been some question on this point. M. Geradin remembers that, fifteen or eighteen years ago, a letter was addressed to the *Académie* by an English physician, *who pretended*, by means of the nitrous oxide gas, *to render patients insensible to pain*. Larrey alone did not repel this communication with incredulity; he promised to make some experiments, which, doubtless, did not succeed, for the subject was not again agitated."

CORRESPONDENCE BETWEEN THE SURGEONS OF THE MASSACHUSETTS GENERAL HOSPITAL, AND CALEB EDDY, ESQ. AND MR. R. H. EDDY.

Since writing the foregoing, the wish therein expressed has been gratified; and, by the kindness of Drs. Hayward, Townsend, Parkman, and Bigelow, surgeons of the Massachusetts General Hospital, I am permitted to lay before the public the following correspondence between

them, and Caleb Eddy, Esq. and Mr. R. H. Eddy. As these communications will speak for themselves, I need not add any comments, but will give them at once, merely expressing the pleasure it affords me, thus to be able to adduce a kind of testimony which cannot fail, as it seems to me, to carry conviction to the minds of the most incredulous. This correspondence affords me the means of corroborating many of my foregoing statements.

The subjoined is the letter from three of the surgeons, Dr. Bigelow having addressed a separate note to the same effect, which, therefore, I will omit :—

Boston, May 18, 1847.

Caleb Eddy and R. H. Eddy, Esqs.:

Gentlemen,—The undersigned, having been informed that you are in possession of important information relative to the discovery of the new property of sulphuric ether, and of its subsequent history, are desirous that you should, at your earliest leisure, furnish them with such an account of the matter as will elucidate so important a subject.

They will thank you to state how the names of Dr. Charles T. Jackson and Dr. W. T. G. Morton became associated in the Letters Patent; what share each had, in your opinion, in making the discovery; and any other facts you may choose to communicate tending to the same end.

GEO. HAYWARD,
S. D. TOWNSEND,
SAMUEL PARKMAN,

Surgeons of the Massachusetts General Hospital.

—

Boston, May 24, 1847.

To Drs. George Hayward,
S. D. Townsend,
Samuel Parkman,
Henry J. Bigelow,
Surgeons of the Mass. General Hospital:—

Gentlemen,—Your favors of May 18th and 20th, addressed to myself and Mr. R. H. Eddy, have been received. As I presume any reply I may make will be made public, I would take the occasion to remark, that, were it not that there now seems no possibility of the controversy existing between Drs. W. T. G. Morton and C. T. Jackson being settled by mutual arbitrament, owing to the refusal of the latter to submit the same to a reference, I should feel an indisposition to make any relation of what came under my notice relative to the discovery in question. I have no wish to rob Dr. Jackson of any honor to which he may be properly entitled, and am governed by no interest further than a desire that he to whom the world is really indebted for making the discovery may receive that reward to which he is justly entitled.

On the evening of Friday, October 23, 1846, Dr. Charles T. Jackson visited my house. During the evening, I requested him to relate to me the particulars of the new discovery for prevention of pain in surgical operations. He stated to me, that Dr. W. T. G. Morton called on him near the latter part of last month to obtain the loan of a gas-bag, which he said it was his intention to use for the purpose of administering atmospheric air, or something else, to a patient to quiet her fears in order that he might extract one of her teeth: that he informed Dr. Morton that his gas-bags were in the attic story of his house, and it would be attended with some trouble to procure them: that Dr. Morton stated that he was desirous of operating on the imagination of the person in some such way as was said to have been practised on a criminal condemned to death, viz.—by suffering warm water to trickle upon and from some wounded or lanced part of the body while the eyes of the person were bandaged. Dr. Jackson stated, that he told Dr. Morton that such an experiment would prove a failure, and he would be ridiculed for making it; that he had better let her breathe some ether, (if he could induce her to inhale it,) which would put her to sleep, and then he could pull her tooth, and she could not help herself, or could not prevent him by any resistance: that Dr. Morton inquired of him as to the danger and mode of using it. He replied to him, that he might saturate a sponge or cloth with it, and apply it to her mouth or nose. 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 his 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." This is all, or nearly all, of any importance, that I now recollect in relation to the discovery, previous to the application for the patent in which the names of Drs. Morton and Jackson were associated.

With respect, your obedient servant,

CALEB EDDY.

—

COMMONWEALTH OF MASSACHUSETTS.

County of Suffolk,
City of Boston.

Be it known, that, on this twenty-ninth day of May, Anno Domini eighteen hundred and forty-seven, before me, the undersigned, a notary public, within and for said county and city, duly commissioned and sworn, came Caleb Eddy, and made solemn oath that the foregoing statement, by him subscribed, is true. The said Caleb Eddy is well known to me as being one of the most respectable and trustworthy citizens of said Boston.

In witness whereof, I have hereunto set my hand and seal notarial.

JOHN P. BIGELOW, *Notary Public.*

Boston, May 22, 1847.

To Drs. Geo. Hayward,
S. D. Townsend,
Samuel Parkman,
H. J. Bigelow,
} Surgeons of the Mass. General Hospital:—

Gentlemen,—I have received your communications of the 18th and 20th instant, in which you state that you have understood me to be "in possession of important information relative to the discovery of the new property of sulphuric ether, and of its subsequent history," and are desirous that I should "furnish such a statement of the matter as will elucidate so important a subject;"—also, "to state how the names of Drs. C. T. Jackson and W. T. G. Morton became associated in the letters patent, and what share each had, in my opinion, in making the discovery." "Also, any other facts I may choose to communicate tending to the same end."

The friendly relations which, for many years, have existed between myself and Dr. C. T. Jackson, have heretofore caused me to refrain from making known many facts in my possession in relation to the late discovery of the new effect of sulphuric ether. The difficulties, between him and Dr. W. T. G. Morton, I hoped to see settled by an impartial reference,—one, where the evidence, produced by both parties, could be subjected to a rigid examination, in order that truth might be elicited, and strict justice rendered to whichever of those gentlemen such a tribunal should accord the chief merit of making the discovery. I have earnestly recommended Dr. Morton, whenever an opportunity has presented, to induce Dr. Jackson to submit the matter of the discovery to such a reference. Accordingly, it was a cause of much gratification to me to learn, that a proposition of Dr. Morton to do so, had received the favorable consideration of Dr. Jackson. I find, however, my anticipations have not been realized. Dr. Jackson, after having consented to refer the case, and after delaying, a long time, to agree on a suitable umpire, has, as I learn, utterly refused to submit his claims to a just arbitration. Under such circumstances, I feel it a duty to make known to you a few facts. My business engagements prevent me from stating a particular history of much that has come under my observation in relation to this matter. I shall, therefore, endeavor to confine myself to a simple statement of what I was witness to, from the time I first heard of the discovery until a patent was applied for on it in this country.

Within a few days of Sept. 30, 1846, I think the 1st of October, Dr. W. T. G. Morton called on me at my office, stated to me that he had made an important discovery, by which he could extract teeth without pain, and desired to learn from me whether it could be secured by a patent. After replying to him that he must state the nature of it, before I could render him any definite opinion, he informed me, that he used sulphuric ether, by administering it by inhalation in a state of vapor. He mentioned, that he had extracted a tooth without the patient being sensible of the operation, and that, on awakening from the sleep into which he had been thrown, he was much surprised to find his tooth drawn and lying on the floor.

I stated to Dr. M. that, as to the patentability of the discovery, I had some doubts; but that I would consult the law, and the various legal decisions on the subject of patents, and advise him of the result. After this, I saw Dr. Morton not more than once, I think, if once, until Wednesday, the 21st day of October. In the mean time, I had read several articles in the newspapers relative to the experiments performed at the Massachusetts General Hospital, and had understood, from Dr. Charles T. Jackson, that he had had some connection with Dr. Morton in making the discovery. My reflections on the subject led me to the belief, that a patent could be obtained in this country, and, on the 21st day of October, Dr. Morton having called at my office, I so informed him. I stated to him that, from what I had learned from Dr. Jackson, I considered the discovery to be a joint one, and that the patent, if applied for, must be conjointly by him and Dr. Jackson. In rendering such advice, I was fully impressed with the belief, from the statements of Dr. Jackson, that he, Dr. J., had suggested to Dr. Morton the propriety of experimenting with ether, —that Dr. Morton, without the presence or further assistance of Dr. Jackson, had practically demonstrated the effect of ether to annul pain. Upon this I reasoned, that, had Dr. Morton kept the discovery secret, neither Dr. Jackson nor the world would have known of the result; or, in other words, had Dr. Morton not performed the experiment that he did, the discovery made could not have taken place;—also, that had not Dr. Jackson given Dr. Morton the *idea* of using ether, neither Dr. Morton nor the world would have known of the discovery. It seemed to me to be a clear case of joint invention or discovery. Dr. Jackson had admitted to me that he had never performed a surgical operation of any kind on a patient, under the influence of inhaled ether.

In reply to my remarks to Dr. Morton, he stated that he did not know by what right Dr. Jackson should have any interest in the patent, as he (Dr. M.) had an understanding with Dr. Jackson to fully remunerate him for any advice he might have rendered him. In order to satisfy myself more fully as to the position of Dr. Jackson in this discovery, and the understanding between him and Dr. Morton, I called at the office of Dr. Jackson the next morning. I cannot recollect the precise conversation which ensued at this interview, but the substance of it was, that Dr. Jackson informed me that, by the laws of the Massachusetts Medical Society, he would be prevented from joining with Dr. Morton in taking out a patent, as he would be expelled from the association if he did so. He further stated, that he intended "to make a professional charge of $500" to Dr. Morton, for the advice he had given him, and that Dr. Morton had acceded to this; that he did not wish his name connected with Dr. Morton's in any manner; that Dr. Morton might take out a patent if he desired to, or do what he pleased with it. I made inquiries as to the assistance rendered Dr. Morton, and asked Dr. Jackson if he had ever tried any experiments to practically demonstrate the fact that the inhalation of ether would prevent pain during a surgical operation. He informed me that he had not. I am fully persuaded that Dr. Jackson, at this time, thought the whole matter of little

value or importance. The conversation I had with him led me to this belief. He supposed Dr. Morton might realize something from it in his business of dentistry, and was willing he should do what he pleased with it, so long as he did not couple his (Dr. J.'s) name with it. I afterwards inquired of Dr. Morton whether he had agreed to give Dr. Jackson $500 for the assistance rendered, as well as for all the Doctor's interest whatever in the discovery. He said that he had, and that he had agreed to pay him at the rate of *ten per cent.* on the sale of licenses until the $500 was paid.

On Friday evening, Oct. 23d, on my return to my residence after a visit to the theatre, I found Dr. Jackson in conversation with my father, Caleb Eddy, Esq., and waiting to see me. At this interview, I urged Dr. Jackson to waive his objections to associating with Dr. Morton, as I was confident that he was mistaken in his views of what would be the action of the Medical Association; that Dr. Morton could not properly take out a patent without him; and that, by joining in the patent, he would, of a certainty, be obtaining *credit as a discoverer;* whereas, should he not do so, he might lose all credit, as in the case of the Magnetic Telegraph, which I had understood from Dr. Jackson he had suggested to Professor Morse.

The next day, or within a few days after, I called on Dr. Augustus A. Gould, to learn from him the nature of the rules of the Medical Society. Dr. Gould I knew to be a personal friend and a well-wisher of Dr. Jackson. He exhibited to me a copy of the by-laws, in which I found they only provided, so far as I could see, that no member should deal in *secret remedies*. I perceived at once from them, that no objection could arise to Dr. Jackson's patenting any invention he might make, as it would cease to become *secret* the moment it might be *patented*. I understood Dr. Gould to coincide with me in my views. After preparing the specification, I submitted it to Dr. Jackson, who fully approved it. I next had it copied in a manner suitable to be signed and sworn to by the parties.

I recommended to Dr. Morton to allow me to insert, in the written agreement to be made between him and Dr. Jackson, ten per cent. on all sales of licenses, instead of ten per cent. until the amount to be paid would reach $ 500; advised him to be liberal towards Dr. Jackson, both in giving him credit, and a chance of profit. In this, I was governed by a sincere desire to benefit Dr. Jackson, while, at the same time, I supposed I was doing my duty to Dr. Morton, as I believed it would be for his interest to do so. I thought the chemical science of Dr. Jackson would be brought to improve the article used, or to produce a better quality of ether than could be found in the market; that his association with Dr. Morton would give immediate character to the discovery, and his future advice might be of great service to Dr. Morton.

My views seemed to strike Dr. Morton very favorably, and he acquiesced in them.

Here I would remark that he (Dr. M.) had never *informed* me of any experiments with ether, which I have since understood he made previous to his

obtaining advice in relation to it from Dr. Jackson. This I can readily account for, as I saw very little of him, from the 21st to the 27th of October, the latter being the day on which the papers for the application for the patent were executed by the parties.

Dr. M. was so much engaged in his discovery and business of dentistry, that I found it exceedingly difficult, if not impossible, to obtain an audience with him. His office was constantly thronged with persons in waiting to consult him on professional and other business. Had Dr. Morton, during this time, stated to me what I have since read in the affidavits of Dr. G. G. Hayden, Messrs. W. P. Leavitt, T. R. Spear, Jr., and F. Whitman, I am confident I never should have advised him to associate Dr. Jackson in the discovery or patent, as I should have concluded that his friendly intimacy with Dr Jackson had led him to visit him, as the readiest manner of obtaining certain chemical information respecting ether and its properties, which might be found in various scientific or medical works not conveniently accessible to him.

I should have considered that the idea of using ether was an original one with Dr. Morton; that he had, by a practical application of it, made the discovery that it would annul pain under the operation of a surgical instrument; had been the first to publish this to the world, and under peculiar circumstances, in which he had developed much of that remarkable energy of character we often find to belong to most great inventors, who are generally obliged to stem a powerful current of difficulties and risks, in order to impress on the community the importance of their discoveries. With such views, I do not hesitate to affirm that I should have accorded the discovery to him.

On Tuesday morning, the 27th of October, Drs. Morton and Jackson executed the papers for the American patent. While Dr. Jackson was passing from his office to my own, I informed him that I had seen Dr. Gould, and he had shown me the laws of the Medical Association; that Dr. G.'s opinion and mine coincided as to what was meant in them by the prohibition of secret remedies; that such could not be *patented* ones, as *they* (the latter) could not be secret. He replied, "Well, if Dr. Gould thinks so, that settles the matter with me. I have no objections to signing the papers with Dr. Morton." I think I give nearly, if not exactly, the words made use of by him.

I would here remark, that I had found Dr. Jackson tinctured with old and exploded prejudices against patents, and I labored to remove them. So successful was I, that he subsequently informed me, that, after a consultation with a distinguished chemist at the south, he had resolved to secure every invention he might hereafter make; and, in accordance with such views, he sent me the specification of an alleged improvement in preparing a certain article for dentistry purposes, with the view of filing a caveat and taking out a patent on the same. His disinclination to associate with Dr. Morton, in a patent, arose from no disposition, ever evinced to me, to give the public a *gratuitous* use of the discovery. The most important objection to his taking out a patent arose from what he supposed would be the action of the Massachusetts Medical Association.

In conclusion, I would remark that I have endeavored to state a few facts relative to the early discovery of the effect of sulphuric ether in surgical operations. In doing so, I am influenced by no other motives than to render justice to whom it may be due. It is a matter of indifference to me to whom the world may ultimately accord the merit of being its benefactor for having given to it the great discovery in question. Dr. Jackson has been my personal friend for many years. With Dr. Morton, I have had, comparatively, but little acquaintance, never having seen or known him previous to my introduction to him while he resided in the family of Dr. Jackson. My sympathies would naturally tend towards Dr. Jackson ; but personal friendship, private character, or scientific attainments, are matters which, it seems to me, ought not to prejudice me or any one else in favor of or against either of the claimants, when judging of the merits of their respective claims.

Yours respectfully,

R. H. EDDY.

—

COMMONWEALTH OF MASSACHUSETTS.

County of Suffolk, } *ss.*
City of Boston. }

June 18, 1847.

Then personally appeared the above-named R. H. Eddy, and being duly sworn, did declare that his statements, contained in the foregoing letter, by him subscribed, are true, according to the best of his recollection, knowledge, and belief.

Before me,

JOHN P. BIGELOW, *Justice of the Peace.*

The following communication, from the accomplished and well-known author of that entertaining work entitled "Two Years before the Mast," has been quite unexpectedly received, and which I am happy to have an opportunity to introduce here, corroborating, as it does most amply, the statements in the affidavits of Dr. Hayden, and Messrs. Leavitt, Whitman, and Spear, as to the early date of Dr. Morton's experiments, and the importance he attached to them. It would be supererogatory to make any remarks upon this communication, (or its author,) and I will submit it at once :—

30 *Court Street, Friday, June* 4, 1847.

MR. EDW. WARREN :

SIR,—On reading the pamphlet you were so kind as to send me, I find that a fact stated by one of the deponents is within my own knowledge, and, in a controversy of so much interest to the public and importance to the parties, I feel that they have a right to information which any one may happen to possess.

I perfectly well remember that Dr. Morton and Dr. Hayden came to my office late one afternoon last summer, (which I find, on referring to my books, was the 30th of June, 1846), and desired me to draw a contract for them. They stated the intention they wished effected, which was substantially this: Dr. Hayden was to leave his place of business and go to Dr. Morton's, and take the entire management of the work going on there in mechanical dentistry. The business was to be done in Dr. Morton's name, and he was to be responsible to the public; but Dr. Hayden was to take charge of the work, and Dr. Morton was to be at liberty to work and to direct the work whenever he pleased, but to be under no obligation to do so. On this point, Dr. Morton was very particular, reserving his right to control or labor if he pleased, and when he pleased, but freeing himself from all obligation to do either. Dr. Hayden was to receive, as a compensation, a liberal share of the profits of the business.

Dr. Morton had occasionally been to me for professional assistance, and I knew something of his business. I knew that it was almost exclusively mechanical dentistry, and that he had spent his time and given his attention with unusual energy to this department, and that it had been on this he relied entirely for success, and even for subsistence. For this reason, I was rather slow to apprehend the intention of the parties, and made two or three rough draughts of a contract, none of which were satisfactory. At length, Dr. Morton explained himself more fully, and said his object was to be free from all obligation to work, and all responsibility, as far as possible, as he wished to give his entire attention to something else. The contract was accordingly drawn to effect the purpose named, which seemed to be the sole object of the parties. I have found, among my papers, a duplicate of the contract, and have it now before me. It bears date June 30, 1846, and was duly executed by the parties in my presence on that day.

So much I can say that I recollect distinctly. There is one thing further which I am not quite willing to state as matter of distinct recollection, but as to which I have a very strong impression. I have a strong impression that Dr. Morton, toward the close of the interview, finding me slow to apprehend that he intended to give up his business in the manner referred to, besides stating, as I have said, that he wished to give his attention to something else, went further, and told me that this was something of great importance connected with his profession, and as to which he expected to do something very remarkable.

On this last point, I do not mean to make a positive statement, but I cannot in justice fail to say that my impression is very strong to that effect.

I think proper to add, that I make this communication of my own accord, at the suggestion of no one. The circumstance had entirely passed from my mind, and was recalled by reading your pamphlet yesterday. Had I made myself acquainted with the controversy, and known what facts were involved in it, or had Dr. Morton or Dr. Hayden applied to me, I could have made the

communication before your pamphlet appeared. It is, however, only corroborative of what you have already published.

Your obedient servant,

RICHARD H. DANA, Jr.

Postcript.—(*Saturday Morning.*)—The correctness of my impression has been placed beyond a doubt in my own mind. Last evening, after writing the above, I happened to meet a friend, a surgeon dentist and member of the Medical Society of this city, and mentioned to him the subject of this communication. He said, at once, "You are perfectly right in your impression;" and told me that, between the 1st and 8th of July, I was at his office for the purpose of a dental operation, (we have the means of being sure that this is the time;) and, in the course of conversation, told him that Dr. Morton was at work upon something which, when brought out, he believed would astonish the public, and work an entire revolution in the practice of dentistry.

This gentleman remembered the conversation because it related to his profession; and says that, when Dr. Morton's announcement appeared, in the autumn, he immediately said to himself, "This is what I was told Dr. Morton was at work upon in the summer." I have no doubt this gentleman will readily testify to this effect, if it shall be thought material.

Your obedient servant,

R. H. D. Jr.

And here I will introduce the following

TESTIMONY.

The undersigned, having been for some years intimately acquainted with Grenville G. Hayden, surgeon dentist, of the city of Boston, have the most undoubted confidence in him for truth and veracity, and do not hesitate to say, that his statements or affidavit may be fully relied upon. We consider him a gentleman of strict probity and truth.

B. FISKE,
GILBERT BROWNELL,
JEFFREY R. BRACKETT.

Boston, May 29, 1847.

—

Boston, March 25, 1847.

I, *Grenville G. Hayden*, of Boston, in the county of Suffolk, and State of Massachusetts, dentist, on oath, depose and say,—

That, about the last of June, 1846, Dr. William T. G. Morton called upon me at my office, No. 23, Tremont Row, and stated to me that he wished to make some arrangements with me that would relieve him from all care as to

the superintendence of those employed by him in making teeth, and all other matters in his office. He stated, as a reason for urging me to superintend his affairs in his office, that he had an idea in his head, connected with dentistry, which he thought "would be one of the greatest things ever known," and that he wished to perfect it, and give his whole time and attention to its development. Being extremely urgent in the matter, I made an engagement with him the same day, according to his request. I then asked him what his "secret" was. "Oh," said he, "you will know in a short time." I still insisted upon knowing it, and he finally told me the same night,—to wit, the night of the last day of June, 1846, aforesaid,—that "it was something he had discovered which would enable him to extract teeth without pain." I then asked him if it was not what Dr. Wells, his former partner, had used, and he replied, "No! nothing like it;" and, furthermore, "that it was something that neither he, nor any one else, had ever used." He then told me he had already tried it upon a dog, and described its effects upon him, which (from his description) exactly correspond with the effects of ether upon persons who have subjected themselves to its influence, under my observation. All this happened in June, 1846. He then requested me not to mention what he had communicated to me.

About a month after this, or the first of August, 1846, Dr. Morton asked me where he could get some pure ether, and asked me to go to Joseph Burnett's apothecary shop, and purchase a 4-ounce vial full of ether, which he said he wished to carry home with him, he being about to leave town for Needham, where he then resided. And about the same time he explained to me the nature and effects of ether, and told me that, if he could get any patient to inhale a certain quantity of ether gas, it would cause insensibility to the pain of extracting teeth, and he tried to induce me to take it. Dr. Morton said he had breathed it himself, and it would do no harm; and he at the same time tried to induce three young men in the office to take the gas. This was in August, 1846. He was continually talking about his discovery to me. From the time I engaged with Dr. M. as aforesaid, he frequently stated to me that he had nearly perfected every department in dentistry, save extracting teeth without pain, and that he was determined to accomplish that also. But towards the last of September following, he 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.

Upon this, I recommended him to consult some chemist on the subject. Dr. Morton then sent Francis Whitman to see if Dr. Jackson was at home, but Francis returned, and said that Dr. J. was not at home. The next day, however, which was about the last of September, 1846, Dr. M. said that he had that day seen Dr. Jackson, and derived from him a hint by which Dr. M. thought he could remove the only remaining difficulty. Dr. M. said that, in his interview with Jackson, the subject of nitrous oxide gas and of ether gas, and atmospheric air, was freely talked of, as having an effect on the imagination of the patient, and various experiments which had been tried with these gases on students at Cambridge college; also, the experiments of Dr. Wells

and himself together, with the nitrous oxide gas; but that he withheld from Dr. Jackson the fact that he had been experimenting on ether gas before. The same day, Dr. Morton told me that he had just tried ether again—in accordance with Jackson's hint—on himself, and that he had remained insensible seven or eight minutes, by the watch.

The first successful experiment upon any patient was made September 30th, 1846, by inhaling ether through a folded cloth, and on that occasion a tooth was extracted without pain. We tried repeated experiments with the same means subsequently, and they all resulted in total failures. Dr. M. said that Dr. Jackson recommended a certain apparatus, which he lent Dr. Morton from his laboratory, consisting of a glass tube of equal size throughout, having a neck, and being about three feet long. This was likewise a total failure. So far, all our experiments, with one exception, proving abortive, we found that a different apparatus must be obtained, and it was at this time that Dr. M. procured, from Mr. Wightman, of Cornhill, a conical glass tube, with which, by inserting a sponge saturated with ether in the larger end, we had better success, and our experiments began to assume a more promising aspect.

Still, our success was not uniform, and far from perfect. At this time, Dr. M. suggested that our failures might be owing to the fact that, in all our experiments so far, the patient had breathed the expired vapor back into the vessel, thus inhaling the same over and over. He then stated that the expired air should pass off into the surrounding atmosphere, and wished me to make a pattern for an apparatus, by which the air should pass into the vessel, combine with the ether, be inhaled into the lungs, and the expired air thrown off into the room. The idea, as thus forced upon him, and communicated to me, was fully elaborated, and corresponds most accurately with the apparatus now in use in this country and in Europe, and for which Dr. M. has applied for Letters Patent. I replied, that he had explained his idea so clearly that he would have no difficulty in directing a philosophical-instrument maker to manufacture a proper inhaler at once, without a pattern, and recommended to him Mr. Chamberlain, in School-street, to whom he applied accordingly, and who made, as thus desired, the first inhaler. And with such an apparatus, we have had almost uniform success to this day, the results of which are known to the world.

And I will here state that, on the evening of the 30th of September, after the first experiment had been made with success, Dr. Morton spoke about going to the Hospital and using the ether there, and thus bring out the new discovery. After several other successful experiments, the question came up anew, how to introduce it to the world, when Dr. M. stated, that Dr. Jackson had declined to countenance it, or aid in bringing it out, and then he (Dr. M.) said he would see Dr. Warren, and have his discovery introduced into the Massachusetts General Hospital. He went out and soon returned, stating that Dr. W. had agreed to afford him an opportunity to apply the vapor, as soon as practicable, in the Hospital.

For more than four weeks after our first experiment, it was well understood,

and often spoken of in the office, that Dr. Jackson repudiated all share, pretence of, or interest in, the discovery. He was never in Dr. M.'s office during all our experiments, to my knowledge, until the 21st of October, and I never knew that Dr. M. advised with Dr. J. as much as with many others, or in fact but once.

GRENVILLE G. HAYDEN.

—

COMMONWEALTH OF MASSACHUSETTS.

SUFFOLK, ss. *March 30th*, 1847.

Sworn to before me, WILLIAM WHITING,
Justice of the Peace.

The undersigned, having been acquainted with William P. Leavitt, of Boston, for several years, feel no hesitation in saying, that he is a person of strict integrity, and that any statement made by him may, in our opinion, be fully relied upon. We have never known him other than a young gentleman of veracity and worth.

WILLIAM FLAGG,
Justice of the Peace for Norfolk County, Mass.;
also, Postmaster at West Needham, Mass.

EDWARD A. DANA.

BOSTON, MAY 28, 1847.

—

BOSTON, March 25, 1847.

I, *William P. Leavitt*, of Boston, in the county of Suffolk, and State of Massachusetts, on oath, depose and say,—

That, about one week after Dr. Hayden came to practise dentistry in connection with Dr. Morton, with whom I was then a student,—that is to say, about the first of July, 1846,—Dr. Morton stepped into his back office, much excited, and exclaimed, with great animation, (as nearly as I can recollect his language,) "I have got it now. I shall take my patients into the front room and extract their teeth, and then take them into the back office and put in a new set, and send them off without their knowing any thing about the operation."

Some days after this, about the first of AUGUST, 1846, Dr. M. asked Dr. Hayden where he (Dr. Morton) could get some very nice pure ether. Dr. H. recommended him to send to Brewer, Stevens & Co. Dr. Morton then called me out behind the screen, and requested me to go down to Brewer, Stevens & Co.'s, and get him some pure ether. He told me to keep every thing to myself. He said he wished me to be careful not to let them know who it was for, or where I was from or was going to. I then bought some ether; told them it was to be sent out of town, and requested them to make out the bill in the name of some person in the country,—whom, I don't now recollect.

I brought the ether home and gave it to Dr. Morton. A short time after this, he requested me to call on Dr. Gay, and ask him if ether would dissolve India-rubber, as he wanted to put some ether into an India-rubber bottle or bag. I went to call, but could not find his residence. I returned, and said so to Dr. M. the next morning.

About a week after this, Dr. Morton told me that, if I would find a man who would have a tooth extracted, and have an experiment tried upon him which was perfectly harmless, he would give me five dollars, and he sent me out with Thos. R. Spear, Jr. for that purpose. We went down to the wharves and spoke to a number of persons; but they declined coming; so that, after some time, we returned without bringing any one with us. Dr. Morton then asked me to try it; but I refused. He then said that he had taken it, and that it was perfectly harmless, and that he wanted some one else to take it, that he might SEE how it operated. Dr. Hayden said, "Tom will take it;" but he said no, he had no teeth he wished extracted. But he finally said, "I will take some, won't you?" We both took it the same evening, inhaling it from a handkerchief. Thomas took it first, and I stood by him. He seemed to fall nearly asleep, so that he dropped the handkerchief; and, when he was coming to himself, he was very much excited, so that I was obliged to hold him in the chair. When he came to, he seemed perfectly delighted with the sensations he had experienced—so much so, that he could not find language to express himself. He then persuaded me to inhale it. I told him I would, if he would leave the room, as he did, when I took it with much the same effects.

WM. P. LEAVITT.

—

COMMONWEALTH OF MASSACHUSETTS.

SUFFOLK, ss. *March 30th*, 1847.

Sworn to before me, WILLIAM WHITING,
Justice of the Peace.

To all persons whom it may concern.

We, the undersigned, citizens of Boston, do hereby certify, that we are well acquainted with Thomas R. Spear, Jr. of said city, and have entire confidence in his integrity and veracity.

JOHN P. BIGELOW.
CHARLES SPRAGUE.

BOSTON, MAY 26, 1847.

—

Boston, March 25th, 1847.

I, *Thomas R. Spear, Jun.* of Boston, in the State of Massachusetts, depose and say,—

That, about the first of August, 1846, at request of Dr. Morton, I inhaled a portion of ether, which William P. Leavitt brought from Brewer, Stevens,

and Co.'s, in a demijohn, in Dr. Morton's office. The rest of the young men in the office were afraid to take it; but, having taken what I supposed to be the same before, at the Lexington Academy, I did not hesitate to take it when I learned what it was.

About a week after the ether was purchased of Brewer, Stevens, and Co., Dr. Morton was expecting some persons at his office to witness an experiment, and he then offered me a sum of money if I would be present and inhale the ether. I went home and consulted my parents, and they advised me not to go. I have often heard Dr. M. say that, when he had completed his invention for extracting teeth without pain, he should be satisfied.

Ever after Dr. Hayden came into the office, Dr. Morton seemed wholly absorbed in making this discovery, and had a number of bottles, an India-rubber bag, &c., &c., with which he prosecuted his experiments in the little room adjoining the front office, where he frequently locked himself in.

Dr. Morton offered me five dollars if I would get some one to come into the office and to have an experiment tried upon him, of having a tooth extracted while under the operation of gas. I went, accordingly, down to the wharves, in company with Wm. P. Leavitt, in order to get some one for this purpose, but did not get any one to have the experiment tried upon.

THOMAS R. SPEAR, Jr.

—

Commonwealth of Massachusetts.

Suffolk, ss. *March* 30, 1842.

Sworn to before me, WILLIAM WHITING,
Justice of the Peace.

The undersigned take pleasure in stating that they have been acquainted with Francis Whitman—now of Boston—for many years, or even from his boyhood; that he has ever been perfectly correct and upright in his deportment; and that any statement made by him verbally, or, still more, an affidavit over his name, is entitled to the highest credit and consideration of the public. His family are our neighbors, and are persons of high standing and worth. In conclusion, the undersigned would say, that they should place the most implicit confidence in Mr. Whitman's statements, and believe them entitled to full credence, so strict have his principles ever been as to probity and truth.

GILES STILLMAN,
Justice of the Peace.

JOHN HOOKER,
Notary Public.

GEORGE D. COWLES,
Postmaster.

Farmington, Ct., May 25th, 1847.

Boston, March 25, 1847.

I, *Francis Whitman*, of Boston, in the county of Suffolk, and State of Massachusetts, student at dentistry, on oath depose and say,—

That I have often heard Dr. Morton speak about discovering some means of extracting teeth without pain. This discovery appeared to be the subject of his thoughts and investigations during the greater part of last year, *i. e.*, 1846. One day,—I think it was previous to July, 1846,—Dr. M., in speaking of the improvements he had made in his profession, and of some one improvement in particular, said, if he could only extract teeth without pain, he "would make a stir." I replied, that I hardly thought it could be done. He said, he believed it could, and that he would find out something yet to accomplish his purpose.

In conversation with Dr. M., some time in July, he spoke of having his patients come in at one door, having all their teeth extracted without pain and without knowing it, and then going into the next room, and having a full set put in.

I recollect Dr. Morton came into the office one day in great glee, and exclaimed, that he had "found it," and that he could extract teeth without pain! I don't recollect what followed; but, soon after, he wanted one of us in the office to try it, and he then sent William and Thomas out to hire a man to come in and have an experiment tried upon him. After all these circumstances happened, Dr. Hayden advised Dr. Morton to consult with some chemist in relation to this discovery. I went, at Dr. Morton's request, to see if Dr. Jackson had returned, (he having been absent from the city,) but found that he was still absent.

I told Dr. Morton I knew what it was that William had bought, and said it was chloric ether. Dr. M. then said, he wished to know if ether would dissolve India-rubber, and sent William P. Leavitt to inquire of Dr. Gay if it would.

About this time, Dr. M. asked me to get the books on chemistry, and find what they said about ether. I did so, and read it over to him, and I think he went to Burnett's to see if he could not find something there.

After the first announcement of the discovery in the papers, I went to Dr. Jackson's, and he spoke to me of some notices in the papers; but, immediately after, said he did not "care how much Dr. M. advertised, if his own name was not drawn in with it." A week or two after this conversation, I was at Dr. Jackson's, when he asked me how we got along with the gas. I told him that we got along first-rate. He then said, he "did not know how it would work in pulling teeth, but knew its effects at college upon the students, when the faculty had to get a certificate from a physician, that it was injurious, to prevent them from using it:" but that he "did not know how it would operate in pulling teeth."

FRANCIS WHITMAN.

COMMONWEALTH OF MASSACHUSETTS.

Suffolk, ss. *March* 30, 1847.

Sworn to before me, WILLIAM WHITING,
Justice of the Peace.

Review of the "Statement" of Dr. C. T. Jackson's Claims to the Discovery of the New Use of Ether.

A pamphlet written by Dr. Martin Gay, containing "A Statement of the Claims of Charles T. Jackson, M. D., to the Discovery of the Applicability of Sulphuric Ether to the Prevention of Pain in Surgical Operations," has been handed me, and I propose, in a few words, to notice some of its contents. But, before doing this, I must say that I admire the fairness and candor the learned author exhibits, and will endeavor not to be outdone in this respect.

In the outset, Dr. Gay very properly says, that "the history of the discovery *has been derived from Dr. Jackson himself*," a very important fact to be known, and appropriately stated in the preface.

This fact in mind, let us pass at once to the leading idea of the "Statement," which idea is, that Dr. Morton could not have made the discovery in question because "of his want of the medical information required for understanding the operation of sulphuric ether upon the system." Upon this point, Dr. Gay has bestowed much labor, and his deponents more. But in this, do they not prove too much for Dr. J.'s cause? For, if he was so entirely ignorant of the nature and effects of ether,—if he inquired, as Barnes states, "Sulphuric ether, what is that? Is it a gas?"* or, if he did not know, as was currently reported by a distinguished doctor on the day of the Medical Convention—whether "ether was a solid or fluid,"—was it then not inexcusable in Dr. Jackson to entrust so important a discovery—such a powerful agent—to so great an ignoramus? And if Dr. M., after being so long a student of Dr. Jackson's, knew so little of ether—did not know, in fact, whether it was a "solid or fluid," does it not prove that Dr. J. must have been a very poor tutor? But can this be true in point of fact? On the 1st of March,

* This statement of Barnes, if correct, only goes to prove that Dr. M. was acting in that instance, as in many others,—which will be alluded to hereafter,—with the intention of disguising his real plans; and, for this purpose, affected such a degree of ignorance as is stated by this deponent. And this is further evident from the fact that, during the summer of 1844, Dr. Jackson sent Drs. Keep, Flagg, and *Morton* each a bottle of highly rectified *ether* for them to use in preventing the toothache! Dr. Morton used his for that purpose until it was exhausted. Mr. Barnes's ears must, for once, have played him a "fantastic trick"; for it cannot be that Dr. M.—after becoming thus familiar with ether prepared by Dr. J. himself, and sent by him to Dr. Morton—did not know whether it was a solid or fluid! This ether was thus sent to Dr. M. in consequence of a conversation, some time previous, between him and Dr. Jackson, respecting ether,—its being inhaled by the students at college, &c. &c.; and it seems that this was a topic upon which they often conversed.

1847, Dr. Jackson gave Dr. M. a certificate, in which he says:—"I would recommend him as a suitable person for admission as a dental surgeon." He also states, in the same paper, that Dr. M. had been his student in medicine, &c.; that he had "studied Bell's and other standard works on anatomy and attended the lectures of Drs. Warren, Hayward, and other professors;" that he "is a skilful operator in the surgical and mechanical departments," and has studied the "chemical properties of the ingredients" required in the manufacture of teeth. But the absurdity and entire incorrectness of the statements of Dr. Keep, Mr. Barnes, and others, and the deductions from such premises by Dr. Gay, are clearly shown by the ample testimony of Dr. Hayden, and Messrs. Leavitt, Spear, and Whitman. "About the 1st of August, 1846," Dr. Hayden testifies, "Dr. Morton asked me where he could get some pure ether, and asked me to go to Joseph Burnett's apothecary shop, and purchase a 4-ounce vial of ether"; that, "about the same time, he *explained* to me the *nature and effects* of ether"; and said, "it would *cause insensibility to the pain of extracting teeth,*" if he could induce any one to inhale it. Leavitt testifies that, about this time, he "bought some ether," and "gave it to Dr. Morton," with which the doctor was, for some time after, making experiments. Spear states much the same. And Whitman corroborates the foregoing, and says: "Dr. M. asked me to get the books on chemistry, and find what they said about ether. I did so, and read it over to him." The very fact that Dr. Jackson's friends have had to resort to so lame an argument as this, proves conclusively the extreme weakness of his cause.

But if, after all these opportunities, Dr. Morton did not know whether ether was a "solid or fluid,"—if, after being under Dr. Jackson's instructions during this time, boarding in his family, spending considerable time, during many months, in his laboratory, and often conversing about ether, among other chemical substances, at the table and elsewhere, he was so ignorant of its nature,—then he either must have been a very dull scholar, and not a fit person to bring out this great discovery, or Dr. J.'s character as an instructor must stand very low in future. Which condition he will accept, I know not.

It appears, from Dr. Gay's "Statement," that, for some years previous, Dr. Jackson had been perfecting "his discovery;" that he had bestowed great attention upon it, had given it much thought, and had, all this time, been brooding over it, aware of its vast importance to suffering humanity, and of the amount of misery it might prevent; but that,

at the same time, the agent to effect all this was a dangerous one, and should be entrusted to none but the safest and most responsible hands. Of Dr. Morton's qualifications to become the almoner of so much good —so vast a blessing to the world, Dr. Jackson must have been thoroughly informed; and, therefore, was he not most culpable in employing Dr. M. as his high priest to communicate his long-cherished discovery to afflicted man, if he knew him to be so utterly unsuited and unsafe to be trusted with the agency? This is certainly an afterthought—an *ex post facto* argument, manufactured for this particular emergency, the foreshadowings of which were known for some time before this "Statement" appeared.

And, before leaving this part of the subject, I would state that it appears evident, for several reasons, that Dr. Morton, when he went to Dr. Jackson for the "gas-bags," did not wish to let him know his real object. Indeed, this is most conclusively proved by the affidavit of Dr. G. G. Hayden, who testifies that Dr. Morton, on his return from Dr. J.'s laboratory, stated to him that he (Dr. M.) "*withheld from Dr. Jackson the fact that he had been experimenting on ether gas before.*" Dr. M. asserted the same thing in my presence at an early period in this controversy, and had previously stated it to several others. The fact is, he did not wish any one to suspect what he was doing, as is abundantly proved by the affidavit above, and by that of Mr. Leavitt. When Dr. Morton applied to Dr. H. to join him, the latter states in his affidavit that he urged Dr. M. to say what his "*secret*" was. "O!" said he, "you will know in a short time;" but, on still being urged, he reluctantly revealed it, and Dr. H. adds, "He then requested me *not to mention what he had communicated* to me." Mr. Leavitt likewise says, that when Dr. Morton wished him to go to Brewer, Stevens & Co.'s to get some ether, he called him "behind the screen," and adds, "*He told me to keep every thing to myself;*" and that the bill of the same was made out in some fictitious name in the country, so careful was he that no one should suspect what he was doing, and forestall him. And, indeed, he always manifested the same caution to prevent, so far as possible, his investigations, and the articles he used in his experiments, from getting out and becoming generally known. That he went to Dr. J. in the same cautious manner is not, therefore, a matter of doubt. Barnes,—if he was not also mistaken in this statement,—corroborates the same thing, when he says that "Morton repeatedly *begged* the doctor to keep the matter a *secret*." And the wisdom of all this caution is admitted in the statement subjoined to this, in which

Barnes says that Dr. J. replied, "No! I will have no secrets with my professional brethren;" and that, "in point of fact, *every one* who afterwards came to get information on the subject *was at once told all about it!*" If this be, even in part, true, it shows how well Dr. M. understood Dr. J.'s character, and how necessary it was to observe such precaution!*

I cannot, however, yield my full assent to this statement of Barnes; for Dr. Hayward states that, up to the 9th of November, neither he nor the other surgeons of the Hospital knew what Dr. Morton's "preparation"—as they still called it—consisted of, and that they could not consent to have further trials made with it until informed on this point; to which he reports Dr. M. to have answered, "that he was ready to let them know what the article was, and to give to the surgeons of the Hospital the right to use it there when they pleased." Now, if Dr. Jackson "told" every one he conversed with on the subject, "all about it," it will appear absurd to those who know Dr. J., to state that not only the surgeons, and physicians, and even a large majority of the scientific men of Boston, did not know what this preparation was, so late as the 9th of November!

But as regards this strong point in the case of Dr. Jackson's claims, —backed up by the oath of Dr. Keep,†—that Dr. Morton was ignorant of the nature of ether, and, *therefore*, is not the discoverer, I reply, that, ignorant as he is sworn to be, *he is the first person who ever successfully applied ether for the prevention of pain in surgical operations!* Is this not a sufficient refutation of the charge? or, so long as he has been triumphant in his systematic researches, what matter is it whether he was so or not? It seems that Dr. Keep—the learned—the oracular—the astute Dr. Keep, with all his boasted knowledge of ether, was never able to discover this new property of the article; so that even Dr. Morton's *ignorance* was superior to Dr. Keep's *wisdom!*‡

* On this subject, that Dr. Morton did not wish Dr. Jackson, and others, to know what his real object was, I am now able to produce, at least, strong circumstantial evidence, corroborating the above; for, since writing it, I have received a communication from R. H. Dana, Jr., Esq., which shows, very clearly, that such were his real intentions. Indeed, it cannot be doubted, after all that has been adduced, that Dr. Morton studiously concealed from Dr. Jackson, and, so far as he could, from all others, the precise nature of his long-pursued and intensely interesting researches and experiments, which have now resulted in so brilliant a discovery!

† See Appendix, E.

‡ The boasted wisdom of this class of men, who are always seeing the failings of others, but can never correct the errors in themselves, calls to mind an anecdote of a would-be

And the same argument applies with equal force to all others who have resorted, in the plenitude of their spleen and envy, to this kind of proof. We are prepared, therefore, to admit the whole rather than cause them to waste their logic.

It is, I believe, now generally understood that Dr. Keep, in his communications to the Medical and Surgical Journal, the Daily Advertiser, &c., and in his voluntary affidavit, is endeavoring to call public attention to his experiments, and thus steal away another's business. This trick is too apparent in this community; for Dr. Morton had been experimenting, had triumphed, and had given the ether with uniform safety and success long before Dr. K. was aroused from his "twehty years" repose by the startling announcement of his former pupil's discovery. Any such attempt, therefore, to pass off as his own what he derived solely and exclusively from Dr. Morton, will be exposed and must result in total failure. Dr. Morton himself, and by his immediate agents, has administered the ether to more than *ten thousand patients* without a *solitary accident;* and yet this learned Theban, who, but yesterday, scarcely opened his drowsy eyes, sets up—after his "thirty days" (as he terms it), under the pupilage of Dr. M. in the use of ether—to instruct, not only Dr. M., but the surgeons, and all the world beside. But I repeat, this attempt to steal away the "thunder" of another will not add a cubit to the doctor's dimensions, or a penny to his professional income.

But on this question of ignorance, we have it in our power to turn the tables upon Dr. Jackson, and to prove that he was the "ignorant" party in the case. About the time the discovery was made, Mr. Francis Whitman called at Dr. J.'s laboratory, when the latter informed him that ether could not be administered in a room with a fire, or at night with a lamp in the room, as the air would become so charged with the vapor escaping as to take fire, and that it would even explode in the patient's mouth! On being asked how it might be safely used at night, he advised Mr. Whitman to get a Davy safety-lamp. Dr. Morton, on learning this, said he knew better, for there could not be enough ether in the atmosphere to produce an explosion; and, therefore, went on with his experiments. Indeed, the first successful application, on the

learned astronomer of antiquity, who was dissatisfied with the mechanism of the heavens, and who said, "*que s'il avait été du conseil de Dieu, il lui aurait donné de bons avis sur le mouvement des astres!*" And yet, notwithstanding these capticus philosophers were not consulted, both these experiments were successful:—The heavens were created in beauty, order, and harmony, without the advice of Alphonso of Castile, and the ether has been found capable of alleviating untold suffering, without the aid of Dr. N. C. Keep!

30th of September, was made about nine o'clock at night, Dr. M. administering the ether and extracting the tooth, while Dr. Hayden held the lamp close to the patient's mouth.

But on this subject of ignorance, let us see what was the result of Dr. Jackson's experiments of "five or six years." At the time the solicitor of patents made out the specifications under Dr. Jackson's own directions and advice, the latter stated to him that *any or several of the ethers* would answer the purpose of preventing the pain of surgical operations. Accordingly, it was stated that "the vapors of some, if not all, these chemical distillations, (ethers) have produced a peculiar effect on the nervous system; one which has been supposed to be analogous to what is usually termed intoxication." And further on, Dr. Jackson says:—"We are led to prefer the vapors of sulphuric ether to those of muriatic, or other kinds of ether, *but any such* may be employed as will produce the state of insensibility," &c. The truth is, it cannot be shown, for it is not the fact, that Dr. J. knew, or had ever supposed, that ether of any kind would produce such insensibility, prior to Dr. Morton's having demonstrated the fact to the world. If he had known it, why did he *wait for Dr. M. to come to him and drag it out of him*, instead of applying to some one to prove it, or instead of demonstrating it himself!

Dr. Jackson also told the writer, so late as the last of November, that the ether was "dangerous," and would, if repeated, or given in more than small quantities, "seriously injure the brain." And I am sure, from long and renewed conversations with him about this time, that he knew no more about the *effects* of sulphuric ether than other chemists, or most physicians; and that he was even then quite incredulous as to Dr. Morton's success, or as to the new property he had developed. I certainly would not state this, did I not believe that Dr. Jackson himself recollects the conversation on this subject. I cannot be accused often of mixing up with facts gained from others those I have received from Dr. J. himself, and would not bring them forward here, were it not an imperious duty. But, trusting that the public will agree with me that Dr. J. had no peculiar information, either as to the nature or effects of sulphuric ether, I will, for the present, rest this matter here.

Dr. Jackson's friends here and in Paris have taken some trouble to extol his suggestion of oxygen gas as an antidote to ether. Abroad, it was stated that he had not only made the greatest discovery of the age, but that he had also found out an agent to resuscitate those under

the influence of ether vapor. But on this subject, Dr. Snow of London says, in a late number of the Lancet:—"I was somewhat surprised to find it stated that oxygen gas was an antidote to ether; and I undertook fresh experiments, and found that making animals breathe oxygen, after they had been rendered insensible by ether, did not restore them any sooner; that, indeed, they were often longer in recovering, and that one bird, very much under the influence of the vapor, died in the oxygen, an occurrence I never found to take place in the open air. Dr. Gull has arrived at the same result with respect to oxygen given after ether." I regret thus to be compelled to take away this credit also from Dr. Jackson; but, even if oxygen gas were a sovereign antidote to ether, it is too expensive and inconvenient to be used, save by the affluent.

The author of the "Statement" cites the case of Jenner and the milkmaid—the former, as he contends, occupying the same position relative to vaccination that Dr. Jackson does to the discovery in question; but whether he sees any analogy between Dr. Morton and the latter I know not, as he does not inform us, although we may presume he does, having previously stated that Dr. Morton, in regard to this discovery, stands in the same relation to Dr. Jackson that the "nurse" does to "an accomplished physician." But if so, I would state that, even from his own showing, and from all Dr. Jackson's claims, the milkmaid who made the suggestion to Jenner is the true discoverer in the highest sense, and in all respects, while the latter was but the "nurse" to bring her "bold prescription" out to the world, and render it available to the afflicted, as the most important blessing ever conferred, *even by woman*, on unhappy man! The truth is, if Jenner, who acted on the suggestion of the simple-hearted milkmaid, is the true discoverer of vaccination, as all mankind concede he is, then most certainly is Dr. Morton the true discoverer of the new property of sulphuric ether; and that, too, whether he acted upon his own suggestions, (as he is proved to have done), or received the idea from Dr. Jackson! The weaker case has been long since, by the united voice of mankind, fully settled in favor of Jenner, while the stronger one cannot fail, it seems to me, to be given to Morton. Otherwise, there must be a reversion of this unanimous judgment, in favor of the much-injured milkmaid. But not till then, I apprehend, will the honor in this case be awarded to Jackson. This argument, like all arguments in a lame cause, either proves more than is required, or otherwise weakens the "Statement."

The following extract from Baron's Life of Dr. Jenner shows a most

striking analogy between the discovery of vaccination and that of the Letheon, even admitting all Dr. Jackson claims, namely, that he gave the *hint* to Dr. Morton: Jenner "was pursuing his professional education in the house of his master at Sodbury: a young countrywoman came to seek advice; the subject of small-pox was mentioned in her presence; she immediately observed, 'I cannot take the disease, for I have had cow-pox.' This incident riveted the attention of Jenner. It was the first time that the *popular notion*, which was not at all uncommon in the district, had been brought home to him with force and influence. Most happily, the impression which was then made was never effaced."

But I need not tilt long nor furiously at a superstructure like this "Statement," having only a foundation of sand, if as good—with all deference to the author, Dr. Gay, who has been cautious, in the outset, not to become responsible for the facts Dr. Jackson and others furnished him. The whole argument of the pamphlet rests mainly upon priority of discovery, as proved by the deponent, Dr. Bemis. For all hinges, more or less, upon the doctor's affidavit, as Dr. Gay lays great stress upon it, and seems, in the end, to think that it settles the question. But let us see: Dr. Bemis deposes that, in 1842, Dr. Jackson, in a conversation relative to the profession of dentistry, said it was "his wish to alleviate or destroy all sensation of pain and suffering during operations of a surgical nature," and asserted that this could be done by the "introduction of a new mode of practice in such operations;" but did not state what that "new mode" was. This is all very well, and, so far, we can yield our belief to the statement; but when he adds, "I have no doubt whatever that *the plan communicated to me* at the time was the same in regard to the substance to be used, viz., sulphuric ether, and *in all other respects*, as he has since promulgated to the world,"—when he asks us to leap this wide and difficult chasm with him, we cannot consent. The deduction does not legitimately follow from the premises before given; it is not logical, and has not reason or common sense to authorize it. The mind will not, therefore, assent to so much violence being done on its domain. But if there was a "plan communicated" to the doctor "at that time," as he asserts, why not give that, and not guess at one, as he has done in this affidavit?

But the doctor having vaulted the chasm, Dr. Gay at first follows hesitatingly, saying that Dr. Jackson communicated his favorite "plan" to several persons, and, among others, to Dr. Bemis in 1842, "as is proved by his statement." Having thus gained firm ground again—

as he seems to believe he has—Dr. Gay, no longer in doubt, fearlessly asserts that Dr. Jackson had thus "recommended the use of *sulphuric ether* to Dr. Bemis!" Now let any logician examine the premises and the mode of reasoning thus adopted to arrive at a most important conclusion in the "Statement," and even though he be the author himself, he will at once see the weakness and absurdity of the whole process.

In the "Statement," it is boldly and unequivocally asserted that "Dr. Jackson distinctly assumed the responsibility of the application;" that he "took upon himself the sole responsibility of the act, and would alone have been morally responsible, had the life of the patient been lost," and similar passages. Is this so? Why, then, did he say that he did not care what was done with it, "if his name was not drawn in with it," as is proved by Mr. Whitman, and as he stated to others? The fact is, if Dr. J. "distinctly assumed" the responsibility of the application of ether, he displayed an extraordinary method of showing it! The paternity he manifested is much the same as that exhibited by the ostrich, which deposits its eggs in the sand, and then abandons them forever after to their fate; or rather, perhaps, like that of the cuckoo, which leaves its offspring to the care of a foster-parent.*

But if he consigned to the care of Dr. Morton his long-cherished method of alleviating pain, why does he not show some stipulation or understanding previously entered into with Dr. M., to bring out his discovery, so that he should not have lost the credit of making it, while another has, as he contends, run away with all the honor as well as emoluments? Did he ever name any thing of this kind to Dr. M.? If so, why not show it? Why has not Barnes, who quotes whole passages spoken six or eight months before, and whose memory has brought up all other facts required, also recollected something on this subject?

In answer to the statement that *sulphuric* ether is not mentioned in the affidavits I have introduced in my pamphlet presenting Dr. Morton's claims, I reply that, if the word "sulphuric" is not used in re-

* Of the cuckoo, it is said that, when she furtively deposits her egg in the nest of another bird, it is done not that her offspring may be a *sharer of the care* of the foster-parent, but that it may *engross it entirely* to the total destruction of its own natural offspring. The natural and foster eggs being about the same size, the young birds, on coming to life, have about an equal start; but this does not last long, for the cuckoo soon outstrips his companions, and exhibits his superiority in the most selfish manner by pushing his weaker brother, the rightful occupant, out of his own home to starve. Upon which does the "responsibility" in this case rest,—the cuckoo that deserts its egg, or the foster-bird that hatches it, and ushers the young bird into life?

gard to experiments made *before* going to Dr. Jackson's, neither is it used *after* that time. But, although not used, it was supposed to be sufficiently well understood not to require it. If any other kind of ether was meant, it was designated by the deponent, as in the case given by Dr. Gay, of "chloric ether." But if Dr. G. still urges this objection to the affidavits, I reply that, as *sulphuric* ether was intended, save in the case given, that word can be very easily supplied. The deponents would prefer to go before a magistrate and correct the omission. Having it in my power, however, to settle this question, and place this matter beyond a doubt, I would here say, that we still have the demijohn alluded to by the several deponents, and that it contains a considerable quantity—two or three pounds—of the identical ether which came from Brewer, Stevens & Co.'s, in August last, and with which Dr. Morton and others in his office made the experiments spoken of in the affidavits. This ether has been in the possession of one gentleman ever since it was bought, and has been tested, and pronounced to be sulphuric ether! So much for this objection, or quibble, or whatever it may be called, raised by Dr. Gay, and which called forth, in one of the weekly papers, the following:—"It turns out, however, that he (Dr. M.) was making his experiments with *chloric* ether, and that he probably knew nothing about *sulphuric* ether until his attention was directed to it by Dr. Jackson. This is very wrong (!) The reader should have been told the whole truth."

Since the above was written, I have very unexpectedly had placed in my hands the following analyses, by Dr. Gay and Mr. Joseph Burnett, with the certificate from Dr. Hayden. I trust all will be satisfied, after reading these statements, that Dr. Morton used *sulphuric ether* in his experiments, and that such was intended by the deponents in their affidavits:—

Boston, June 22d, '47.

Examination of Mr. Leonard's Liquid:—

It is essentially an impure sulphuric ether. It contains more impurities than usual in the best ethers sold at the druggists. The proportion of alcohol is very large, not far from a quarter part of the liquid being this substance. It contains, beside the other impurities of common ether, particularly sulphur acids. It contains a trace of oil of wine.

MARTIN GAY.

P. S. The above general information is given, not knowing the object of the examination.

Boston, June 22d, 1847.

At the request of Mr. G. G. Hayden, I hereby certify that the contents of a demijohn, handed me by him, is *unrectified sulphuric ether.*

JOSEPH BURNETT.

—

I certify that the ether,—analyses of which are given above,—has been constantly in my possession since August last, and is the same brought by Wm. P. Leavitt from Brewer, Stevens & Co.'s, as stated in his affidavit.

GRENVILLE G. HAYDEN.

Boston, June 22, 1847.

But there is still a sequel to this subject of sulphuric ether. With the four-ounce vial of ether, spoken of in Dr. Hayden's affidavit, a very near approach was made to the great discovery which has since burst so brilliantly upon the world. But this small quantity being exhausted, and Dr. Morton afraid to apply twice to the same apothecary, lest he should suspect his object, sent, as stated in the affidavits, to Brewer, Stevens & Co.'s for a larger quantity. With this, his success was not so good as while he experimented with the first-named,—the cause of which he could not then understand. But this mystery is entirely dissipated by the analyses now furnished me, by which it appears that the ether procured at Brewer, Stevens & Co.'s happened to be of an inferior quality. If, instead of this poor article, Dr. M. had received the pure *washed*, or even a good quality of *unwashed* ether, it is now almost certain that he would have succeeded early in August, and without giving Dr. Jackson any chance to set up the unwarrantable claims he has now done.

In the "Statement" in question, it is roundly denied that Dr. Jackson has ever shown any doubts as to the safety of the new use of ether, or that he has ever repudiated it. And this is backed up by the assertions of Peabody, and others. Peabody says, "I can most positively state that not at any time has he shown the least *want of confidence* in the importance of his application, and not for a moment did he *undervalue it*, nor has he ceased *to assert his claims* as the sole discoverer." To these three propositions, I have only to confront the statements, under oath, of Francis Whitman,—known for his honesty and veracity,—and of Caleb Eddy, Esq., also under oath, in which it is clearly proved that Dr. Jackson *did* show an entire "want of confidence" in the new use of ether; that he *did* unequivocally "undervalue it;" and that he *did* not only "cease to assert his claims" as sole

discoverer, but took particular pains to have it understood, so that he *should not* be held responsible for the results. Is this denied by Dr. Jackson? His answer to Mr. Eddy's question covers the whole ground :—"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 his experiencing any pain?" "No! *nor Morton either;* he is a reckless man for using it as he has; and the chance is, he will kill somebody yet." To Whitman he said, about the same time—three or four weeks after Dr. Morton had made the first successful experiment—he "*did not know* how it would operate in pulling teeth." Trusting that the public will fix as high an appreciation upon the statement of Mr. Eddy as upon that of Mr. Peabody, I will take leave of this part of the subject.

Barnes says that Dr. Jackson, on being informed by Dr. Morton of his success, "expressed no surprise," and concludes that this is a favorable feature in his case. But others, reasoning from Dr. J.'s well-known incredulity on the subject, see this fact in quite a different light, recognizing in it his entire disbelief, not only in Dr. M.'s announcement, but also in the power of sulphuric ether to produce any such result.

This Mr. Barnes—the man of the wonderful memory—states, as I have before said, that Dr. J., on being requested by Dr. M. to keep the matter of his discovery to himself, replied, "No! I will have no secrets," &c.; and then says, that every one who came to get information on the subject "was at once told all about it." In answer to this, I have to say that, about the first day of December, I called on Dr. J. to learn something respecting the discovery, but that, although requested to inform me what was used, Dr. J.—who had been for years my personal friend—declined giving me the information. Others of his personal friends, and nine tenths of the profession, did not, up to that day, know what article was used by Dr. Morton to produce so extraordinary a result. So much for Mr. Barnes's statements, and affidavit—an affidavit in which nearly *fifty lines* are quoted as the exact language employed by the speakers; in which long and complicated sentences are perfectly remembered for more than six months, to be produced and written down *verbatim* at the moment they are wanted! I have had something to do with law-books and legal documents in my day, but I have never seen, and I am almost sure that there is not in existence, another affidavit like this one by Mr. Barnes. It is the most extraordinary document of the kind to be found on record, and almost surpasses belief. Are

the words quoted the exact ones used, or do they convey the exact meaning intended by the speakers? If not, what were their words—what their meaning? Has Mr. Barnes given the one and the other to make out his case?—for one's leanings are apt to blind his eyes, and sometimes to warp his understanding! Henceforth, "Barnes's memory" will become proverbial. If he can recollect every thing Drs. Jackson, Morton, and others, said on that occasion, he can recollect what was said on others, and would, no doubt, if desired, repeat, *with equal precision*, all that has been said in his presence during the last six or eight months!

But, these arguments apart, it is on all hands admitted that Dr. Morton has *acted* in the matter, and demonstrated to the world the practicability of preventing much human suffering by means of the vapor of sulphuric ether, while Dr. Jackson has been content, for "five or six years," to let all he knew of the matter rest in oblivion, satisfied with *talking*. The one has exhibited action,—decisive, energetic action,—the other, merely the emptiness and vanity of words. The former seizes an idea, and, by actual experiment, follows it out to its ultimate result, thereby bestowing an inestimable boon upon mankind,—while the latter, even on his own showing, had but a faint conception of the fact, and, attaching no importance to it, was satisfied with occasionally suggesting it for the demonstration of others, never making any experiments himself, or superintending those of others. And yet this is the man who, when the result is attained, obtrusively thrusts forward his bared head to receive the crown of laurels. But when a crown is bestowed, he will find that it is only one of nettles.

The "Statement" abounds in errors, which we must attribute, not to the author, for he, in the outset, shields himself effectually against blame in this respect, but to the persons who gave him his information. It is stated that the solicitor of patents consulted, gave it as his opinion that Dr. Morton could take out a patent in his own name. Such, however, I am assured, is not the fact; for he supposed, and so advised, that it was necessary to success to have their names (Jackson's and Morton's) united. Had he not, the former would never have been urged into it against his will. Dr. Jackson, I am also assured, was never informed by the solicitor that, if Dr. M. were to take out a patent alone, it might be used against the former. Neither did he (Dr. J.) express any surprise, when he saw the petition for letters patent, to find his name and Morton's joined as co-discoverers. He had, before this, agreed to such a union, as Dr. Gay admits immediately after:

"he had agreed to the arrangement!" How then could he have been "surprised," when he saw the petition? This is probably an oversight, on the part of Dr. J. and the author.

I would here say that, as the numerous mis-statements, contained in the pamphlet under review, and made through Dr. Jackson's "agent," Dr. Gay, are not vouched for by the author, I will take leave of them, merely adding that the insinuation at the close of his preface is not in keeping with his general high bearing; and that, in my "various publications," I have done but little more than to collect and arrange certain facts which have not been denied—although Dr. J. has often promised to attempt it, but has as soon forgotten his pledges. As to the changes rung by Dr. J. and his agent on my being a clerk, agent, or employé of Dr. Morton, and insinuating that, *therefore*, I could not state facts as well as others, I repeat that I have espoused this side *because I knew, from Dr. Jackson himself, that it was the right one*, and because no one else seemed willing to enter the lists, after the publication of Dr. J.'s extraordinary claims in Paris. In justice to Dr. Morton and myself, I should add, that I have done what I have voluntarily, freely, and without *any pecuniary reward whatever*,—in the same way Dr. G. is probably employed in Dr. Jackson's cause.

I have thus hastily noticed some of the statements in the pamphlet setting forth Dr. Jackson's claims, and I have done so with no intention of being severe upon the accomplished author, whose fairness I can but admire and wish to imitate. And in conclusion, I would congratulate Dr. Jackson, that so able an "agent or clerk" has espoused his cause, and only regret that Dr. Morton has not been equally fortunate.

TO THE AMERICAN AND BRITISH PUBLIC.

Dr. Morton has been often censured, both in this country and in Europe, for wishing to realize any thing from his discovery, by means of Letters Patent. If any small discovery or invention is made and patented, however worthless it may be, not a word is said; but when a person has labored long, and suffered much in his business and reputation,—as in the present case,—to confer a blessing upon the world surpassed only by vaccination, he is at once charged with cupidity and sordid feelings, if he desires any pecuniary reward!

When these Letters Patent were taken out, and he began to sell rights under them, he inserted, as a standing condition in all, this clause: that, in case the government of the United States, or that of any individual State, "at any time during the existence of this license, be disposed to purchase of the said Morton, &c., the whole right to use said Morton's invention in the United States," or in such individual State, then he should have the privilege to cancel said license by paying back the amount received, or a part of it proportional to the unexpired time of the license.

Every eleemosynary institution in the country where surgical operations are performed, every charitable hospital, and every person in Boston who has applied, have all received a free license granting them the benefit of the discovery, and the privilege of making use of it whenever they choose. With the desire of disseminating its blessings still further among the poor, Dr. Morton requested Dr. Warren, on the 30th of November, to give him the names of such hospitals as Dr. W. knew of in this country, in order that they might be presented with the use of this new anodyne process. Subsequently, Dr. M. was at considerable expense to bestow this gratuity upon such hospitals, having sent sets of apparatus to some, and, in every case, directed his agents to make the donation to others throughout the country. This was accordingly done in every large city, and, I believe, to almost every such institution in the Union. And should our Government come forward and refund the trifling sums he has received for the sale of rights, he would then most cheerfully give the unrestricted use of

his discovery to the whole American people; and he would even do so without, and refund these sums himself, had he not become already involved in the matter. Or, if *any one of our liberal and benevolent citizens would do the same*, Dr. Morton will not delay a single hour afterwards in making it free as the air we breathe. The amount is but small, and certainly *not more than Dr. M. has lost in making and bringing out this discovery;* and how can any one of our wealthy citizens more endear himself to the American people than by removing all restrictions from this great and universal blessing? Dr. M. has not sold, or attempted to sell, a right under his Letters Patent for more than two months; neither is it his intention, as he informs me, to send out new agents, or make any further efforts to extend his discovery, with the expectation of gaining any remuneration. Sales thus being over, the amount is not likely to increase, and therefore conld not be burdensome. But this is a hint thrown out for their consideration.

The free use of the ether has been three times offered to our government for the army and navy, and as often rejected, for the reason, as they say, that it is not safe, and its administration on board ship, or on the battle-field, and in camp, would be attended with too much trouble. Dr. M., in making these three offers, only required that the expenses of an agent, the apparatus, &c., should be paid. It was stated this could not amount to more than a few hundred dollars; but still the offers have been as many times refused.

Dr. Morton has likewise shown the same desire with regard to giving this great boon unshackled to Europe, and the world. Some attempts have been made in Great Britain to procure Letters Patent; but, by the steamer of the first of May, he forwarded to the English agent a note *authorizing and desiring* him to grant a free use of the discovery, for the benefit of her majesty's subjects. And, by the steamer of the first of June, he remitted to the same agent one third—or the amount desired—of the expenses attending the procuring of the patent; and now, so far as he is concerned, all obstacles are removed to the general and unrestricted use of the ether in all cases where it is desired. If the British public, therefore, have any cause of complaint in future on this score, it should be directed to others, and not to Dr. Morton. The agent residing in London has the matter entirely in his own hands, Dr. M. wishing me to take this opportunity to say that he is ready and desirous to bestow the full blessings of his discovery, not only upon Great Britain and all her dependencies, but upon Europe.

APPENDIX.

A.

"LETHEON." Lest any one should object to this term, found at the beginning of this pamphlet, I would observe, that it is only used to avoid circumlocution. The same idea might be conveyed differently; as, for instance, "A process for the prevention of pain in surgical operations;" but the name given to the discovery in question answers the same purpose, and has the further recommendation of brevity. It may be objected to, as taking the term out of its original meaning and giving it a somewhat new signification; but, once accustomed to the change, it will, I apprehend, make but little difference. Or, if some think otherwise, I reply, that many words are taken out of their former connection, and undergo a greater or less modification, to accommodate a new order of things. Our language does not admit of words for all ideas, or shades of meaning; and perfect exactness, in this respect, is wholly unattainable.

As soon as this discovery began to assume some importance, it was found desirable to give it a name. And, for this purpose, Dr. Morton called on several persons, among whom were Drs. Gould, H. J. Bigelow and Holmes. Dr. G. made a list of certain words significant of the subject, Dr. Bigelow doing the same. Soon after, Drs. B. and M. called at Dr. Gould's office, and, seeing his list, Dr. Morton, on catching the word "Lethéon,"—the same that Dr. B. had also put on his list—exclaimed, "That is the name the discovery shall be christened." Returning to his office soon after, where the writer was then sitting, he said, "I have found a name for the discovery, and am going to call it *Lethéon*."

About the same time, Dr. M. received the following note, which I cannot forbear giving in this connection. It is from that eminent scholar, poet, and surgeon, Dr Holmes:

Boston, Nov. 21, 1846.

My Dear Sir: Every body wants to have a hand in a great discovery. All I will do is to give you a hint or two as to names—or the name—to be applied to the state produced and the agent.

The state should, I think, be called "Anæsthesia." This signifies insensibility—more particularly (as used by Linnæus and Cullen) to objects of touch. (See Good—Nosology, p. 259.)

The adjective will be "Anæsthetic." Thus we might say the state of Anæsthesia, or the anæsthetic state. The means employed would be properly called the anti-æsthetic agent. Perhaps it might be allowable to say anæsthetic agent, but this admits of question.

The words anti-neuric, aneuric, neuro-leptic, neuro-lepsia, neuro-stasis, etc., seem too anatomical; whereas the change is a physiological one. I throw them out for consideration.

I would have a name pretty soon, and consult some accomplished scholar, such as President Everett or Dr Bigelow, senior, before fixing upon the terms, which *will be repeated by the tongues of every civilized race of mankind.* You could mention these words which I suggest, for their consideration; but there may be others more appropriate and agreeable.

Yours respectfully,

O. W. HOLMES.

Dr. Morton.

B.

Having already given an instance of Dr. Jackson's *penchant* for laying claims to other persons' discoveries, and of his anxiety to go down to immortality by clinging on to the discovery of some one more fortunate than himself, and Dr. J. having given an unqualified denial to all my statements, I will remark that I have before me a letter from Prof. Morse, in which is the following sentence: "I have received your pamphlet, and, *so far as Dr. Jackson and myself are concerned, it is correct.*"

But there is a sequel to this matter of the Telegraph, and a long correspondence between Dr. Jackson and Prof. Morse, which I expect soon to lay before the public. This will be a feast to those who are curious in such matters, and will well repay the perusal, showing how one may become a discoverer.

In the mean time, however, I will add the following, by way of appendix to the statements above referred to:—

Prof. Morse, as I am informed, having occasionally, within the last few years, heard that, in private companies, Dr. Jackson was still in the habit of boasting that he was the inventor of the Telegraph, always requested his informant to dare Dr. J. to publish what he thus iterated and reiterated in private. He was also publicly called upon, some years since, to do the same; but he dare not, it seems, lest his own letters in Prof. Morse's hands should condemn him. The Professor has been restrained from making them public heretofore, out of regard to Dr J.'s family and friends, and from a reluctance to injure a man of science, deservedly eminent in his particular sphere. He has borne much and long with the Doctor, in the hope that his *hallucination* would, in time, wear off, and is still suffering severely in foreign countries in consequence of these unjust claims, while the Doctor clings to his hobby with the same fondness as ever; or did, until a new one came along, that promised him better speed! I might galvanize into momentary life his *exploded* claims to improvements in the mode of producing *gun-cotton*, but will not, merely remarking that, between the elusive nature of electricity, the explosive properties of the "Cotton," and the intangible qualities of the "Gas," Dr. J. is likely to miss of his grasp, and fall to the ground, and that *exeunt fumo* will have to be written over his claims!

C.

Frequent allusion has been made by me to the erroneous impression made by the manner in which Dr. Jackson saw fit to make public his address to the American Academy of Arts and Sciences, and to send it out to Europe. And in these allusions, the regret was expressed that the paper in question should carry upon its face the apparent sanction of the Academy, and of the names of Dr. Warren and President Everett. It is now in my power, however, to give something like an authoritative disclaimer to such sanction—at least, from one influential quarter. From a note of Mr. Everett, now before me, I am permitted to make the following extract on this subject:

"I need scarcely say," remarks President Everett, "that my communication to Dr. Jackson to address a paper on the subject (of the discovery) to the American Academy can, in no degree, be regarded as giving the sanction of that body to his statements. It is a standing regulation of the Academy not to assume any responsibility either for opinions or facts set forth in the memoirs submitted to it. Even if this were otherwise, it is hardly necessary to remark, that the Academy's sanction could not be conveyed in advance by an individual member."

D.

In a private letter from Paris, entitled to the highest credit, and from a disinterested person, I find this sentence:—"Dr. Jackson has written to Mr. ———, (of Paris,) abusing Dr. Morton most roundly." I do not know the date of the letter from Dr. J. containing such abuse, whether earlier or later than the following: nor does it matter which, as either may follow the other with perfect propriety, apparently, according to his system of ethics:—

"*Boston, March 1st*, 1847.

To the Secretary of the Executive Committee
of the American Society of Dental Surgeons:—

Mr. W. T. G. Morton, Dentist, entered his name with me as a student of medicine, March 20th, 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.

CHARLES T. JACKSON, M. D."

Boston, Dec. 31, 1846.

To the Secretary of the Executive Committee
of the American Society of Dental Surgeons:—

Dear Sir,—Dr. W. T. G. Morton having requested my assistance in presenting his name as a candidate for membership of the 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.

He has been a student in medicine with C. T. Jackson, M. D., chemist; attended two courses of medical lectures in Harvard University; has received instructions from me; and is one of the discoverers of the "Letheon."

I have taken pleasure in interchanging professional thoughts with him, and am desirous of promoting his honorable intentions.

I am, respectfully,

Your obedient servant,

N. C. KEEP.

E.

I feel constrained here to allude to several gross mis-statements contained in Dr. Keep's communications to the Medical and Surgical Journal, and to several newspapers, as well as in his affidavit at the close of Dr. Gay's pamphlet. Dr. K. says, "All *his*" (Dr. Morton's) "apparatus for inhalation of ether was so constructed that it was a matter, in my opinion, of absolute uncertainty, whether the patient could receive sufficient atmospheric air to prevent asphyxia." In answer to this I reply, that it is well known to every surgeon in the hospital, and to hundreds of others, that it cannot be true. And the fact, that not a single serious accident has happened, out of more than *ten thousand persons*, to whom the ether has been administered in Dr. Morton's office and by his immediate agents, sufficiently disproves it. But even if it did not, I can inform the learned doctor and deponent that no *sort of* "*apparatus*" *whatever has been used in Dr. M.'s office for the last three months*, he having adopted the use of the *sponge* altogether!

Dr. K. has trumpeted every where the advantages of his apparatus. Now, I take this opportunity to inform the public, that this famous apparatus, which dentists from a distance have made pilgrimages to see and examine, is one that he procured of Dr. Morton; and that the original of his fine description of the same is found in Dr. Morton's specifications for letters patent. Dr. K. is still, or was until recently, I am informed, making use of the same apparatus, with the addition only of the "diaper." He also describes the ether he "prefers," which description is to be found almost verbatim in Drs. Jackson and Morton's letters patent. He has, in fact, borrowed all he knows on the subject from others—principally from Dr. Morton. To this I might further add, that a surgeon dentist in a neighboring town, who is writing a work on dentistry, and who had seen Dr. Keep's beautiful description of the apparatus he used, called, not long

since, on Dr. K., to get a drawing to introduce into his book. He stated his business, and desired to see the object of his search, having already seen the one Dr. Morton used. Dr. K. was taken by surprise, (as the gentleman informed the writer;) stated that his inhaler was broken; then, that it was out of order; next, that it was not *just such* a one as he desired, and therefore declined showing it at all. This prevarication too clearly expressed the state of the case, and proved that he was trying to pass off, as his own, what he had borrowed during his "thirty days'" tutelage under Dr. Morton.

And hear the wisdom of this Solon in his concluding paragraph, where he says, while a *clean* apparatus is "rather agreeable," a *dirty* one is "repulsive" and "absolutely intolerable!"

Dr. Keep having voluntarily brought forward charges affecting the judgment and intelligence of Dr. Morton and all employed in his office,—charges which are absolutely groundless,—I have been favored with the subjoined affidavit:—

I, Grenville G. Hayden, of the city of Boston, surgeon dentist, depose and say,—

That I was engaged in Dr. W. T. G. Morton's office during the time Dr. N. C. Keep was in partnership with him; that I daily administered the vapor of ether to his patients; that I used precisely the same kind of apparatus (invented and patented by Dr. Morton,) employed by Dr. Keep, having the same valve for the free admission of atmospheric air, the valve through which the vapor was inhaled, and the side valve to allow the expired air to pass off in the surrounding atmosphere; and that I took the additional precaution to fasten open the valve first named, when it did not work with ease, so that the patient could inhale with perfect freedom. I further say, that the apparatus described by Dr. Keep, in a late article published in the Medical and Surgical Journal, answers precisely to that used by Dr. Morton during the partnership aforesaid; and that, while Dr. Morton, and ourselves, met with almost uniform success in giving the vapor, Dr. Keep, on the other hand, it was generally understood in the office, but rarely succeeded in his attempts at etherization. I never heard Dr. Keep give advice as to the manner of administering the ether, and I am confident that he never gave such advice, as he was entirely ignorant on the subject; but, on the contrary, often heard him ask of those in the office for directions as to the mode of giving it, and frequently for assistance.

GRENVILLE G. HAYDEN.

—

COMMONWEALTH OF MASSACHUSETTS.

Suffolk, ss. *Boston, June* 21, 1847.

Then the above-named Grenville G. Hayden personally appeared, and made oath that the foregoing statement, by him subscribed, is true. Before me,

THOS. S. HARLOW, *Justice of the Peace.*

Dr. Jacob Bigelow and the Ether Question.

Although the following communication, over the initials "J. B.," (understood to be those of *Dr. Jacob Bigelow*,) appeared too late to find a place in the body of my "Account" of Dr. Morton's discovery, I cannot forbear appending it to the pamphlet, or, at least, to so many of the third edition as are not distributed. In this communication, the matter of the discovery seems to be pressed into a nut-shell.

As to the idea that the "two inventors" ought "to bear their honors meekly together," I have merely to say, that Dr. Morton has in no case departed from his agreement with Dr. Jackson; and it was only after the latter had instructed his friend, M. Elie de Beaumont, of Paris, to suppress Dr. M.'s name and all allusion to his claims, thus, by one bold stroke of the pen, making Dr. J. *sole discoverer*, that Dr. M. or his friends ever published a word in defence of his claims. It was then a matter of life or death with him. And since, at least four earnest attempts have been made, on the part of Dr. M. and his friends, to have matters accommodated; all of which have been frustrated, however, by the duplicity of Dr. Jackson, through his attorney, Francis B. Hayes, Esq.

With these remarks, I submit the article from the Medical and Surgical Journal of 7th July :—

Discovery of Etherism—The question settled.—The question of the legitimate title to the discovery of an effective use of ether in obviating pain, has lately occupied the press with some discussions of much earnestness and ability. Various persons, not before heard of, have presented their *ex post facto* claims to this discovery; but the public attention has settled down upon two individuals, to whom the world is indebted for all its practical benefits, and these are Drs. C. T. Jackson and W. T. G. Morton. Between these two gentlemen, the controversy, though it appears to us very uselessly, is still kept up.

We have been told that, when this subject was first agitated before the French Academy, a person present rose and claimed to have himself made the discovery several years before. Whereupon M. Velpeau exclaimed, "Sir, you did not make this dicovery! Else, why have you *suffered thousands of the human race to undergo the tortures of surgery during these years, if it was in your power, by a word, to have relieved them.*"

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 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.

Discoverers may properly be divided into two classes, the suggesters and the performers. They may be separate, or identical, but both are useful. The latter class are sometimes indebted to the former, but the former could do nothing without the latter. Several Portuguese navigators suggested that there was undoubtedly a western continent, and Columbus discovered that there really was one. Jonathan Hull, in 1736, made a theoretical steamboat on paper, and seventy years afterwards Robert Fulton made a practical one on the Hudson. The milkers in Gloucestershire discovered that their sore fingers, contracted in milking cows, prevented them from having the small pox, and suggested this mode of prevention to Dr. Jenner, who, at that time, knew no more about vaccination than Dr. Morton did about ether. The power of inhaled ether to diminish suffering and produce stupefaction, was not only suggested but made known in London many years ago; but its useful application to surgery was not made known till the experiments in Boston in 1846.

The public, as well as the respective friends of the parties, have given themselves much trouble about the claims of these two individuals to the greatest medical discovery of the present day. There are two witnesses, however, with whom the decision of this vexed question must ultimately rest, and these are the parties themselves. They have made their joint deposition, in taking out their patent, to the effect that they are joint discoverers in the case. From the stringency of this deposition, of the propriety of which they themselves were good judges, we think no court of justice could relieve either party, in consequence of any after thoughts. The public, moreover, a tribunal who are very apt to get right in the end, have already had the sagacity to find out, that, had there been no Dr. Jackson, Dr. Morton might never have known the properties of ether; and, had there been no Dr. Morton, the world would probably have been without the use of ether at the present day. The first, made partial experiments, and recommended (but did not make) decisive ones. The last, took the risk and labor necessary to demonstrate or disprove the efficacy, and, above all, the safety of the process, which, until his time, had been believed to be dangerous to life, on various good authorities, from Dr. Christison to Mr. Peabody. It appears to us that it remains for the two inventors to bear their honors meekly together, however much they may seem to dislike being in each other's company.

J. B.