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John C. S. Monkur, M.D

SKETCHES

OF THE

CHARACTER AND WRITINGS

OF

EMINENT LIVING

SURGEONS AND PHYSICIANS

OF PARIS.

TRANSLATED FROM

THE FRENCH OF J. L. H. P***.

BY Peisse

ELISHA BARTLETT, M. D.

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DISTRICT OF MASSACHUSETTS, TO WIT:

District Clerk's Office.

BE IT REMEMBERED, that on the fourth day of January, A. D. 1831, in the fiftyfifth year of the Independence of the United States of America, Carter, Hendee and Babcock of the said district have deposited in this office the title of a book, the right whereof they claim as proprietors, in the words following to wit:—

'Sketches of the Character and Writings of Eminent Living Surgeons and Physicians of Paris. Translated from the French of J. L. H. P***, by Elisha Bartlett, M. D.'

In conformity to the act of the Congress of the United States, entitled 'An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned;' and also to an act, entitled 'An act supplementary to an act, entitled "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned;" and extending the benefits thereof to the arts of designing, engraving and etching historical and other prints.'

JNO. W DAVIS,
Clerk of the District of Massachusetts.

BOSTON CLASSIC PRESS....I. R. BUTTS, PRINTER.

TO

LEVI WHEATON, M. D.,

PRESIDENT OF THE RHODE ISLAND MEDICAL SOCIETY,

AND

PROFESSOR OF THE THEORY AND PRACTICE

OF

PHYSIC AND OBSTETRICS,

IN

THE MEDICAL SCHOOL OF BROWN UNIVERSITY,

THIS

LITTLE VOLUME IS RESPECTFULLY DEDICATED,

BY

HIS FRIEND AND PUPIL,

THE TRANSLATOR.

Lowell, Mass.
Jan. 1, 1831.

CONTENTS.

TRANSLATOR'S PREFACE.

THE work from which the present volume is made up, entitled Les Médecins Français Contemporains, was published in two numbers, the first in 1827, and the second in 1828. The original contains twentytwo biographical articles, only nine of which are here translated. This selection has been made with reference to the celebrity of the individuals and the interest likely to be excited by sketches of their character and writings, in the mind of an American reader. With most of the names contained in this volume the medical reader has long been familiar. The men who are here held up to view, have exerted, and some of them still continue to exert, a powerful influence on the interests of science. Some of their writings are to be found in all our libraries, and the results of their labors are conspicuous in every department of medicine. I trust, then, that a more intimate acquaintance with their distinctive traits of character as men and as physicians, and a more complete and extended knowledge of their various scientific

researches will possess sufficient interest with the American reader to justify this publication.

I may add, that the object of the publication is two fold. First, the delineation of distinguished professional character and attainment; and, second, by the influence of such high examples, to awaken in the younger members of the medical body, a more devoted and worthy emulation of the great masters of our art. The contemplation of this exalted excellence in others may show us more clearly our own deficiencies and arouse us to the efforts necessary to supply them. After making all reasonable allowance for natural tact or talent, and for the facilities and advantages of instruction to be had in extensive medical establishments, it will be found that *study*, intense, untiring, unremitted *study*, is the only foundation of professional worth and distinction. Has not medical science in our own country felt, in some degree, the withering influence of the superficial literature of the age? Let us look at DUPUYTREN, the unrivalled chief of modern surgery, holding, while a boy, offices which were the reward only of solid, scientific knowledge; at BECLARD; at BICHAT, who, dying at the age of thirtyone, left behind him a reputation second only to that of JOHN HUNTER. These men have imprinted, deeply and indelibly, the traces of their labors on medical science, and the history of their lives may teach us that similar honors can be won only by similar means.

AUTHOR'S PREFACE.

Some of the following biographical articles have appeared in the Mercury of the Nineteenth Century; most of them are now published for the first time. Yielding to the desire of many well-wishing physicians and readers, I propose to follow, with more or less rapidity, and with more extent than I at first intended, the critical review which I have undertaken. This new mode of publication has occasioned some changes in the order which I had adopted, and I have abandoned the alphabetical arrangement, which offers only a factitious appearance of impartiality. All this, however, is sufficiently unimportant, and I have to justify, not the mode of publication, but the book itself.

The 'Biographie Médicale,' so prolix for the dead, is in general very incomplete in the department of living physicians of all countries, and particularly so in relation to those of France. Many remarkable names are there omitted; others are recorded which are but little distinguished, and some which are not distinguished at all. From a secret inclination towards complaisance, or partiality, scarcely any are admitted among cotemporaries except the colaborators of the Dictionary of the Medical Sciences, and among these, even, the most remarkable are forgotten. The eminent medical men of whom France is honorably proud, are never justly appreciated in this work, nor noticed in their proper point of view. The historical details are numerous, very exact, and derived, without doubt, from good sources: in a word, there is nothing to

say, but that they interest, and can interest no one except those in relation to whom they are written. For my own part I have neglected them, most generally, persuaded that the real interest of a medical biography, and especially one that is cotemporary, consists in the history of *opinions*, whether promulgated from the chair, in books, or at the bed-side of the patient.

My review concerns itself, then, with doctrines and not with persons; but this with some restrictions, *excipienda excipiendis*. The route is narrow, and exposes one to many dangers. What shall I say of some personages whose celebrity is rather recent, placed so high *by their places*, so low by their science? Many sterile writers and dumb professors have been placed by destiny, or a more omnipotent fate, at the head of the first school in Europe. Their names are inscribed on a thousand theses, on a thousand programmes, and last, not least, *in the budget of the Minister;* we are forced to speak of them, to characterize and to appreciate them, and then we find ourselves very near those direct investigations so difficult to make with fitness, and so unwelcome to the subjects themselves. The best course in such case, is to retrench one's self behind the scientific point of view, and to make no sortie thence, whatever inclination one may have; making, on the remaining points of character, such concessions as politeness or charity may suggest. Thus, to continue my supposition, while lamenting to see, in our school, ability in such sad disproportion to the work to be accomplished, the little in the place of the great, nullities become something, mediocrity all, and superiority nothing, I shall not consider less, the professors who furnish one with these reflections, as men venerable and worthy of esteem; not physicians, not learned, as everybody knows; not orators, nor writers, nor practitioners, it is true; but wise men, of irreproachable habits, men of probity, religious and well-meaning.

And, indeed, how is it possible to make entire abstraction of the person in a controversial writer? Medical polemics are

the most violent of all polemics. The field of dispute is vast, for medicine is not yet established, whatever may be said at the present day, but on principles which are contested, varying from age to age and from day to day, and rarely susceptible of being verified by direct and conclusive experiments. The spirit of controversy, always on the look out, calms itself one instant only to arouse itself the next, with new ardor, and increased energy. To the spirit of controversy, inflamed by the nature of medical science, is joined the spirit of the profession. The practice of the art conducts to fortune and to honor; physicians, all marching, and in great numbers, on the same route, frequently encounter each other; they cannot pass so near together without coming in contact, injuring and overthrowing each other; it is the law of opposition and rivalry. This, without doubt, is a great evil, and we must rank it among so many other evils, born of the passions of men, which are excused because they cannot be cured. The rivalries of self-love and of interest, embitter the spirit, darken the character, and attach to all writings an air of rancor and hostility. In the *History of Chronic Phlegmasias*, I see the learned man alone with his thoughts; in the *Examination of Medical Doctrines*, I again see the learned man; but behind him is the man surrounded and acted upon by his passions. In this case, criticism ought to take note of the difference. When the quarrels of doctrine become the quarrels of party, a circumstance sufficiently common, they exert on the destinies of science an influence which it is important to notice, and for this purpose, it is necessary, whether we will or not, to study the men who thus act, and to judge their passions, when we would wish to judge only their maxims. There is here a quicksand that I have already met, that I shall again meet in my course, and I will endeavor, a thing rather difficult, to speak the truth with fitness and moderation.

I would wish with all simplicity, without prejudice and with justice, to give an idea, somewhat more exact than has hith-

erto been given, of the scientific and literary merits of those cotemporary French physicians, who, whether deservingly or not, have acquired some celebrity. Many, I doubt not, will gain little by this investigation. I shall find myself frequently in opposition to the apparent opinion of the public; but after deliberate examination, many readers, I believe, will range themselves on the side of my own opinions. I cannot hope to spare entirely the susceptibility of some minds, which are no better pleased with qualified eulogy than with unqualified condemnation, and who place on the same line an open attack and a restricted approbation. I respect, as much as any one, the just and laudable pride of the learned man glorying in his labors; I excuse, and I respect also, as far as may be, other little pretensions of vanity, which every man, and especially every writer, ought to avoid wounding in another, however little they may be justified by real merit; but respect and excuses have their limits; there is a self-love so exacting that it becomes importunate and ridiculous, and it is only so much the worse for men thus constituted, if severe verities, mingled with laughter, sometimes reach their ears. I have studied the doctrines of which I here give account; I have endeavored to understand them well in order to exhibit them faithfully; if I deceive myself, if I bestow either blame or approval wrongfully, it is not done designedly. I must be pardoned for sometimes laughing, for the occasion presents itself often in medicine. Although physicians no longer walk the streets in black robes, and with magicians' hats, although they do not often speak either in good or in bad Latin, unless it be at the concourse of Aggrégés, there is yet remaining among them matter for comedy. Leeches and warm water, Magnetizers and their somnambulists, the amusing scenes of the Aggregation, the lessons of a professor of 1823, and the course of Recamier! O Gui Patin! Rabelais! and Moliere! where are you?

It remains to examine the publication under a point of view more serious.

Modesty is not a defect of French character. In everything, we place ourselves, without ceremony, at the head of all civilized people. In an individual, such vanity is considered caprice, in a nation, virtue. But whether virtue or caprice, I fear that our neighbors of the North, the East, and the South, will not agree with us here. Are we really richer in medical writers and in great practitioners than England, Germany and Italy, not to speak of Spain, which is rich only in Monks and in ignorance? We may, I believe, in this respect, pretend to a superiority in regard to the English, perhaps, also, but this is less sure, in regard to the Italians; as to the Germans, we can with difficulty, it seems to me, rival them; for if, on the one hand, the present French School appears farther advanced in practical medicine, we can oppose to them in anatomy and physiology, neither works nor names so great as their own. It should be remembered that I speak only of the few last years, and that I except Bichat, who belongs to another century. However it may be, this review may, perhaps, assist in settling the question. I shall endeavor to make known the different degrees of importance of many books of which the biographies give only the title. One may thus judge better, perhaps, of the number of our medical writers, and of their respective merits, each one in his particular department. Although my review is specially concerned with doctrines and simple literary considerations, I have endeavored to unravel and appreciate, through the writings of each physician, his genius and intellectual capacity, and to characterize well whatever he may possess of individuality; hoping thus to give interest and life to scientific discussions, too often superficial for men of art, and not susceptible of being read by the rest of the public.

I do not expect to please every body. So much the worse for myself to be sure, but it is a matter of necessity. Medical parties are at this moment so intermixed and so excited, that one cannot always render justice to whom justice is due.

Praise one of the learned in office, well paid, having powerful friends, able to render a service when occasion requires, expert, besides, capable and experienced,—were it Hippocrates, to praise him is flattery. The eulogy may be good, all may agree that it is merited, but the author is not less suspected of sinister designs, secret views and ambitious projects, because, forsooth, nothing is done in this world without an equivalent. On the other hand, venture to utter somewhat freely your opinion of some physician in favor, esteemed by the learned, adored by his pupils, well received by the public, but whose intellectual despotism is fatal to the interests of science, insupportable to his adversaries, and somewhat so even to his partizans; venture this, and fanatics will accuse you of folly and detestable waywardness. Do you hold up some errors in doctrine, some obliquities in conduct, though with calmness and moderation; do you admire the importance of certain works, though without fanaticism or indiscreet partiality? In both cases, your impartiality is taken for pure hypocrisy: if you do not blame more, it is because you dare not; if you approve, it is because you could not do otherwise; logic certainly most admirable! Happy may one be if he is not convicted of having badly understood, badly exhibited, and poorly said whether more or less; an error sufficiently possible, though his work may have been neither long nor complicated.

Note.—In order that some allusions in the foregoing preface may be understood, it is necessary to state, that among the biographical articles contained in the original work, there are some, the chief object of which is to ridicule the men to whom they relate. In 1823, the political ministers, in strict keeping with their jesuitical and bigoted principles of government, declared it necessary that the School of Medicine should be *reformed*. CHAUSSIER, PINEL, DESGENETTES, DUBOIS, PELLETAN, &c, were dismissed from

their places, and DENEUX, FIZEAU, GUILBERT, BOUGON, &c, men who were more ready than their predecessors, to

> ——— bend the pliant hinges of the knee,
> Where thrift might follow fawning,

were rewarded with the vacant professorships. M. CHAUSSIER was guilty of assisting in the establishment of the School, *during the Revolution*. PINEL was suspected of cherishing liberal opinions and philanthropic sentiments. M. DESGENETTES had followed the *usurper* in most of his campaigns; he had received from him honors and rewards; he had been distinguished with his friendship and had cured republican soldiers. M. PELLETAN was gifted with an eloquence that might be dangerous; had held places under the republic, and had received from an emperor the cross of the Legion of Honor; while M. DUBOIS had, with unparalleled effrontery, attended the birth of an imperial infant!

Such were the crimes of which this illustrious brotherhood were individually guilty. They were accordingly driven from their stations, and their places were filled by men of little celebrity and of less desert. These men, and the ministers who appointed them to office, our author lashes with unsparing and well merited severity. There is little doubt that they are now involved in the fallen fortunes of their royal master and his worthy associates, and that the School of Medicine at Paris, with all the institutions of regenerate France, has re-assumed its rank, and re-asserted its long violated rights.—[*Trans.*]

M. DUPUYTREN.

If I could have avoided speaking of M. Dupuytren, it would have been a great relief to me, for I find myself in a very uncomfortable embarrassment. I am almost sure to leave all parties dissatisfied. If I were writing in verse, I should then have elbow room, and might satisfy the wishes of every body, friends and enemies. I could pass easily from apology to satire, and indulge myself in those direct, personal investigations which would rejoice the principal part of the surgeons of the capital, both great and small. Marvellous privilege of rhyme! My good friends and compatriots, the authors of the Villéliade, with their caustic humor and their bold speech, have thus, thanks be

Note.—Dupuytren (William,) Baron, Chevalier of the orders of the Legion of Honor and of St Michael, was born at Pierre-Buffiere, Oct. 5, 1778. He commenced, while very young, the study of anatomy and surgery. At the age of seventeen, he was appointed dissector of the school of health at Paris. From that time he devoted himself with ardor to the instruction of anatomy and physiology. He received the degree of Doctor of Surgery, and was the opposing candidate of M. Dumeril for the

to poetry, been able to censure with impunity the freaks of certain ministers, and to pour out upon them liberally, ridicule and shame. But lack-a-day, where would they have been, if they had had the foolishness to have written in prose ? Instead of being quoted as brilliant poets and courageous citizens, they would, at this moment, have been company for M. Cauchois-Lemaire, who, for a few words in the air, addressed to a Prince of the blood, is forced into retirement for a period somewhat long.

Happily for myself, M. Dupuytren is neither King, nor prince, nor minister, and one may speak of him without running the chances of a warrant from the sheriff. Suppose that I should make myself the echo of reports generally circulated as to certain faults of his character, and some particulars of his advancement in the world, I do not think that he would summon me before the court. We do not see that Count Montlosier was thus treated by M. Recamier, for having said that this physician had in his chamber a crucifix five

place of chief of the anatomical works. He was beaten by one vote, but obtained the situation when his competitor was advanced to the chair of anatomy. It was at this epoch that M. Dupuytren, having Bayle for an assistant, devoted himself to researches on pathological anatomy, which were published in the Journal of Medicine, Surgery and Pharmacy of Corvisart, Leroux and Boyer. M. Dupuytren obtained, in 1802, the place of second surgeon of the Hotel Dieu. In 1808, he was appointed adjunct surgeon in chief of this establishment, and finally, in 1815, first surgeon. On the 15th of February, 1812, a brilliant concourse, and one of the last where the professorships at the faculty of medicine were the prizes, elevated him to the chair of Sabatier. M. Dupuytren is first surgeon to the King, member of the Academy of Sciences, of the Royal Academy of Medicine, &c.

feet high. But if I do not fear the constable, I profess great regard for propriety, and propriety does not direct us to enter the bed chambers of people without being invited. I shall not deny that M. Dupuytren may be blameable in many things, for he has received, like other men, passions with his being ; but this matters little to his patients. That he is an unsociable companion, that he strives for a surgical omnipotence, that his manners have the bearing of a stern and despotic severity ; for these things I know he is justly complained of, but it would be painful for me here to dwell upon them. That he has penetration enough to discover that talent, unassisted and of itself, is not a sufficient recommendation to the favor of the distributers of honor, and that he is a diplomatist capable of securing to his merit a worthy recompense, I can still more easily believe. But what evil is there in this ? Those only who succeed are reproached, for it is only such who are exposed to observation and envy. But those who are left in the back ground in this rivalry, are they often anything better than unskillful combatants, conquered, who strive to sacrifice others in order to cover the shame of defeat ? Finally, how many men, well or poorly informed, with good or bad intentions, come to whisper in my ears accusations of every species ; I listen to them, for I risk nothing in this, but I am still no better disposed to put the public in the confidence of reports thus blown about. But I shall endeavor, hereafter, to say what I think of M. Dupuytren, considered under this point of view, and I hope to conciliate matters sometimes very incompatible ; to wit, justice, propriety and truth.

Should I be accused of partiality, and this will happen, I avow boldly that M. Dupuytren is, in my opinion, a surgeon of the most exalted merit. I do not know even, that we can reasonably look for his rival in France. The public voice has ordinarily designated him as such. It is not myself who bestows on him this place—I find him there. I do not wish to utter a panegyric, I simply state a fact; and I say that the reputation of the professor of the Hotel Dieu is the highest surgical reputation of our country. Does he merit this reputation? I do not doubt it, and I proceed to give the reasons of my opinion.

M. Dupuytren is surgeon and clinical professor, and I shall speak of him in these two relations.

The art of surgery is, in the eyes of the world, only the art of performing operations. In the view of people generally, a great surgeon is a man whose genius, like that of a juggler, lies in the ends of his fingers; whence it follows that they neither comprehend nor appreciate the art. Physicians themselves, for a long time had the same notion, and this foolish opinion was the cause of the long continued inferiority of surgery to the other branches of medical science. At present it is not so, and surgery now occupies the rank that it ought to occupy. A surgeon is a physician who concerns himself specially with those diseases called external, that is to say, such as the hand is able to touch and the eyes to see, directly; and who, in order to cure them, employs all those therapeutic means that seem to him indicated, but principally those that are called operations.

M. Dupuytren appears to me equally superior in all the departments of this difficult art. He has a '*coup*

d'oeil' of most admirable precision, a sure and steady hand, a coolness and self-possession always imperturbable, and that innate instinct or tact, so necessary in all the arts. A man is born surgeon or physician, as a man is born poet or painter. At seventeen years of age, an honorable concourse appointed him dissector of the school, whence we may see that almost from boyhood a decided inclination drew him into the career which he has followed with success, because he entered it with passionate ardor ; for nothing is well done unless it be engaged in *con amore*. From the period of his first essays in practice, up to the time of his elevation to the post where we now see him, and during the fifteen years passed at the Hotel Dieu, he has witnessed an immense number of facts of every species, and has thus been able, better than others less favorably situated, to study and enrich his art. Favored by an advantageous situation, practising on a theatre so vast, the habit of seeing and of doing has given him, among other qualities which will hereafter be mentioned, the talent of recognising disease, *where* it is and *such* as it is. Indeed the talent which especially distinguishes this practitioner is, in my opinion, in the science of diagnosis ; and diagnosis is often as obscure in surgery as it is in medicine. Diseases are not and cannot be *external*, in the rigorous meaning of the word. There is nothing in the human body truly external, except the cutaneous surface. All the affections coming within the province of surgery are more or less difficult distinctly to characterise, because they are often hidden in the depth of some cavity, as the uterus, the bladder, the nasal fossæ, the pharynx, &c. and because, although to a certain extent perceptible

to the eye, their point of origin is more distant, in the interior of the bones or in the enclosure of an articulation, for example. The consequences of error are grave and sometimes irreparable.

It is easy thus to see how ridiculous is the exaggerated idea of the certainty of surgery when applied to diagnosis. You can *see*, you can *touch*, it is said ; but more often than otherwise, *what* do you see ? *what* do you touch ? Symptoms, certainly, and not the disease itself ; symptoms on which the judgment must deliberate and finally decide. Now, M. Dupuytren is particularly remarkable for his diagnostic foresight. It is difficult, I believe, to carry farther the precision and certainty of quick observation. He observes with attention, but rapidly ; rarely undecided, he judges with promptitude. Arrived at the bed side of the patient, his five senses are all awake ; in a few minutes of questions and researches, his examination is finished. One might often believe that he has given to the case only a superficial attention, but his subsequent lecture will prove that he has seen everything and seen it thoroughly. In a case where the student or a practitioner but little experienced finds nothing remarkable, he exhibits a crowd of interesting circumstances, and deduces from them, consequences numerous and well founded. I have heard few physicians interrogate a patient with so much intelligence and pertinency. His questions have always an object. I have rarely known him to deceive himself, whether in regard to the seat and nature of disease, its probable issue, or even as to the expected effects of therapeutic means. And let it not be supposed that these decisions are inaccurately or vaguely expressed, in a manner that they

might, like the ancient oracles, apply themselves to all and contradictory results. Many practitioners act thus ; but, on the contrary, I have been astonished at the care and especially the confidence with which M. Dupuytren enters into the minutest details on facts which yet exist only in the future. He describes a pathological alteration, yet hidden in the interior of an organ, as though it were visible, and when the scalpel has dissected and uncovered it, the truth of his description is verified by all who witness it.

Is M. Dupuytren never deceived ? There are men who have asserted such nonsense without believing it themselves : but my own observations have satisfied me that he is sometimes mistaken, a thing that does not surprise me, and ought not to surprise any one. It is said that he once performed the operation of lithotomy in a case where there was no stone : he had sounded the bladder at several different times ; he had felt the presence of the calculus ; he had heard and the bystanders had heard the shock produced by the sound on the foreign body ; but in truth this fact, apparently so well demonstrated, did not exist. This circumstance I have often heard cited, and it is willingly repeated, because there is a great satisfaction in finding a rival contemporary in fault ; but it only proves that in diagnosis every error is possible, even to the most skillful practitioners. The same thing happened to Cheselden, to Desault, and, in particular, twice to M. Roux, who acknowledges it with a frankness that does him honor. M. Dupuytren has not the same candor. If we consult only the avowals which he judges it expedient to make to the public and to his students, we must believe him infallible. He has an

ambition for superiority so jealous, that he manifests the utmost care to conceal not only important errors but the most trifling inexactness. A reproach, whether merited or not, however insignificant it may be, seems to him to tarnish his glory forever. I shall return again to this kind of tactics, peculiar to the surgeon of the Hotel Dieu.

On a correct diagnosis depends the indication, and the manner of fulfilling it. M. Dupuytren is not less skillful in treating surgical diseases than he is in detecting them. There is no department of his art that he has not thoroughly studied, and to which he has not given improvements more or less important.*

* The writer here gives, in a note, a catalogue of the surgical improvements and inventions of M. Dupuytren, taken from the Dictionary of Medical Sciences. Among them is the operation for the cure of artificial anus, the honor of which, says the author, is given by M. Richerand to Dr Physick of Philadelphia, *but without sufficient proof.* In relation to this mooted question, I here give an extract of a letter from Dr Hays of Philadelphia, Editor of the American Journal of the Medical Sciences, dated Nov. 1, 1830.

'Dr Physick's operation for the cure of artificial anus was first performed in 1809, on a patient named Exilius, in the Pennsylvania Hospital, and the record of the case was entered in the Hospital register by Dr Hutchinson, then a resident pupil of the House. This operation was subsequently described by Dr Physick annually in his lectures, is noticed in the Elements of Surgery by the late Dr Dorsey, published in 1813, and the details of the case, taken from the Hospital register, were published several years since, in one of the Medical periodicals of this city.

'M. Dupuytren's operation was first performed, in 1813, on a patient named Aucler, admitted into the Hotel Dieu with strangulated hernia, which resulted in an artificial anus.

'It is said, however, that this operation was proposed and executed in Germany, so long ago as 1798, by Dr Frederick Schmalk-

Without making here an enumeration, which, to be appropriate and complete, would require too much room, I do not fear that I shall be accused of exaggeration in saying that very few surgeons have given proof of so much surgical genius in the invention of modes of operating or so much expertness in their execution. M. Dupuytren possesses in the highest degree a creative and inventive spirit; he knows with an admirable forecast how to modify the general methods of practice, according to the particular, individual cases, which, for the most part, I repeat it, depends on the accuracy and precision of his diagnosis.

As an operator, he possesses that invaluable union of qualities which are found only in the great masters of the art, and all which are more or less necessary. A familiarity with running blood and with suffering

alden. The dissertation of this surgeon which is entitled "Nova methodus intestina uniendi," appears not to have attracted any attention. It has never reached this country, and M. Dupuytren says that though he has taken great pains to procure a copy, he has never been able to obtain one. He states, however, that Dr Koreff has communicated to him an extract from this dissertation, and adds, "We cannot doubt, after reading this extract, that Schmalkalden was the first to conceive and execute the project of establishing a communication between the superior and inferior ends of the intestine by *perforating* the partition which separates them." After noticing Dr Physick's operation, M. Dupuytren adds, "The operation that I have performed on Aucler has with those of Schmalkalden and Physick an incontestable analogy." As to Dr Physick's and M. Dupuytren's operation, they are *identical*, there being only a slight difference in the mode of operating, and I think Dr Physick's is the better. As to Schmalkalden's operation, we have none of the details, and do not know even the result, and had it not been re-invented by Dr Physick or M. Dupuytren, it would never have been known to this day.' —*Trans.*]

men has enabled him to acquire a presence of mind that is never shaken, and a tranquil assurance that is never disturbed. Accidents the most unexpected never disconcert him ; and it is, especially, in these unlooked for occurrences that he developes all the resources of his genius. He is then seen striving with difficulties, seizing with quick sagacity the new indications which present themselves, and employing at the instant the means of fulfilling them. Is there in this, simply skill, or rather is it not instinct ? We might believe the latter ; but, the operation finished, one is astonished to hear him discussing fully all that has just taken place, with a method and a spirit of order, remarkable. He exposes the reasons of what he has done with as much precision as if he had deliberately weighed and elaborated them in the silence of the cabinet ; he indicates the various means that might have been resorted to ; points out their respective inconveniences and advantages, and justifies his conduct by practical examples and solid reasoning. We are then convinced that he has not acted at random ; but, on the contrary, that he has well reflected, well calculated, deliberated, and that he has not finally decided without good cause, although for all this but a few minutes were required. I have witnessed instances of this sort, and I confess, that never has the art of healing appeared to me more noble, more worthy of admiration than on these occasions.

M. Dupuytren performs all the common operations of surgery with dexterity ; but in this I see nothing that ought to surprise any one, for there are, in the hospitals of all the large cities, operators capable of amputating well an arm or a leg, of extracting a cal-

culus, and of extirpating a tumor in a satisfactory manner. There is much less address necessary for this than is generally imagined. In relation to manual dexterity and agility of movement, the professor of the Hotel Dieu does not lack for rivals, and there are practitioners who are even superior to him in this respect. M. Roux, for example, is much more adroit, taking this word in its purely mechanical sense; he has also, incontestably, more grace and vivacity, which is not saying that he operates better, but only that he has, apparently, more ease and freedom in his motions, although they may not be more sure. If we were to regard a surgical operation as an ingenious exhibition, and the surgeon as a skillful player of his part, I should prefer M. Roux to M. Dupuytren and to all the surgeons of Paris. But in my opinion the art of surgery is far from consisting, altogether, in the more or less adroit application of cutting instruments; it consists, essentially, in the diagnosis of diseases, in the appreciation of indications, in practical experience; and in all these things I place M. Dupuytren in the first line.

Frere Jacques said to the patient whom he had just cut for the stone, '*I have operated—may God cure thee!*' Surgeons do not thus talk at present, but they act in a similar manner. The success of an operation is, to a great extent, dependent on the subsequent care and treatment to which the patient is submitted. M. Dupuytren exhibits also, in this respect, the same superiority of practical views. He never operates without having previously prepared his patient by an appropriate regimen, and assuring himself that his general health will not be seriously affected by the op-

eration. He seems to me also a pretty good physician in whatever relates to diseases which ordinarily complicate traumatic lesions. I say a pretty good physician and not a perfect physician, for herein I do not think him above all accusation. The majority of surgeons, besides, sin on this hand; the greatest number suffer themselves to be governed by notions altogether too mechanical. M. Dupuytren is one of those in whom this fault is least apparent.

So much for M. Dupuytren as a practitioner; let us now consider him as an instructer.

When M. Dupuytren came to seat himself in the amphitheatre of the Hotel Dieu, he took upon himself a high responsibility. He succeeded to a professor whose chief glory consisted in the art of teaching. M. Pelletan disappeared, we know not why, from this place, where the students loved so much to see him; and these were not disposed to indulgence in regard to the new comer, whose unlooked for and unusual advancement appeared to them irregular and out of course. Before M. Pelletan himself, Desault had, during a long time, shed upon French surgery a new and brilliant eclat. It was necessary that a man should possess no ordinary resources, not to be intimidated and overawed by such predecessors. M. Dupuytren accomplished all that any one could have the right to require, and if he did not still every voice that was elevated against him, he at least silenced such as doubted only his capacity. Since 1815, the surgical clinic of the Hotel Dieu has lost none of its ancient reputation. No other clinical course in France can be compared even, to this, whether for the number of students, the abundance of cases, or, finally, for the genius of the professor.

In effect, M. Dupuytren comprehends perfectly in what clinical instruction consists; a thing that ought to be somewhat difficult, seeing how few there are who succeed in it. Lessons of clinical surgery have no resemblance to a course of surgery. The material of a regular course may be distributed beforehand; the professor may lay out his plan and fill it up with such developments as appear to him appropriate: he has time to mature his ideas and to systematize his theories; he can pass in silence whatever he does not know, slide over whatever he understands but partially, and dwell particularly on such subjects as he has most thoroughly studied; he may, for he has leisure to do it, consult authors, quote their opinions, and corroborate his precepts by the examples of the masters of the art. Indeed, a course may be prepared much as a book is written. A clinic is altogether a different thing. The professor has need here to speak continually without preparation, because the material of his lesson cannot be regulated by himself, in advance, but is dependent upon chance, which brings him, today, a strangulated hernia, tomorrow, a fracture; and in the same day, four or five different cases. Arrived with his students in presence of his patients, he must explain himself, he must speak out his thoughts, he must form his diagnosis and state the reasons of his decision; he must prescribe a treatment and explain the purpose of his prescriptions. His task consists still more, perhaps, in action than in words. Always on the alert, continually watched, continually accompanied by a crowd, from which each look is a question, he must satisfy all, he must reply to all. It is easy to see how much greater practical knowledge, and richer intellectual

resources are necessary for a clinical professor, than for him who recites a systematic course. It is not the purpose, at the bedside of the patient, to develope learnedly and authoritatively fine theories, and to speak more or less eloquently on a subject already prepared, a thing sufficiently easy for a man who unites to solid learning, some literary taste and the faculty of easy conversation. Here, on the contrary, theories which offer so many advantages to the eloquent and voluble tongue are no longer of any service; we have little to do with *science*, but much with *art*. He ought, in each individual case, to point out to the student all the circumstances of such or such affections on this or that patient, and thus to prepare him by degrees for the practice of an art which does not and cannot exist in books. Now, the difficulty of this task is great, for the subjects of observation are continually changing, as I have already said. It would not be by any means impossible for a physician, altogether unqualified for the practice of his art, but well versed in the literature of the science, and endowed with a certain degree of intellectual shrewdness, to give a passable course of lectures on some branch of the art. We have, even at this moment, some books of practical medicine written by men who would be shocked by the sight of a patient; and who would not so debase themselves as to write a formula; and these books enjoy a certain degree of celebrity. But in clinical teaching, practical talent goes before everything else, for the professor ought especially to teach by his example. It is essentially necessary, if his clinic is surgical, that he should be a great operator; the value of instruction and his own reputation imperiously require it. Let us

add, finally, that a clinical professor, continually exposed to the control of those who see him act and hear him speak, ought, in order to maintain himself in such a post, to be necessarily a man of extraordinary merit, or an absolute fool. We have living proofs of this double verity in the school of Paris.

An excellent practitioner, M. Dupuytren thus really possesses the most essential quality of a clinical professor. But to this first fundamental qualification others ought to be united. The professor ought to have a free command of language and the talent of extemporaneous speaking; he should possess a memory sufficiently good to recall distinctly all the circumstances of diseases, and the peculiarities of the various treatments that he has directed; it is necessary, that, thoroughly understanding the necessity and obligations of his instruction, he should accustom himself to return every day to things which he has a thousand times repeated, unmindful of the fatigue resulting from such repetition; above all, he should remember that he is occupied with inexperienced hearers, to whom it is not sufficient to say things imperfectly; hearers who may easily be dazzled and led astray, but who ought to be instructed, an end that cannot be attained without patience. In respect to all these things, M. Dupuytren is almost irreproachable. We do not say that he is an orator, in the ordinary meaning of the word, for this would be a subject of censure rather than of eulogy. But we say, that, although a little prolix, and sometimes diffuse, his manner of speaking is altogether winning and appropriate. His diction is not destitute of elegance; at times, and, according to the subject, it possesses a certain literary elaboration which is not

displeasing. There is in his words an elegant finish and a fine tone, rarely met with in the hospitals. His manner of expressing himself is so far removed from vulgarity, that I suppose he takes more care than is generally believed to cultivate and improve his elocution. However it may be with these observations which relate only to subordinate qualities, and the justice of which may, perhaps, be doubted, I shall insist, with greater earnestness, on a more solid and more valuable merit. This merit consists in the inexhaustible riches of practical reflections of the highest interest; in an excellent memory, which furnishes in abundance the most interesting relations; in a facility of thought and of speech, which enables him to discover in a few moments, and satisfactorily to develope whatever there is of importance in any fact; in the faculty of adapting his instructions to the capacities of his pupils, &c. The students themselves understand and feel very well all this, though they may not all be able to account for the motives which conduct them to the Hotel Dieu, rather than elsewhere. As to myself, instructed by my personal experience, and by the numerous comparisons that I have made, I do not hesitate to believe and to say, that the clinic of M. Dupuytren may be offered as a model of this kind of instruction. To learn what it is necessary to do, in order to succeed well in this difficult task, you must go to the Hotel Dieu; to learn what is necessary to avoid, you must go to Saint-Côme and to some other places besides.

But the most brilliant qualities, sagacity in diagnosis, imperturbable self-possession in operating, facility and elegance of elocution in instruction; are all these qualifications sufficient to merit general esteem, and to

obtain the willing suffrages of all? No : for with all these, science is not complete.

There is a *scientific good faith* required of every learned man, but more particularly of a clinical professor. I understand by scientific good faith, that happy impartiality of spirit, and that praiseworthy modesty, which renders unto Cæsar the things which are Cæsar's, and gives homage to truth under whatever circumstance it may be found. This good faith will not justify the concealment of a fault, from the fear, whether of public censure or of a mere pique of self-love; it does not allow one to proclaim a success which does not exist, to cry up or to depreciate an operation, not because it is good or bad, but because the inventor bears this or that name; it does not suffer one to invade the possessions of others; it receives whatever is useful, come from where it may, and is never silent when it ought to speak well of its neighbor. Without this good faith, the most eminent qualities may become instruments of deception.

In surgery, as in everything else, a reasonable ambition does no injury; it is even laudable and necessary when united to merit, for without its powerful assistance, merit would often remain in obscurity; but it is not necessary that this passion should always inflame the spirit, whenever its reasonable and highest possible object is accomplished. If there should exist a man, thirsting for fame and domination, whose character exhibited, in all its degrees and in all its shades, the destructive energy of ambition, the inflexibility of pride, the jealous irritability of self-love, and the most insignificant requisitions of vanity; if this man should dare to pretend, that in all the chairs and in all the

books of surgery in Europe, there was but one name pronounced, and that this name was his own; if he should dare to wish, that, struck with impotence, his rival practitioners should be able to invent nothing, to perfect nothing, in fine, to do nothing, but by his order and in virtue of his approbation, and that French surgery was only the surgery of his hospital; if he should pretend to reign alone, like an absolute oriental monarch, and to have at his mercy, the voice, the pen and the practice of all the men of his art; if he should seem to desire that all the labors of his predecessors and his contemporaries were covered with oblivion, in order that it might be said that surgery had commenced and finished with him; if, dissatisfied with all, he disdained the most flattering praises as insufficient, and felt himself wounded by the most trifling criticisms, for this only reason, that they doubted his high capacity; if, finally, instead of encouraging youthful talent, he appeared to see with alarm, in each of his associates, a successful rival, ready to dispute with him the sceptre of surgery, and to replace him in his elevated post by some stroke of fortune analagous to that by which he himself had attained it: — such a man might indeed find slaves and flatterers, as any one can, whoever he may be; but generous hearts would estrange themselves from him and refuse to him their homage.

Let us return to the clinic of the Hotel Dieu.

This clinic, so brilliant on many accounts, so profitable to students from its abundant sources of instruction, is a school which ought not to be implicitly trusted; for truth is there not always respected. There, as elsewhere, mistakes are committed, but they are not spoken of, or, if they are acknowledged, it is only when

some bold and successful stroke may retrieve and redeem them; there, men have not the awkwardness to praise themselves openly, but they invoke the testimony of their auditors, of their students, and they put under contribution all the subtilty of diplomatic language and of their own genius, to express things without saying them, and to make them understood without speaking. Who has ever heard, within that enclosure, a living professor cited, whether for good or for evil. Nothing is aspersed, nothing is attacked, but everything is stifled under a leaden silence. Is there an instance of well verified success? All the trumpets of the hospital and of the journals ring with it. The fact is exposed and proclaimed to the public. Unsuccessful cases are hardly related or altogether unknown. Does a patient who has been operated on recover? He is carried in triumph to the amphitheatre, and observation expatiates on the long list of cures. Does he die? There is no more said of it, and the dead body is swallowed up with the truth in the humid vaults of the Hotel Dieu. Is it the purpose to justify a diagnosis by autopsy? If it is confirmed by the anatomical inspection, the pathological piece will be exhibited to the people; if there has been error, it will be inadvertently kept back, or well disfigured by the clumsiness of the dissector. Why so many precautions and manœuvres? why so many pitiful combinations? Why?—To avoid this terrible avowal; *I have been deceived.*

These pretensions to infallibility, sustained with so much perseverance and by so many means, direct and indirect, disclose still better this spirit of domination of which I have already spoken, and which cannot but be unfavorable to the interests of science. The Hotel

Dieu is not a school; it is a government. There are a few subordinate ministers and a single chief, whose will is the law. The amphitheatre is not a simple gymnasium, destined to familiar conferences; it is a divan in which men, more or less abased, listen in silence to the words which the master deigns to utter. This subjection of the minds and wills of many to the mind and will of one, is painful to witness, but it exists. There are, in some of the halls of this hospital, habits of genuflexion, of silence and of mystery, which call to mind the Seraglio. One speaks to the chief only when he interrogates, and the body of him who replies, bends itself by degrees as under a superior force, and from the influence of a redoubtable look. A direct question made to the master would be considered a temerity, of which there are few examples. All shrink before him. Men even, whom talents and honorable labors have made his colleagues in the instruction and the service of the hospital, diminished, abject, or rather annihilated by his ascendancy are not able, in spite of themselves, to maintain that footing of equality which such men ought to preserve among themselves. Almost confounded with the multitude of students who throng the wards, they are rarely admitted to the counsel of their chief, and in case they are, their part is so subordinate that it is pitiful. Equally confused before him, whether he rebukes or caresses, they lose three quarters of their faculties.

I must desist from pursuing this subject, which might lead me too far. Some may, perhaps, consider this criticism unbecoming, because it concerns itself with personalities. I have reflected on this matter, but moved with that indignation provoked by the spectacle

of despotism, I could not constrain myself from elevating my voice against such domination. Those who do not know the first surgeon of the king will charge me with imprudence and exaggeration; those who do know him will find a sufficient degree of moderation and reserve. However this may be, it is not unfitting to find here expressed those sentiments that every body feels, but which from various motives no one has dared to speak out. I know the adage, that it is not proper to tell every truth, but I admit it only with restrictions. I am neither the friend, nor the enemy, nor the pupil, nor the obsequious advocate, nor the associate of the surgeon of the Hotel Dieu. I have observed him in his character of a public man, and I have stated with some freedom the impression which this scrutiny has left. Some hypercritical fault-finders may see cause of censure in my language, but I have no fear that my intentions will be suspected.

M. Dupuytren has written only two or three small treatises, of which the following are the titles. 'Propositions on some points of anatomy, of physiology and pathological anatomy,' (1803); 'Memoir, concerning the effects produced on respiration by the ligature of the pneumo-gastric nerves;' 'Memoir on fractures of the fibula.' This last work only is written with prolixity and dulness. The first volume of the 'Memoirs of the Royal Academy of Medicine,' will contain, it is said, a Memoir of M. Dupuytren on Artificial Anus, announced and expected for a long time.*

* This paper was published in 1828. [*Trans.*]

M. BROUSSAIS.

M. Broussais is unquestionably the most remarkable medical writer of the present age. Splendid works, celebrated lectures, and a great number of proselytes, have in a few years spread far and wide his name and his opinions. He has wrought a medical revolution in France, favorable in many respects, unfavorable in others, but in every way worthy of attention. This physician, it appears to me, has been hitherto wrongly judged, not through ignorance, but through the spirit of party. Partizans or adversaries—his critics have always mingled their prejudices or prepossessions with their judgments. The result has been that on one

Note.—Broussais (Francis-Joseph-Victor) was born at Saint-Malo, on the 17th December, 1772. He pursued his classical studies at the college of Dinan. After having served, during six years, as surgeon in the navy, he visited Paris to pursue his studies, received the degree of Doctor of Medicine, and practised in the capital till 1805, when he resumed his service in the army, which he accompanied to Holland, Germany, Italy and Spain. He was principal physician of one part of the army, when at the peace of 1814, he was appointed physician and professor at the military hospital of *Val-de-Grâce*. He is a member of the Royal Academy of Medicine.

part, this innovator is represented as a transcendent genius, comparable to no others for greatness and energy of character ; as the definitive founder of medical science, theoretical and practical. These well persuaded partizans honestly think and say, that future physicians will have, after this system, to act the part only of commentators ;—they will henceforth be relieved of the labor of studying, of observing and of thinking for themselves. M. Broussais, who, alone, has annulled the intellectual acquisitions of twenty-five centuries, has also, alone, accomplished the task and the labor of all futurity. There are, on the other hand, many physicians who, too old to return now to their studies, and witnessing with no pleasure all these innovations, say that the professor of Val-de-Grâce is only a sectary in whom passion holds the place of genius, and hardihood of force. According to the latter, he has acquired partizans only in stirring up the passions of every species of mediocrity, and in abasing science to the same level. His brutal attacks on men, whether dead or living,—French or foreigners, surrounded with the esteem and admiration of all, have found approval only among the personal enemies of the contemporaries whom he criticises, and this too in a generation greedy of novelty, and imposed upon by his rough manners and bold speech. Habit and fashion have done the rest. Between these extreme opinions there are certainly others more moderate, which will ere long manifest themselves ; but in the first effervescence of parties, it is always the most excitable and ardent minds that show themselves and push things to extremity. There exists, moreover, especially in the provinces, a medical public, almost indif-

ferent to these quarrels, thinking little, never writing, practising by routine, and caring nothing for scientific debates which they can hardly understand. There is there, a compact, immovable mass into which new opinions are not easily infused. This class of physicians has taken but little part in the actual reform. Although the contest between the old and new opinions is warm and animated, we may still engage in it with pacific intentions, and succeed in making ourselves heard.

M. Broussais likes much that the world should be occupied with himself, but he is difficult to satisfy. Every criticism on his opinions is, in his eyes, an insult to good sense, and almost a personal offence ;— every eulogy a demonstration that he receives only with frigid politeness, as a creditor receives the tardy payment of a debt. What I think, however, of this celebrated physician, I shall say, although at the risk of not pleasing him in everything. I shall show as well as I am able, the first steps of his reform, the consequences that it has produced, and the ultimate destiny which seems to me to await it.

Three works contain the principles of M. Broussais, on physiology, pathology and therapeutics. 1. *The History of chronic inflammations :* 2. *The Examination of systems of Nosology, preceded by propositions containing the substance of physiological medicine :* 3. *A treatise on physiology applied to pathology.* Published at somewhat distant intervals, they mark very well the different phases of this professor's scientific career. The History of Chronic Inflammations is a work of pure observation, abounding in just and discriminating views of pathological anatomy, mingled

with fragments of an incomplete and half formed theory. At this period, M. Broussais attached to the armies and the hospitals, observed in silence, with no other object in view than to see and discover with his own eyes. Endowed with a strong and comprehensive mind, he began to discover many errors on points of doctrine generally admitted, and succeeded in replacing them with more than one truth. He pointed out in this work, the vicious modes of treatment adopted in a great number of cases ; he showed the physiological importance of the digestive canal, the frequency of its lesions, up to that time almost unacknowledged, and the influence of its diseases on other affections. He insisted on the necessity of well ascertaining the state of the digestive organs before the administration of medicine ; he investigated inflammatory action in all the tissues of the economy, detecting its origin, watching its progress, and following it up to its ultimate result—the disorganization of the affected part. A clear and close method accompanies throughout these researches ; he reports numerous cases written with clearness and precision, and draws from them sound and legitimate conclusions. The originality of his ideas stands out in still bolder relief on account of his style, which is incorrect, rude and extravagant, but lively, rich and energetic. This book will remain a model of knowledge and originality in medicine.

This work contained the germ of that system since promulgated with so much conviction and party zeal, but the theoretical principles did not have the influence on medical science which the author expected. Struggling under the immense authority of Pinel, un-

decided also in regard to the definitive systemization of his ideas, M. Broussais, as the simple observer and historian of disease, had hardly sketched even the first vague outline of his doctrine. Many years even, after this publication, he had established no school. He had not yet been able to impose on his readers that community of opinions which can only be established where a vast theory, boldly and distinctly laid down, serves as a rallying point, by showing the causes and relations of facts gathered from observation. M. Broussais felt this, and influenced by a disposition to systematize, towards which all original and vigorous minds are more or less inclined, irritated at the obstacles which his innovations had encountered, more confident also of his own power and better master of his ideas, he published successively his first and second *Examination*. I shall speak only of the last.

The *Examination* is composed of two parts, entirely distinct in character and object. The first is a collection of aphorisms on physiology, pathology, and therapeutics—a complete code of new medical doctrine, given without commentary or discussion in a bold magisterial tone, and in concise and laconic language. He speaks like a legislator proclaiming and promulgating the laws which are to govern a nation. This part of the *Examination* is exclusively *dogmatical*. A system of such vastness and novelty, thrust upon science in a manner so abrupt and unexpected, would neither have been understood nor noticed, had not the author at the same time destroyed the reigning opinions and cried down the labors of his predecessors and cotemporaries. The *Examination* of 1816, was the prelude to this destruction; the second part of the Examina-

tion in 1821, came to accomplish it. This second part is exclusively *polemical*. The enterprise was daring, and to project as well as to execute it, there was necessary, in the highest degree, a union of no common qualities,—audacity of spirit and strength of character —perseverance, and solid, scientific resources. M. Broussais possessed them all and used them successfully. The book created a great sensation, and, if we consider the circumstances under which it appeared, its success may be deemed astonishing.

Pinel possessed an influence in France, already sanctioned by time. Five or six editions of his *Nosographie* attested the accumulating weight and solidity of his authority. Medicine was taught in the spirit of his doctrine, and this doctrine, still young—the product of the nineteenth century,—cotemporary with the *Anatomie Generale* of Bichat, was in the zenith of its ascendant. The *Examination* did not appear then at the time most favorable for its purposes. M. Broussais must seek within himself for those elements of success which circumstances did not afford him. It was important, above all things, that his attack should be made roughly, resolutely, and with unerring directness. Timidity would only have injured, concessions would have paralyzed his cause. There were no half measures to be taken. M. Broussais had calculated the chances, or at least he acted as though he had calculated them. Unlike some clumsy writers who have since attempted to imitate him, he was cautious how he borrowed from or made concessions to Pinel, whom he supplanted;—he sought no countenance nor support in ancient and foreign doctrines. He presented himself from the first as alone with his opinions,

declaring of no avail the past and the present. To indicate plainly the extent of his mission, he went back to all the epochs in the history of medicine. He questioned the correctness of Hippocrates, venerated and guarded so long,—he attacked Galen and Boerrhaave, always illustrious in fame, but long since nullities in science;—of Cullen and Sauvages more modern, little remained for him to destroy;—he grappled vigorously with Brown, whose influence was still felt in therapeutics, and whose profound and comprehensive doctrine had governed so many others subsequently, and among them that even of M. Broussais. Arrived at the end of the last century, he combatted Barthez and the school of Montpellier, and finally, placing himself in the midst of his cotemporaries, he put forth all his efforts to overthrow the *Pinelism* of France and the *Contro-Stimulism* of Italy.

The Hippocratic doctrine, the humoral pathology, the Brunonian doctrine and that of the *Nosographie philosophique* of Pinel, are the principal subjects treated in the *Examination*. The Hippocratic doctrine which has been cited in all ages, and always with admiration, is difficult to define, or rather it is, like many others, a consecrated name, but which has not and cannot have any precise signification. Hippocratic medicine has also been called the medicine of observation, but all doctrines have claimed for themselves the same foundation. Hippocrates, like all other physicians, observed, and true it is that no one ever observed more faithfully, and then he theorized on his observations. It has been erroneously pretended, that he had no system, but his physiological and pathological principles governed his practice. This doctrine, it is true,

did not consist in those physiological phantasies, which men of the present day, called Hippocratic physicians, pretend to be governed by. As to his practice, it was no other than the *expectant* method, wise, judicious and proper, when there were no good reasons for more energetic procedures. For my own part, I conceive that this system has, in all times, excited the admiration of good practitioners, because other modes of treatment, resulting from their cotemporary systems of doctrine, were all more or less murderous.

M. Broussais has, in effect, clearly shown that this Hippocratic doctrine, of which it is pretended that a school even exists in the present age, is only a collection of traditional opinions, inconsistent in themselves, with no common bond of connexion, and altogether in arrear of the actual condition of science. He has, however, rendered justice to the exalted genius of Hippocrates, not imitating in this respect the cynical and unjust language of his cotemporary, Rasori.

The humoral pathology had little left for him to destroy. Brown had long since given it its due; the vital *solidism* of Bordeu had also powerfully shaken it, and the modern labors of the French school had debased it, even to ridicule. M. Broussais has been charged with resuscitating these ancient errors, only to give himself the airs of victory, by again demolishing them. This reproach is not altogether without foundation, but it must be justly admitted, that the language of the humoral pathology had become, by the usage of many centuries, so intimately interwoven with all branches of medical science, that it still appeared in many modern writings.

There is another thing to be said in regard to the humoral pathology. In the *Examination*, M. Broussais is an exclusive *solidist;* he denies that the fluids have any direct, spontaneous action in the organization — any primitive idiopathic alteration — in a word, he most expressly makes them subordinate to the action of the solids. I doubt whether in nature, facts are altogether in accordance with this theory. Certainly, the passing away of the old humoral doctrine is not to be regretted, but it seems to me, that late experiments on the part which the fluids play in the organization, tend to withdraw them from that complete passiveness to which modern *solidism* has condemned them. This result might have been foreseen, for if they are *living*, which is not denied, why may they not be *diseased*? No malady affects, exclusively, either the fluids or the solids. We find these two elements of our organs simultaneously disordered in all lesions appreciable by the senses; where is the point of origin? This is the problem, and although at present solved in favor of the solids, it may and ought to be a subject of further investigation.

The Brunonian doctrine was more difficult to combat. Considered as a theory, it is profound and philosophical. Having reigned throughout Europe, it still exercises a strong influence on therapeutics. M. Broussais devoted much time and labor to its refutation; for his own doctrine, bearing certain resemblances to that of the Scotch physician, it was all important for him to define wherein, and how far they materially differed from each other. As I shall hereafter compare the French doctrine with the Brunonian, and with the *Contre-Stimulism* of Italy, I have here but little to say

on this subject. It is sufficient to indicate, in a few words, the principal propositions which M. Broussais lays down and sustains in contradiction to Brown. 1. Excitability is not uniform in all the organs; neither is it increased or diminished in the same degree throughout the system at the same time. 2. Diseases are never primarily general. 3. Diseases of debility (asthenic) are not the most numerous. 4. Stimulant remedies are very rarely indicated. 5. The success of the Brunonian practice is illusive, or false, or erroneously explained.

This last proposition is worthy of notice. The incertitude, in regard to the results of any kind of practice, is one of the misfortunes of medical science. M. Broussais denies, with hardihood, the success of the Brownists, whom he frequently calls incendiaries. Still there are numerous works, filled with observations gathered by skillful and enlightened practitioners, men of wisdom, candor, and veracity, which attest the good effects of stimulant remedies in a great number of cases, where M. Broussais declares them murderous. The disciples of Brown invoke the success of their practice, as proof of the soundness of their theory; but M. Broussais meets them with opposing observations, and the results of his own method. How shall we decide such questions? All physicians know well that they are arduous; they know how many difficulties surround the statistics of medical facts; how much these facts are perverted by being submitted to the interpretation of different theories, — thus losing, at one period, the value which they may have possessed at another. M. Broussais knows this himself. He denies the legitimacy of conclusions deduced from

facts, poorly observed, or seen through the medium of a false theory. He is right: but the facts which he himself invokes, who shall vouch for them?

It is this disastrous versatility of pathological phenomena, and of the action of remedies, which, preventing the establishment of any rule applicable to all, or even to any considerable number of cases, throws so many physicians into a disheartening scepticism. Some men, especially at the present day, have taken refuge in an eclectic system; (*eclectisme*) but they cannot maintain themselves in this. In effect, *eclectism* is sheer nonsense in medicine. This word signifies to choose among the most reasonable systems, or to adopt the most rational portions of each system, and the best methods of treatment. Behold the practitioner well advanced, to be sure! How shall he choose, and how estimate the value of his choice? By reasoning. Yes, let him reason on this immense number of facts of every species; let him read twenty thousand volumes; let him discuss the whole, according to the laws of medical and historical criticism; and then, let him indicate *a priori*, what things it is necessary to believe and to do, and he will find himself the inventor of the newest, and certainly the most extravagant system in the world. But he will be governed by experience! The experience of whom? He has only his own, for that of all past time and of the present must be controlled, for herein consists the very essence of *eclectism*. The practitioner is thus reduced to his own personal experience, and to the necessity of recommencing the labor of centuries, which have taught him nothing. This is not indeed true of all branches of medicine. I know that the experience of centuries has left, floating

above the ruins of systems, some rules of practice generally admitted in all places, and in all times; but they are few in number, and reduce themselves rather to the principles of hygiene than of cure; and they may be found in Hippocrates, who discovered them, because he was one of the best observers, and the first. But this does not constitute a science. M. Broussais is right, then, in his opposition to the eclectics; he is right in his opposition to systematizers, when he doubts them, as to their experience; but he is mistaken when he imagines that he has closed these eternal debates. The facts which he invokes will be and already are contested; his theory is discovered to be defective in many respects; everything in his system will soon grow old, except indeed that spirit of doubt and inquiry which he has implanted in all heads, and of which he himself will first feel the reaction.

Leaving this digression, already too long, because not altogether apropos, I return to the *Examination.*

Pinel was formerly the great authority, even for M. Broussais, as he still continues to be, for many physicians. In the *History of Inflammations*, he is quoted as the father of clinical medicine in France; as a genius worthily enjoying the gratitude of science and of humanity. M. Broussais was his pupil; he dedicated to him his thesis. His opinions on many important points, were for a long time in accordance with those of his master, proof of which may be found in many passages of his writings anterior to the appearance of his *Examination* of 1816. At this epoch, M. Broussais, seeing better, or at least in another manner, gave a different idea of the venerable chief of French medicine. Pinel was now only a man of limited views and

narrow intellect; an old and tiresome dotard; in a word, an *ontologist*.

This term is of modern invention in medicine. M. Broussais designates by it, those physicians who have reasoned upon diseases as essences, existing independently of the affected organs; regarding the evils which afflict the human species, as birds of prey, pouncing suddenly on the animal economy, and attacking it, sometimes on one point, sometimes on another. They have thus made of phthisis, fevers, &c, abstract entities, endowed with various qualities, on which they have reasoned *a priori*, at random; without considering the physical alterations which correspond to them, and which alone constitute the disease. There is some foundation, in truth, for this reproach of M. Broussais. Undoubtedly, the language of medicine has hitherto been, and still continues to be, imperfect and erroneous; but he goes too far in asserting, that all physicians, past and present, except himself, have been merely *ontologists*. He is wrong in interpreting thus, certain figurative expressions, which abound in all authors, and of which he himself furnishes examples in every page of his own works. If we should collect all that he has said on *irritation*, and submit it to the same test which he has employed in regard to his adversaries, we might fully convict him of *ontology*. A thousand examples might be cited. This pretended discovery of *ontology* does not appear to me, then, either so wonderful, or so real, as has been asserted, and *ontologists* are not so numerous as by the new school they are said to be.

Be this as it may, Pinel, according to M. Broussais, was one of them in 1816. According to the opinion

of many men, intelligent and competent to decide, Pinel had done much for science and humanity. It was he, who, clearing up the chaos of all the old traditions which reigned promiscuously in France, established and reduced to order, a body of doctrine very superior to any then known, and gave a character and a name to French medicine. His labors, though already old, for everything in medicine speedily becomes so, possess yet a great value at the present day, after having imparted the most auspicious impulse to their whole cotemporary medical generation. M. Broussais wishes that they should no longer be admired, nor consulted, nor spoken of. He finds, in the high reputation of Pinel, only another proof of the servility of the human mind, always weighed down by the despotism of habit and authority. This servility exasperates him; he resolves to put the geat classification in its proper place, and devotes to this purpose 250 pages of his second *Examination*. The conclusions of this *critique* are, as everybody knows, that the classification of Pinel is fundamentally bad, since the diseases which are there registered are not veritable diseases, but groups of symptoms, arbitrarily formed; and that his therapeutics are misconceived, and consequently insufficient, or injurious.

I cannot, neither do I wish, here to justify the illustrious dead. I incline, even, to think with M. Broussais, that the *Nosographie* is throughout neither clear nor philosophical. In general, I willingly suffer myself to be carried along by his impetuosity and excellent sense, and there is not one among the physicians dead or living, subject to his censure, that I do not

think convicted of error; without wishing however to deny the superior genius of some, for error is very compatible with genius. But I think, with many others, that his criticism, just in its matter, is reprehensible in its form. M. Broussais is almost continually angry in his book, and M. Begin has very properly demanded of him the reason. We are astonished, with this physician, that M. Broussais should reproach for their anticipated hatred or contempt of his doctrine, men who did not and could not then understand it, for it did not exist ; and that he should treat, almost as personal enemies, many others whose only fault was that of not having sufficiently extolled him, or of being placed, without waiting for his permission, in the first ranks of authority and fame. Pinel was one of these last, and neither the public admiration, nor gratitude, nor the respect due to age and to talent, nor the law of literary propriety, nothing was able to moderate the explosion of so stormy and jealous a susceptibility. The criticism of M. Broussais seems to be directed less against the doctrine, than against the man ; less against the scientific opinions, than against a name and a reputation, though the illustrious old man had, among the first, rendered justice to the *History of Inflammations*. His pupil had, he said, filled up a void in science, but he did not approve everything, and had the misfortune, ripe with age and experience as he was, to speak with too little enthusiasm, and not to lead in the van of a reform, tending to depreciate his own labors. M. Broussais has permitted, in his rage, many hard words and bitter reproaches to escape him. The cotemporaries of Pinel felt themselves injured, and they justly insisted that the love of humanity,

however ardent, did not release the author of the *Examination* from a moderation that would have been only justice.

The adversaries of M. Broussais, on their side, abused the advantages of recrimination which his situation afforded them. They trumpeted, loud and long, the impropriety of his attacks on his master. They dwelt so exclusively on his ingratitude, the extent and enormity of his faults, that they believed themselves released from the necessity of justifying Pinel, who needed however such assistance. He himself, disconcerted by so much impetuosity, and relying too confidently on his own works, uttered hardly a word in his own vindication. The change was sudden. All those who have read the *Examination* have not adopted the opinions of M. Broussais but they have all seen the necessity of renouncing Pinel.

Viewed as a whole, the *Examination* is a most remarkable work. Minds capable of projecting and of executing the complete re-edification of a science are rare. True or false, the system which they build up on the ruins of others, is not the less a work of genius. It is truly a vast conception, to embrace in a single view so many various systems ; to examine them, one after another, and to judge of their soundness in a philosophical manner. M. Broussais is, I believe, the first physician who has looked through the whole history of medical science with a glance so hostile and scrutinizing. It is herein, especially, that he has effected an important revolution. The melancholy disorder of science, the vagueness and confusion of the reigning doctrines, had for a long time attracted the attention of sound and reasoning minds. A mixture

of Brownism, Hippocratism, and the humoral pathology, the French doctrine was but miserably constituted under Pinel. All physicians felt the necessity of a reform, but no one attempted to accomplish for medicine, what the nineteenth century had already done for chemical and natural science. M. Broussais undertook this task, and it must be admitted that he has in part accomplished it. It cannot be denied that he has done for medicine what Descartes did for all the other sciences. He has shown us the medical edifice elevated by so many centuries, such as it was in reality—only a vast scaffolding with no solid or enduring support. With a great power of logical examination, he has exhibited the absurdity of its principal dogmas, time-hallowed though they were ; the radical defects of medical language, and the innumerable errors which these defects had produced and perpetuated. Singular as it may seem, all systems have claimed facts for their basis, and all are false. Why? In the first place, because consequences have been deduced from these facts, inconsiderately, and in utter contempt of all sound methods of philosophising; and then, because the facts themselves are false, when interpreted by a false theory. M. Broussais, with that characteristic hardihood of spirit which distinguishes him, has dared to attack, not only the systems, but the observations which sustain them. Experience, always and everywhere appealed to, appears to him to have been the most frequently fallacious, as it had already appeared to Hippocrates.

The *Examination* is disfigured by many defects. M. Broussais is not erudite. His book seems to be made up of the remembrance of hasty reading and in-

complete study; he appears rarely to have consulted the original sources of information. Rectitude of intention cannot supply the deficiency of positive knowledge, and the most comprehensive judgment cannot, of itself, make good the defect of patient investigation. Thus, the *Examination*, hastily composed of insufficient materials, is far from presenting a complete and exact table of medicine; all is mixed up, confused, and incoherent; the learned have detected grave errors of fact, and all critics more than one contradiction. Notwithstanding these blemishes, medical literature can offer no example of so powerful and remorseless a polemic, of such inexhaustible abundance of practical facts, and of such ability in their discussion and application.

The *Examination* is also worthy of remark in a literary point of view. Few books are, classically speaking, so badly written; but there are few which carry the reader along with so powerful and absorbing an interest. The style, like that of the *History of Inflammations*, is incorrect, whimsical, and singularly harsh; but rich, nervous and lucid. Seeking for the man in his style, we should find a spirit, acute, scrutinizing and audacious; but obstinate, despotic and passionate. Thus endowed, M. Broussais must brush rudely many a self-love, but he was gifted for success, for no sudden change is effected, either in the moral or physical world, but by power; and power links itself especially with passion. Minds, yet vacillating, will find in the *Examination*, strong motives for conviction. All those who have no secret reasons for opposing themselves to this innovation, will find, after all, that though too ambitious and too violent, the *critique* of M. Broussais is not the less sound. They will think that the interest

of science ought to prevail over every other; they will excuse his fits of passion, as the unfortunate but necessary results of his organization; justify his unbounded pretensions, by his good right to them, and say with himself, 'so much the worse for those who are wrong, *væ victis.*' A multitude of theses and writings of every species will soon universally diffuse the new principles, and M. Broussais, although difficult to content, as I have already observed, ought to console himself that he has not labored in vain. This revolution has not, however, been effected without opposition; from its origin, on the contrary, it stirred up a controversy which still continues. The medical journals were divided in the debate, and became the theatre of a warm and animated contest. M. Broussais took part in the quarrel, in a journal (Les Annales de la Médicine Physiologique,) which he established soon after; he there showed himself and still shows himself, partial even to injustice, and so impatient of all contradiction that many of his partizans have become his adversaries. I shall add nothing more here, on this scientific quarrel, having occasion to return to it in discussing the modifications and criticisms, of which the new doctrine has been the subject.

Compared to the *History of Inflammations*, and to the *Examination*, the *Treatise on physiology applied to pathology* is a common-place book. M. Broussais appears, in this work, neither a great observer, as in the first, nor a skillful controvertist, as in the second. This treatise was written under other inspirations and with another object. His theory of pathology was pretty well understood, as well as his principles of practice; but it remained for him to justify this title of

Physiological Medicine, bestowed by himself on his doctrine, to the exclusion of all others: it was necessary for him to show in what manner all that he had said of diseases and remedies, was based on a vast and positive physiology; but in this project he found himself surrounded with difficulties. His physiology, thus formed too late, is not established on facts, and offers no semblance of reality; he was forced to fashion it in a manner to comport with all the assertions, whether incorrect or contradictory, which had escaped him in his various writings, published at different periods and when his ideas were not yet definitely settled.

He has exposed, somewhat extensively, in this work, his opinions on the laws which govern the animal organization; the principal of which we shall see, in resuming the consideration of his doctrine. I will here simply observe, that this application of physiology to pathology is a mere blending together of the two sciences, since he affirms that the mechanism of disease is essentially of the same nature as the mechanism of health. For the rest, there exists throughout this book an inconceivable abuse of language, and an obscurity, occasioned, I believe, by the author's superficial knowledge of the subjects of which he treats. How many errors, and I may add, how much ignorance, in all that he says of consciousness, of the passions, of the will, and of all the phenomena of relation! Bichat, notwithstanding some inaccuracies, was a sound guide, and M. Broussais ought then to have followed him in a subject to which his studies, and perhaps the character of his mind, rendered him a stranger. I venture to assert, and without fear of contradiction, that no metaphysician nor physiologist has ever written on these

subjects in so ridiculous and anti-philosophical a manner. This work met with little success, and herein justice was done it. It is far from having made good its title, and has done no service to the author's medical doctrine, but it proves that the intellectual resources of M. Broussais are not equal to one part of his enterprise.

It remains for me to expose the fundamental ideas of his medical system, and I shall endeavor to give, in a few words, a sketch of this doctrine, as it exists in the works of M. Broussais, already cited, and in some others of his writings less important.

The *physiological doctrine* may be considered under the three relations of physiology, pathology and therapeutics; subjects, which, though distinct in their object, depend mutually on each other for consistency and support. In all medical systems, they follow each other in this order; the theory of health determines the theory of disease, and this last, the method of treatment. M. Broussais has followed the same logical march in order to build up a systematic whole.

Of all that M. Broussais has written on physiology, I shall only cite some general principles, immediately applicable to his pathology and necessary for its elucidation. All his physiological works have indeed been written with direct reference to this end. He has, it is true, given a novel and peculiar explanation of some of the functions, or organic phenomena : thus, he has given a new theory of sleep; of the part which the stomach plays in the passions and the operations of the intellect; of the action of the sympathetic nerve, &c. His ideas on all these subjects are singular and worthy of attention, but as they have only an indirect

connexion with his medical doctrine, they may be passed over in silence without detriment to the understanding of this. But the same is not true of the following fundamental propositions.

1. Life, examined in the tissues which are endowed with it, invariably reveals itself by one phenomenon, generator of all the other phenomena, denominated *irritability*. Haller accorded this property only to the muscles, but it is common to all the tissues. *Sensibility* is not a primary vital property, being the result, merely, of irritability. Our organs feel, only because they are irritable, and sensation is only the perception of the exercise of irritability. Irritability is that property, possessed by all the living tissues, of moving themselves by the contact of any stimulus whatever. It is revealed to us, only by motion, for without this movement we should have no evidence of its existence. This motion of the living fibre, when appreciable by the senses, is a *contraction*, and analogy obliges us to admit that it is also a contraction in those parts too minute to be visible. Irritability, then, is nothing more nor less than *contractility*. A *living* tissue, an *irritable* tissue, a *contractile* tissue are three synonymous terms. Life exists in the tissues: it reveals itself only by motions and these motions are contractions. Contractility alone, then, is sufficient to explain all the vital actions.

2. Life is maintained only by the constant application of stimuli, producing excitement. Whenever our organs are deprived of their exterior or interior excitants they cease to live. This state of excitation commences with the conception of the fœtus, and terminates only with death. Each animal tissue, in order to

the performance of its functions, must receive the impression of its peculiar and appropriate stimulus. Thus, the blood is the most generally diffused stimulus of the economy; air excites the lungs, light excites the eye, &c. Various appropriate fluids penetrate the minutest portions of the organs, producing continual stimulations. This vast assemblage of partial excitants occasions a universal reaction throughout the whole economy, and this reaction is life. This reaction, examined in its phenomena, and its mode of operation, is only contractility set in play; that is to say, it consists in an innumerable multitude of *contractions* disseminated and every instant repeated throughout the whole extent of the living tissues.

3. *Life* or *contractility* is not uniformly distributed throughout the system. Certain tissues and certain organs are endowed with it in a high degree, others, in a less degree. It is allotted to every part of the animal, but in different quantities. This inequality of its division occasions a crowd of differences in the nature and energy of the phenomena of which each tissue is the theatre. The action of stimulants is in relation to these differences of vitality. Tissues the most vital are also the easiest to stimulate, and the stimulation received by them is then transmitted to all the others. In every case, whether energetic or obscure, contractility is always identical in its nature; for *contraction* is uniformly the result of its exercise; now a contraction is always a contraction, and these contractions differ among themselves only by their extent.

4. The physical phenomena which follow the stimulation of a vital tissue, are, the contraction of its

fibres and the afflux of fluids towards the stimulated point. Strong or feeble, acting on a highly irritable organ or not, stimulation produces the same organic modification. Thus, for example, a foreign body touches the skin, at the same instant the fibres contract and there is an increase of fluids. This assemblage of phenomena constitutes a vital erection. This vital erection is repeated in the nerves and reproduces itself in the cerebral substance, whence there results either an agreeable or a painful sensation. The *desire* of bringing nearer or of removing the cause of this sensation manifests itself: a new vital erection takes place in the brain and gives rise to the *will;* this last transmits the vital erection to the voluntary nerves, and these to the muscles which are then put in motion to obtain the desired result. Here are several vital and moral acts: the passive impression of contact, sensation, desire, will, and muscular movement, and all these phenomena are the result of a series of vital erections, identical in their nature. In effect they all reduce themselves to contraction of the fibre and accumulation of the fluids. The molecular modification by which a pimple germinates on my skin gives birth to an idea in my head; the organic state of the brain during a profound meditation is the same as that of the stomach during active digestion.

5. These organic phenomena of the solids, in consequence of stimulation, demonstrate the presence of life. Wherever they show themselves there is life, and they are everywhere of the same nature. The sole difference among them is in their greater or less activity and extent; we can conceive no other.

6. Stimulation, exercised on one point of the organization, soon repeats itself on other points, through the intervention of the nerves. This constitutes the *sympathies.* Excitement is never uniform in the system; when it is in excess in one organ, it is in defect in another; it leaves one region only to overload another region, and accumulates itself on one tissue only in abandoning another. A communication of excitement, free, uninterrupted and suitably diffused throughout all the organs is necessary to the equilibrium of the functions, and this constitutes the state of health.

All these principles of physiology are, as it will be seen, directly applicable to pathology.

1. Disease results from the irregularity of the functions, and this irregularity is occasioned by some change, injuring the vitality of one or more organs. Vitality may be augmented or diminished, but cannot be modified in any other manner; its *quantity* may vary, but not its *quality.* In a state of health, a just proportion is established between the excitants and the excited tissues, and the innumerable reactions of which life is composed, are executed in an admirably well-balanced order. But sometimes, and from various causes, this order and equilibrium are broken. At one time, the excitants are too powerful; at another, too feeble; and then follows disorder in one or many functions. At other times, the excitability is increased or diminished, and then the natural excitants become too powerful, or not enough so, whence again arises injury in the organs and functional derangements. In these cases, contractility still exists; it continually presents itself with the phenomena which follow its exercise; but, unduly augmented or enfeebled, it is no longer attended with the same results.

2. The pathological state of a part is then only an exaltation or diminution of the physiological state. Let us take, for example, the case already cited. Suppose the foreign body, applied to the skin, to be heated iron; the fibrous contraction which follows is very strong; there is an abundant afflux of fluids, and an ardent sensation of heat is experienced. The same phenomena takes place in the nerves and the brain. This organ, hardly colored, perhaps, in the former case, is now extensively engorged with blood; the resulting sensation is that of violent pain; the will, instead of acting in a regular manner, may be destroyed, and in its place paralysis or convulsions may occur. The apparent phenomena are the same in the two cases, in the skin, in the nerves, in the brain, and in the voluntary muscles. In the first case, they are preserved within the moderate limits necessary to the healthy exercise of the functions; in the second, they exceed these limits, and the functions are deranged. Arrived at this degree, *excitation* becomes *irritation*. Irritation becomes, in its turn, the generator of all the other morbid states, as healthy excitation is that of all the physiological operations. *Irritation*, carried to a very high degree, takes the name of *inflammation*. Normal excitation, irritation, super-irritation, and inflammation, are only different degrees of the same state. All pathological alterations are engendered by irritation, or by defect of excitement, (ab-irritation.)

3. In every case, irritation is always identical in its nature. Whatever may be its seat, its cause, or the number of sympathies which it awakens, it is uniformly characterised by an afflux of fluids. Irritation always commences in a single organic system, and is then

communicated to others. It is primarily local. Its nature does not change in its migrations from one part to another ; it consists invariably in an augmentation of the phenomena which constitute life. The increase of action in one or many organs is always attended with diminution in others.

4. Irritation may be continued or intermittent.

5. Irritation, having its seat in the sanguineous capillaries, and attended with pain, heat, swelling and redness, is called *inflammation.* If the sanguineous capillaries open at the arrival of the blood, and allow it to escape, the irritation is no longer called inflammation, but *hemorrhage.* Irritation, seated in the lymphatic vessels, draws to them only white fluids. There is then swelling, but neither redness, heat, nor pain, and this mode of irritation takes the name of *sub-inflammation.* Irritation of the nerves is called *nevrosis;* it is characterised only by pain, though this is sometimes absent.

6. There are no general diseases. Fevers are either simple or complicated *gastro-enterites;* that is, simultaneous inflammation of the mucous membrane of the stomach and small intestines.

7. There are no *specific* diseases. All such as have received this name arise either from *irritation* or *debility.* Deleterious miasms, poisons, and all other modifying causes, whatever they may be, act on the living tissue but in two manners ; they augment or diminish its vitality. The diseases which result from their action are then only irritations or ab-irritations.

8. Debility is most often the product of irritation, but it sometimes constitutes the sole malady. Consecutive debility is not a disease; it is dependent on an

irritation, is produced, continues and ceases with it. Primitive debility occupies but a small space in the field of pathology; it is clearly manifest only in scurvy, in many asphyxies, in the sequel of excessive hemorrhages, in old age and after long abstinence; but even in all these cases it is often attended with irritation in one or more organs.

From this pathological theory result the following therapeutic principles:

1. Since there are but two classes of diseases, the irritative and the ab-irritative, so there are only two therapeutical indications; to excite the debilitated part, and to enfeeble the super-excited. All remedies are, therefore, divided into two classes, *stimulants* and *debilitants*. Debilitants are either positive or negative. The positive are those, which, applied to the living tissue, enfeeble the vital phenomena by a direct sedative action. They are very few in number, if indeed they exist at all. The negative are those which depress vitality, by the detraction of the stimuli which excite and support it. They reduce themselves to bleeding, to the application of cold and to abstinence. Thus, in inflammation of the stomach, we cannot attack the phlegmasia by direct counter stimulants, for there are no such remedies; but we must forbid all aliment and resort to general or local blood-letting. These two means tend to the same end; to diminish the irritation of the gastric mucous membrane. Abstinence accomplishes this object by preventing the arrival of stimulants at the affected part, and the abstraction of blood by removing such as are already present.

2. To debilitate, positively or negatively, is the leading indication in almost all diseases. Another mode of fulfilling the antiphlogistic indication, besides the two above mentioned, is by *revulsion*. The method by *revulsion* consists in translating to a less important part, the irritation seated in the more vital organs. Thus a blister on the skin relieves a pulmonic affection, and a seton in the neck cures opthalmia. Revulsion is founded on the principle of physiology, that irritation is accumulated in one part only by abandoning another. In order that this translation should take place, it is necessary that the therapeutic irritation should exceed in degree the morbid irritation; if it is weaker, instead of removing, it augments the other. *Crises* are only revulsions, operated by nature; thus inflammations of the internal viscera are frequently cured by the breaking out of copious sweats or by hemorrhage. The theory of revulsions and of crises mutually explain each other in this manner.

3. Antiphlogistics alone cure all irritations, whatever may be their cause, their seat, or the alterations which they produce in the tissues; whether intermittent or continued, acute or chronic. The idea of a diathesis which is scrophulous, cancerous, &c, or of any specific virus, is a chimera. Irritation is always the same in its nature, and reduces itself, invariably, to an exaltation of the vital phenomena on the irritated point. All remedies then must act in diminishing the vital action, and in no other manner. The pretended *specific* virtue of certain stimulant remedies in irritations is an absurd supposition. Mercury in syphilis, quinine in intermittents, &c, do not always cure, and when they do, it is not by a specific action on these diseases, but by *revulsion*.

4. The stimulant method is indicated only in cases of primitive debility, and these are very rare. Stimulating agents are, it is true, frequently employed in the cure of irritations, but not being applied to the affected tissue, and having an indirect sedative effect on the diseased organs, they really act as debilitants, and their administration thus comes within the province of the antiphlogistic method.

5. It is important to attack diseases at their commencement. There is always danger in allowing their progress, but there is none in arresting them early.

6. Every disease, being primarily local, it is necessary to seek among the diseased organs, the part originally affected, and the lesion of which has occasioned that of all the others. Remedies should be directed to this organ, and its irritation being removed, the others will cease at the same time. If the point of origin of the morbid sympathies is doubtful, and if several organs appear to be simultaneously and seriously affected, it is necessary to attack them all with appropriate remedies.

Such are the fundamental principles of the *physiological* doctrine, or the doctrine of *irritation*, as it has sometimes been called. It is striking from its seductive simplicity. Reducing the whole practice of medicine to two indications, and offering leeches and abstinence as a kind of universal remedy, it has many charms for those young doctors who find it exceedingly convenient to learn their whole materia medica in fifteen minutes, and the science of diagnosis in a week.

It has not been thus indiscriminately adopted, except by some indolent and enthusiastic minds. It has insinuated itself into all the departments of medicine,

but with more or less important modifications. Its prodigious success is owing, less to the positive knowledge which it has brought into the science of medicine, than to the auspicious direction which it has given to pathology and therapeutics. It has strongly insisted on the necessity of associating diseases with the organs; of referring symptoms to their true causes; it has introduced into the language of science, a precision hitherto unknown; it has put practitioners on their guard against a too stimulating treatment, and made them suspect the mode of action and the pretended efficacy of many highly extolled and popular remedies; finally, the philosophical spirit now infused into the study of medicine in France is owing to the influence of the new doctrine.

That these are important services we cannot and we ought not to deny, but it has brought along with itself evil as well as good. I am far from believing that the leading propositions of the *physiological* theory are incontestable, or eternal, or immutable, as M. Broussais says they are; and it is unfortunate that the intellectual despotism of this innovator should have enslaved the minds of so many young men, henceforth incapable of thinking alone and of observing for themselves. France has thus been covered in a few years with some hundreds of blind sectaries, who, retaining of their master's doctrine only the exaggerations to which it may lead, and possessing neither his experience nor his medical sagacity, go on, applying with dangerous assurance a system so easily understood. Full of this perilous conviction, they see nothing but *irritation* and *gastrites*, and in all cases they have only to abstract blood and administer warm water. Indocile,

besides, to the counsels of experience, contemners of the ancients, and confident in their own infallibility, the greater part of them totally disregard the objections which may be opposed to their master, though these are neither few nor unimportant.

I have neither time nor space to go into an elaborate consideration of the objections, which have been made to the new doctrine. I shall confine myself to the enumeration of such as appear to me to have some force, though M. Broussais does not think so. I shall state them without commentary or development; for not having yet been refuted, they remain good till there is proof to the contrary.

M. Broussais pretends, that the various vital properties, imagined by physiologists, are chimeras; and that there exists but *one*, which is *contractility*. To this it is replied:

That neither direct observation nor legitimate induction, can establish the fact, that all the interior motions of the living tissues consist simply of *contractions;* that contractility, clearly evident in the muscular tissue, is not so in all the others, and that Haller, in confining it to this tissue, did not overstep the limits of sound observation, while they who have extended it to all the other tissues have surpassed these limits:

That this *contractility* is not sufficient to explain all the organic modifications of which our organs are the theatre ; that most frequently, even this supposition renders them inexplicable; as, for example, the accumulation of fluids on an irritated point; for irritation is a shortening of the fibres, and in this shortening, the molecules approach each other; the interstices are

thus filled up, and the fluids instead of being accumulated, ought thus to be expelled:

That M. Broussais himself makes contradictory applications of his theory, in explaining by it, at the same time, the production of a phenomenon and its cessation. Thus, in hemorrhage, the fluids that an exalted contractility had attracted, are repelled by the application of an astringent, which acts only by exalting contractility:

That, in contradiction with himself in this case, he is again in contradiction with facts, when he affirms, that the most contractile parts are the most sensible, since it is proved that the nervous substance, the seat and conductor of sensibility, does not contract at all.

In accordance with Brown, M. Broussais affirms, that life is maintained only by excitement. We agree with him. But is this excitement always and everywhere identical in its nature? Does it reduce itself in all cases to an augmentation of the phenomena of life? finally, does it present only differences in degree? To these assertions it is replied:

That, while admitting that excitement manifests itself only consecutively to motion, and by motion; and that these movements, *as* movements, can only be distinguished by their degree of force, it is not less true, that, whether by the nature of their direction, or especially by some specific modification of sensibility, excitement differs in each organ, not only in *quantity* but in *quality*. All the external excitants act in the same manner on the tissues, but in consequence of this impression, each tissue reacts in a manner altogether special and peculiar to itself. The mechanical action of the blood is the same throughout the system;

on the brain, the heart, the liver, the salivary glands, &c. Still the sequel to this identical impression is, that one of these organs produces ideas, another contracts, a third secretes bile, and a fourth saliva. These considerations, drawn from organic life, have a still stronger application to animal life. If the organic action, resulting from all these stimulants, is the same, why are there so many and so great differences in the functional results? and, on the other hand, why are certain excitants, exclusive of all others, necessary to the existence of certain functions? and why are these last important, if they excite in the tissues the same organic modifications as the first? Thus, for example, why is light alone productive of vision; vibrations of the air, of sound; odoriferous bodies, of smell? The odoriferous particles arrive at the same time at the eye, at the tympanum, and at the nasal mucous membrane, but this last only responds. The eye may be irritated from the presence of these same odoriferous particles, but instead of *vision* there will be *tears*.

Excitement differs then, according to the nature of the excitant and the organ excited. Does this difference consist only in the greater or less degree? The supposition is absurd. Would it not be curious to learn, says an ingenious critic,* that hearing is only a greater or less degree of contraction than sight, and that the senses of sight, hearing, taste and smell, are only an increase or diminution of the sense of touch!

Passing from these physiological remarks to pathology, it is said:

* M. Miguel.

That the theory of irritation does not satisfactorily explain the innumerable morbid modifications to which our organs are subject; that in maintaining its identity in all cases, M. Broussais gives a flat denial to facts which exhibit it, producing different results according to the organs in which it is seated:

That, in admitting different MODES of irritation, he contradicts himself; since irritation in his system is only an augmentation of the phenomena of life; that in not admitting these different modes, he cannot make his doctrine accord with the innumerable observations of cures obtained by remedies essentially irritant, and that, besides, he cannot explain the truly specific action of medicines.

In relation to the doctrine of fevers, the chief glory of his school, it is objected:

That pathological anatomy is not in accordance with his theory of gastro-enteritis; that after death, in consequence of violent fevers, the digestive tube is often found intact; more frequently to be sure it is found inflamed, ulcerated, &c. But all the internal organs are also found more or less profoundly affected, and it is impossible to decide what part each one of these affections has had in the production of the symptoms; finally, that very frequently the gastro-intestinal lesions are too inconsiderable for the terrible disorder observed during life to be attributed to them:

That clinical observation does not prove at all, that the first symptoms of fevers at their origin ought to be referred to gastric lesion rather than to the chest or to the nervous system. That, during the course of the disease, symptoms of gastritis, of cephalitis, of pneumonitis alternately succeed each other, intermixed,

confused, and always accompanied with general derangement in the functions of nutrition, secretion, &c, but that we have no proof of the abdominal lesion being the cause of all the others, and forming itself the sole malady.

That the incontestable and daily success of a tonic and even stimulant treatment in certain periods of fever, proves, in the first place, that these diseases are not always inflammatory, and that there sometimes really exists a state of general debility, co-existing with local irritations which do not contra-indicate a tonic treatment; and in the second place that the digestive mucous membrane is not always inflamed, since the irritating substances which are applied to it, instead of aggravating the symptoms, remove them.

That this theory is especially and altogether in fault in regard to intermittent fevers, almost always cured by quinquina, the action of which is explained by the new school only by inadmissible subtilties.

In therapeutics, the objections are not less strong, and it is perfectly reasonable to observe:

That we do not sufficiently understand the *modus operandi* of medicines to affirm that they all irritate. The Italians hold a contrary opinion in regard to a great number.

That in conformity with his doctrine of diseases, proscribing in a great majority of cases, the tonic treatment, he deprives himself of a resource which skillful practitioners have employed and still continue to employ with great success; a success that he may deny, it is true, but which, notwithstanding, does not the less exist; for a denial of a fact does not destroy it.

That it is altogether anti-philosophic in medicine to reject a remedy for the only reason that its mode of action cannot be *conceived* nor *explained;* and that his theory, tending to proscribe the employment of mercury in syphilis, quinquina in fevers, cubebs in gonorrhea, &c, is contradictory to the best established facts.

That the various explanations hazarded by himself and his partizans, of the manner in which these medicines cure, are insufficient, and that their specific operation, being more than probable, his theory of the identity of irritation becomes false.

That his debilitating treatment, useful in many cases, is fatal in others, and like all other exclusive methods in medicine, its tendency in the hands of common practitioners is dangerous.

Finally, that it has not produced all the good which its author anticipated, and that not only has he much exaggerated its influence, but that it has more failures to deplore than successes to boast of.

Such are the objections, in my opinion not altogether futile, which have been made to the new doctrine; but the last has given rise to so singular a controversy that I shall here give some account of it. The affair is of a delicate nature, and as the truth of it is somewhat difficult to detect, I shall state simply the assertions of the two parties, leaving the public to judge between them.

M. Broussais, like all other passionate and irritable men, defends his opinions with violence, and endeavors to subdue by force when he cannot by reason. He wishes to convince in spite of all obstacles. Contradiction irritates him; he runs into exaggerations which can be covered only with still greater exagge-

rations, and attempts by frequent and emphatic repetitions to make them good arguments. This is especially the case in the circumstance of which I now speak.

In 1816, he announced, grace to his own doctrine, that the mortality of *Val-de-Grace* had extraordinarily diminished, to the grand astonishment and admiration of the world. This assertion not having been noticed, M. Broussais, in 1821, went a step farther: he then predicted, in the preface to his *Examination*, that his doctrine would soon exert an influence on population more marked than that of vaccination. This was pretty strong, but not, however, sufficient; for in 1822, the Prospectus to the *Annals* declared that, in the Hospitals where the physiological doctrine was adopted, the mortality was only one in thirty, while in the others it amounted to one in five.

All these assertions were made with assurance, and at first no one demanded that they should be verified. But these results were so astonishing, that a physician, (M. Bousquet) curious in this sort of facts, referred to the sources of information, and produced in the *Revue Médicale*, a table of the mortality of *Val-de-Grace* during five successive years. According to this document, M. Broussais had lost more patients than his cotemporaries for the five years from 1815 to 1819, and his mean mortality had been one in *thirteen!*

M. Broussais replied (in the Annals) and replied badly. He did not deny the correctness of the table, but he pretended that it proved nothing against him. He dwelt upon the difference of the cases; he asserted that he had the care of the most dangerous diseases, and persisted in the conclusion that the mortality by

other methods of treatment was twenty-fold greater than by his own.

His response was no reply; for, apart from the little solidity of his explanations, it remained proved that he had lost one patient in *thirteen* and not one in *thirty*.

M. Roche, author of a pretty good treatise on pathology, dissatisfied, no doubt, with the response of M. Broussais, endeavored to reply for him, and to oppose figures to figures. He also repaired to the original sources, reviewed the table, corrected it after his own researches and proved, indeed, that the practice of M. Desgenettes and Pierre was not comparable to that of M. Broussais, on many accounts, and that their mortality was less than had been stated. As to M. Broussais, the mortality attributed to his practice by M. Bousquet was admitted to be nearly correct. Thus, by this table, corrected and explained by one of his pupils, it was again proved that he lost one patient in thirteen or fourteen and not one in thirty.

It is not easy to find the exact truth among all these calculations and figures. The effects of the duration and nature of diseases, &c, &c, on the results is complicated, and many errors are unavoidable in such estimates. But these errors, after all, can make only slight differences. The basis of approximative estimates is not less solid, and these calculations prove, evidently, that the average loss of M. Broussais has been at least one patient in thirteen or fourteen: whence it follows, that there is still some difference as to the results between his method of practice and vaccination.

The authors of this investigation had at first in view only the clearing up of this single question, whether

M. Broussais had, in sober truth, lost only one patient in thirty; and it appears that their inquiry has totally falsified the assertions of the *Annals* and the *Examination:* but proceeding still farther, they ascertained that not only was the mortality of this physician twice as great as he had asserted, but that it was greater even than that of his rival cotemporaries ; whence they infer that the miracles attributed to the new doctrine, are, like all other miracles, strongly to be suspected. It is true that the differences in the nature, circumstances, &c, of the diseases in the two cases, render this conclusion less legitimate than the first, but making every just and reasonable allowance, they think that the new system may cure perhaps as well, but no better, than others.

M. Broussais has thus placed himself in an unpleasant predicament, and from attack he has been obliged to pass to defence. He has not maintained, for he cannot, that he loses only one patient in thirty, and it remains for him to controvert the figures which accuse him of losing more than his associates. I am much deceived if this polemic advances the interests of his cause ; better would it have been for him if it had not occurred. Although this necrology proves nothing against the new doctrine, it does prove, however, that it has not accomplished all the good that was claimed for it, and this disappointment is in itself a reverse. Enthusiasm, in becoming cooled, is converted into prejudice and enmity, and nothing so chills enthusiasm as detected misstatements.

I wished to relate a scientific debate, and I have well nigh shown a party quarrel. Whose fault is it, if these debates have been attended with some scandal ?

M. Broussais had asserted that all his cotemporaries of Paris and of France witnessed the death of a greater proportion of their patients than himself; some who were implicated in this accusation have proved that he stated a thing which was not true, and they then advanced another which does appear to be true, to wit, that among all the necrologies of Val-de-Grace, that of M. Broussais is the greatest. He has pretended that he loses but one patient in thirty; he has been shown that he deceives himself, and that he loses at least one in thirteen or fourteen. These direct investigations cannot be very pleasant; ill humor is their result, whence proceed sharp attacks, which, in their turn, provoke bitter replies; but, as in the present case, they have one value, in the interesting facts which this contest of passions generally establishes. I finish this digression by referring readers, desirous for further details, to the journals of medicine; and return to the doctrine of *irritation.*

If we consider the prominent and leading divisions of M. Broussais' theory, we cannot fail to recognise their analogy to Brownism. With Brown, M. Broussais teaches that life manifests itself only by the irritability of the living tissues, a property which the Scotchman designates by the name of excitability; and that it is maintained only by excitement. With Brown, he admits but two modifications of vitality, its augmentation and its diminution; with Brown, he divides diseases into two classes, the irritative, (sthenic,) and the ab-irritative, (asthenic,) and they both contend that all agents, applied to the living fibre, stimulate it.

Such are the principal points upon which they agree, but they differ on the following. Brown taught that

the excitability is uniformly diffused throughout the system, that it is one and indivisible, and that it cannot be augmented in one part without being increased in every other. M. Broussais believes, on the contrary, that irritability, though identical in its nature, is imparted in different degrees to the different tissues, and that it cannot be increased or diminished in totality, at the same time ; but that its augmentation in one part necessarily occasions its diminution in another, and *vice versa*. The Brunonian theory was a conception purely speculative ; that of M. Broussais is founded on the differences in the vitality of tissues, taught by Bichat.

In pathology, they class diseases in an inverse order. Brown, blinded by the state of apparent debility which accompanies all violent diseases, and taking into account the debilitating or exciting nature of their causes, concluded that almost all diseases were asthenic. M. Broussais, having remarked that debility is only consecutive to a phlogistic state of the internal organs, and considering the nature of the causes of disease, a chimera, asserts that the great majority of diseases are referrible to irritation,—that they are sthenic.

The first regarded almost all diseases as *general*, since according to him, they reduced themselves to an increase or diminution of his one and indivisible excitability ; the second considers them all primarily local ; that they become general, only by the law of sympathy, and this generalization even, has a signification altogether different from that of Brown.

In therapeutics there is the same dissimilarity. Brown, having always to combat debility, administered continually his stimulants. M. Broussais, seeing

everywhere, *irritation*, employs only debilitants. The Scotch reformer believed, in accordance with his conception of life, that medicines acted on the system in a general manner, to whatever organ or tissue they were applied: the French reformer thinks that their action is always local, and that their remote effect is subordinate, and dependent on the modification which they produce in the part to which they are directed.

It is singular, that, starting as they evidently do, from similar principles, the two schools should arrive at results so dissimilar in the classification of diseases, and in their treatment; and it is not less surprising, as I have already observed, that they should both cite clinical experience in justification of their theories. The Italian school of *contra*-stimulism, the product also of Brownism, has not less singularly modified its parent doctrine.

The contra-stimulists agree with Brown and M. Broussais, in the division of diseases into sthenic and asthenic; but as to the numerical proportion of these diseases, they abandon Brown and think, with the French school, that the sthenic predominate. But, in agreement with the Edinburgh physician, and in opposition to M. Broussais, they admit the existence of *general* as well as local diseases. In their theory of the action of medicines, and in their classification, they differ from both the others. In effect, they maintain not only, that all agents applied to the living fibre do not stimulate it, but that there exist a great number which directly and positively depress vitality. They have denominated these agents contra-stimulants, and, singular enough, they are found principally among minerals, in that class of substances, where the

Brownists and the *physiologists* see only the most energetic stimulants.

The cause of this fact is worthy of attention. Rasori, having convinced himself that the sthenic character prevailed in a great number of cases where the Brownists admitted only debility, and seeing, besides, that the remedies reputed stimulant by the latter, cured these diseases, concluded that these pretended stimulants were not really such, but acted, on the contrary, in a diametrically opposite manner; so that although differing from the pathological theory of Brown, his curative means remained the same. Thus the Italians administer, to contra-stimulate, a multitude of substances which Brown recommended in order to stimulate. These dissimilarities would be of little consequence, were it in fact well proved that cures were performed equally by the two methods; but this M. Broussais denies. He declares them both essentially incendiary and totally contra-indicated in the cases where they are employed. Who is wrong?

It may be concluded from these general comparisons, that the doctrine of M. Broussais and the Italian theory are evidently products of Brownism. In effect, the general and truly fundamental principle of the three schools is the same; to wit, the division of diseases and of medicines into two classes, conformably to their dynamic theory of vitality.

Notwithstanding all their theoretical dissimilarities, the three schools agree on many points of practice; for different reasons, it is true, but this is of little moment, provided they arrive at the same conclusion in therapeutics, the essential and ultimate object of all medicine. What matters it, for example, whether

quinine cures an intermittent fever by stimulation, by contra-stimulation or by revulsion, if it is well ascertained that this remedy actually does cure it ? and what matters it, whether a disease be inflammatory or asthenic, if we possess an agent that will remove it ? Of what consequence is it, whether mercury cures syphilis by a stimulant, special, revulsive, or *elective contra-stimulant* action, if its curative efficacy is well established ; and whether the syphilitic affection is general or purely local, proceeding from a specific virus or a simple irritation, if there really exists a remedy to oppose to it ?

This agreement is not positively avowed by the rival schools. Most frequently, even, they deny, in theory, the results of clinical experience, but sometimes, when these are too evident to be denied, they attempt to explain them, each one according to its peculiar doctrine. This is ordinarily done by untenable subtilties; but these subtilties are of great value, since they place at his ease the practitioner, who, under their safeguard, escapes from the exclusiveness of general theory, and armed with his *explanation*, does not hesitate to prescribe a treatment thus rendered *rational* and absolved from the reproach of *empiricism*.

The French doctrine, from the time of its appearance, excited much enthusiasm; first, from the incontestable truths which it proclaimed, and then because it was exclusive and claimed the prerogative of *explaining* everything. Emanating also, from an ardent and dominating mind, its passionate and headstrong proselytes soon cried, *a miracle!* saying, that the secret was found, and that medicine had at last become a positive science. The theory of irritation was soon applied to

the etiology of almost all diseases, though subjected in the hands of its partizans to many modifications.

M. Boisseau, a brilliant and distinguished writer, and an excellent critic, has remoulded the theory of fevers. Although agreeing entirely with M. Broussais on the general principles of his doctrine, he makes a different application of them to the history of *fevers*. M. Broussais refers all these diseases to simple or complicated *gastro-enteritis;* M. Boisseau denies the correctness of this assertion, and endeavors to prove, that among the *fevers* of authors, some, as M. Broussais says, are gastric inflammations ; but that there are others which have their primary cause in affections of the brain, liver, &c. His book, the success of which was great, though rather temporary, is written with ability.

Criticism has not been less busy. Independently of the war of the journals, many works have been published against the *physiological* doctrine. The greater number of these are ridiculous from their exaggeration ; others deserve to be read. If the first have given a melancholy example of deplorable literary animosity, the last have rendered high service to science, in holding up the dangers inseparable from an exclusive theory. Among these I refer especially to the *Lettres à un médecin de Province*, by M. Miquel. The capital objections to the new doctrine are stated in this book in a lively and spirited manner, which takes nothing from their intrinsic solidity.

This medical quarrel has renewed a spectacle which has been frequently witnessed in the history of science. The overbearing pretensions of a sectarian chief, and

the resistance of numerous dissenters soon occasions the elevation of three or four different standards, the rallying points of the several parties. The minds of men become accustomed to this state of things during the short time that it continues ; the absurdity of certain opinions is overlooked under the influence of habit; those who at first doubted become convinced, and *conjectures* then pass for *demonstrations ;* while self-love, once engaged, forbids every concession, every retraction. The word of the master is at first taken with eyes half shut, and the disciple soon voluntarily closes them, in order that he may not see differently from his teacher. Everything in the field of dispute becomes enveloped in confusion and obscurity. General facts are forgotten or perverted; the mind is blinded, or considers only one side of the question ; and in order to arrive at the truth, we are finally obliged to remove to a distance from the controversy, to shake off totally all preconceived opinions, and to commence anew the investigation.

In speaking of these disastrous consequences of the spirit of party, I do not wish to condemn either M. Broussais, or those other superior minds whose doctrines have influenced the destinies of science. The evil ought not to be exclusively imputed to them. It originates, especially, in the stormy ignorance of their partizans, and the blind hostility of their adversaries; for there is nothing which the spirit of party cannot vitiate or divert from its true end.

Thus, the spirit of contradiction and the desire of leaving nothing without reply, has driven M. Broussais into wide extremes. I am sure that he has been led, almost by force, to many assertions, the truth of which

he cannot honestly guarantee. However this may be, it is easy to predict the ultimate destiny of his school; the history of medicine is here to inform us of it. The physiological doctrine will pass away, though leaving, in France, deep and enduring memorials of its existence. Already do new innovators find it insufficient. The exclusive *solidism* on which it is founded, has lost, within a few years, the favor that it had formerly enjoyed; and if the researches, now making on the animal fluids in the states of health and disease, should lead to new results, which is very probable, it is certain that the theory of irritation will be almost totally overthrown. But the labors of M. Broussais are rich in benefits which will not be forgotten. The true direction which he has given to medical studies, the spirit of doubt and examination that he has created, the reform which he has effected in medical language, and his numerous excellent rules of practice, and profound observations, will place his name high among the illustrious in medical science.

All these will remain, and they constitute a service, the extent of which ought to be acknowledged. I repeat it, lest I should be misunderstood, or be thought one of those malevolent critics who see in M. Broussais only a maker of hypotheses or an obstinate sectary. Before he became too much fascinated with his own theoretical ideas, he had recorded the results of his long practice in a work of the highest order of excellence—the *History of Chronic Inflammations*. In reading his books, it is necessary carefully to distinguish between his *observations* and his *explanations*. I believe even, that M. Broussais has been a great practitioner, but I dare not affirm that he is so now. There is, in

effect, no idea so false, that it may not be definitively and firmly established in the best head, when introduced by prejudice, exasperated by contradiction, and rendered permanent by habit.

It is unfortunate that his mawkish admirers and fanatical proselytes should have made him giddy with their incense and adulation. He seems to have forgotten, that if he has worthily performed his task for the progress of science, his successors have also in their turn the same duties; and he ought to know that his doctrine, far from marking the definitive term of medical science, is only a very small and a very short episode in its immense history.

M. CHAUSSIER.

It is with a sentiment of pleasure and respect that we speak of M. Chaussier; his name naturally associates itself with the history of medical science in France. In 1794, he was called to cooperate in the organization of medical instruction, and since that time his long career has been consecrated to the progress of medicine, and the prosperity of the school. All physicians, and especially medical students, owe him many obligations, for M. Chaussier has done much, and all that he has done is useful.

Note.—Chaussier (Francis,) formerly professor of physiology at the Faculty of Paris, and of chemistry at the Polytechnic school, and chief physician at the *Hospice de la Maternité*, was born at Dijon. He visited Paris, in 1794, by order of the government, to assist in the organization of medical instruction. He then returned to Dijon to resume his usual occupations, but was recalled to Paris in the following year and appointed professor of the new school, where, for twentyfive years, he gave lectures on anatomy and physiology. He held this place till 1822.

This professor has, however, written but little, and the public has expected in vain, during twenty years, the results of his researches in physiology and in legal medicine. The reputation of M. Chaussier, although solid and legitimate, is founded less on what he has written than on what he is capable of writing. From the various posts which he has occupied, from his cooperation in all the labors which have been undertaken for thirty years, and by his public courses of physiology, his name has acquired an imposing authority. Associated with all those eminent men, Bichat, Pinel, Hallé, Corvisart, Desault, Fourcroy, &c, who have passed away from the sciences which they adorned, M. Chaussier held with them all, scientific relations, and all have borne witness to his extensive learning and powerful mind. He has outlived this generation, so rich in great physicians, and, placed now at the head of the present, he is in some sort its chief and patriarch. In this age, when everything marches so rapidly, it is delightful to see this aged and venerable man still maintaining himself in the van of the onward movement. Today, as it has been for twenty years, M. Chaussier is regarded as the best judge of whatever is passing in science. Perhaps he owes a part of his authority to this singular reserve, which induces him continually to defer the publication of his works. These works, the fruit of immense labor, are waited for as oracles. Some fragments which he has given to the public, have obtained, it is true, the suffrages of all; but perhaps we exaggerate the results of his scientific researches and the influence of their entire publication. Besides, it seems probable that these wishes of the learned will not be granted by

himself; M. Chaussier draws near the close of his literary career, and it is now necessary that he should consecrate to repose the last years of a life so laboriously occupied. The public will not the less at some day enjoy the benefits of his labors, but God grant that it may yet be far distant.

Although M. Chaussier has published no works of considerable length, we have still some productions of his pen, distinguished for clearness, accuracy of research, soundness of thought, and for their theoretical and practical utility. By these few works and by his brilliant courses in the chairs of the Faculty, he has acquired a European reputation. If physiology has made, during our days, some solid advances, it is owing, in great part, to the labors of M. Chaussier. At the period of his arrival in Paris, near the close of the last century, a physico-chemical doctrine was introducing itself into medicine. Hardly yet disembarrassed from Galenism and the mechanical theories, we were nigh losing ourselves in the mazes of chemical hypothesis, to which recent discoveries had given a great value. M. Chaussier, a disciple of Hippocrates and of Stalh, opposed with courage the invasion of this doctrine; he proclaimed, with all his eloquence, the independence of the laws of life, and, worthily seconded in his views by Hallé, Corvisart, and Pinel, he made vitality the point of origin and groundwork of all physiological studies. Anatomy is not less indebted to M. Chaussier than Physiology. Before his epoch, this science had hardly been considered in a philosophical manner. No one unites better, the patience which studies details and that generalizing spirit which builds up and systematizes a whole. His

synoptical tables, conceived on an extensive plan, exhibit, at the same time, lucid anatomical classifications and a summary of physiology, pathology, and therapeutics. It is impossible better to bring together and sum up in so short a space all the generalities of sciences so extensive. Nothing less than profound knowledge and a powerful mind could have conceived the possibility of crowding medicine into so narrow a circle. M. Chaussier has accomplished this task with rare ability. He has proved that it is only men of superior knowledge who are qualified for the composition of elementary books, since it is only such who can embrace, in a comprehensive view, an entire science, and thus be able distinctly to perceive and to extract from it whatever is fundamental and absolutely necessary.

There is no branch of medical science with which M. Chaussier is not familiar. We are indebted to him, especially, for important researches in legal medicine, laid down in a few treatises, very short, but substantial, as is everything which proceeds from his pen. Every one believes that if M. Chaussier should publish the entire results of his labors, relative to legal medicine, France would no longer have cause to envy the Germans their superiority in this department of knowledge. M. Chaussier possesses all the qualities necessary for a legal physician, varied and extensive acquirements, sagacity, sound judgment, and a clear, philosophical mind. Vicq-D'azyr said, that something more than good eyes was necessary to see well in anatomy, but it is in legal medicine, especially, that good eyes are not sufficient. The pathological phenomena are often so extraordinary and unusual, the

accessory circumstances so complicated, the discovery of the truth depends upon so great a variety of facts, that a medico-judicial report, even the most simple, is surrounded with a thousand difficulties. The sources of error are so numerous, that there exists few such reports, even among the most celebrated, which, if submitted to the scrutiny of severe analysis, would not offer many things for criticism. We need in France good works on this subject, and the progress of chemistry and pathological anatomy would now render their execution comparatively easy. The small number of works which M. Chaussier has given to the public are sufficiently remarkable to place him among the first of our medical writers; but they cannot alone account for the high authority of his name, and the wide extent of his reputation. These must be attributed, rather to his success as professor, to his numerous scientific relations, and, more particularly, as we have already said, to that kind of parsimony which prevents him from publishing the results of his researches and meditations. Rendered venerable by his age, and by some decisive proofs of learning and superiority, we suppose him to possess the knowledge of a great number of discoveries; and the mystery in which his thoughts are yet enveloped, increases their imagined value. Common consent bestows on him even a kind of infallibility. M. Chaussier, in the high intellectual rank where he is placed, offers us the image of one of those renowned old men of other times, whose fame increased with their years, and whose authority, consecrated by time, had the force of law. This phenomenon is rare in the present age. Few men, even among the most original, maintain, during a long time, their scientific influ-

ence; their ideas, so new and prolific at first, gradually grow old and are deprived of their value. Perhaps M. Chaussier is an exception to this rule; but perhaps, also, his opinions on physiology and pathology would meet with objections at the present day. However this may be, his treatise on physiology, so much desired, were it only the detailed and finished complement to the doctrines of which his *Synoptical Tables* are in some sort the groundwork, would still be a splendid tribute to science. It has been supposed that the *Physiology of Man*, by M. Adelon, was prepared under the direction of M. Chaussier. The accuracy of the researches, and the historical good faith of the work might favor this belief; but the absence of order, the nullity of philosophical views, the feebleness of the criticism, and the diffuse style militate against this supposition, which is still rendered probable by the intimate friendship which unites the ancient professor to his pupil.

The critic has but small occasion for fault-finding with the works of M. Chaussier, and even if the occasion were greater, we should have little inclination to avail ourselves of it. His name has always been pronounced before us, accompanied with acknowledgments of esteem and respect, and we have no wish to gainsay this expression of public feeling.

[The death of M. Chaussier occurred soon after the foregoing article was published. The restorer of the physiological system of Vicq-d'Azyr in France, the instructor of Bichat, the patriarch of physiological medicine, terminated his career in 1828, at the advanced age of eightytwo.—*Trans.*]

M. DESGENETTES.

THE name of Desgenettes is one of the most illustrious in French medicine—a name which is and which truly deserves to be European, familiar alike in France and in Egypt, in Russia, Prussia and Spain. Attached to the history of all our conquests, he appears among them like a benevolent and guardian

Note.—DESGENETTES (Aimé-Nicolas-Dufriche,) was born at Alençon in 1762. In 1789, he received the degree of Doctor of Medicine from the faculty of Montpellier. In 1793, he entered the service of the army of Italy. He then made the campaign of Egypt and of Syria in quality of chief physician. In 1802, he returned to France and was appointed first physician of the military hospital of Paris and general inspector of the health department of the armies. He has made all the last campaigns of the French in Prussia, Poland, Spain and Russia, and that even, of 1814. Having lost his place in 1815, Louis XVIII., in 1819, reinstated him in the council of health of the armies. The place of professor at the faculty was taken from him in 1822. He has besides been adjunct professor of medical physics and of hygiene at the school of health. M. Desgenettes is a member of the Academy of Medicine, chevalier of the Legion of Honor, of the order of the Polar Star, &c.

spirit amid scenes of carnage and destruction. The scientific career of this physician has consisted almost entirely in action, and his writings, though remarkable, have had but a secondary influence in establishing his reputation. If science in itself owes him much, the profession of medicine owes him still more. He has honored it and imparted to it something of that primitive character with which fabulous ages had invested it. Better inspired than Hippocrates, he has extended his cares to the sick of all nations—to the Turk and the Christian, to the men of the north and the south, and as disinterested also as the ancient father of physic, he has like him retired poor from his labors, though he might easily have made himself rich. Often placed in opposition to military power and faction, he always exhibited an unwavering inflexibility and energy of character. His thorough knowledge of men and things, his skill in the practice of his art, and his vigorous and unbending mind distinguished him for more than twenty years at the head of the medical service of our armies. Military physician from 1793 to 1814, professor of the Faculty of Medicine till 1822, his public life then terminated. At this epoch, the system of medical instruction (so said the ministers) needed reforming. They accordingly reformed it, in a manner peculiar to themselves. They removed M. Chaussier, M. Dubois, M. Pinel, M. Vauquelin, all of them men of learning and probity, venerable and illustrious, but who lacked, unquestionably, some qualities which may be found in their successors. M. Desgenettes was also judged by men who were unjust, and replaced by those who were obscure.

The works of M. Desgenettes are numerous and distinguished by various excellences. The principal are an *Analysis of the absorbent or lymphatic system*, and his *Medical history of the Army of the East*. The last is remarkable for its correct spirit of observation, comprehensive views, and its evidence of the author's skill in the medical and *hygienic* administration of the armies. The true talent of a military physician does not consist merely in a knowledge of the nature and cure of certain diseases peculiar to the life of a soldier ; he must be acquainted with the innumerable and powerful effects on the health of troops, produced by change of climate, the nature of localities, moral influences, &c. What medicament, for example, could have produced on the glorious army of Egypt the auspicious result of the chivalrous self-devotion of M. Desgenettes? A contagious disease appeared in the army and spread rapidly from one to another. The soldiers were struck with terror and despair, and were ready to die, merely because they considered death imminent and inevitable. The mind was more diseased than the body; it was to the former, then, that the remedy should be directed. M. Desgenettes assured them that the hideous buboes with which they were covered were not symptoms of the plague, and he proved it. How ? By the following heroic experiment. He took the matter of these buboes and inoculated himself ! This proof was conclusive in the eyes of the soldiers, hope was again kindled in their bosoms and the mortality diminished. Here is one of those brilliant actions which history delights to preserve and transmit from age to age. If physicians—and they have frequent occasion to do it—would always manifest this noble resolution and ardent

love of humanity, they would merit in our days that title of divine men which antiquity bestowed on them in common with poets.

But if these examples are rare, it is because souls capable of producing them are also rare, and they are so much the more worthy of admiration and gratitude. The responsibility of the chief physician of an army is great, and requires a more exalted capacity than the majority of physicians suppose. He must be gifted with a rare union of qualities; to the acquirements requisite for a practitioner he must join the talents of an administrator; and the foresight which prevents evil is much more necessary than the skill which repairs it. This foresight manifests itself in the hygienic regimen of an army. True, it is not sufficient that the physician should merely counsel and direct, he must be able to execute his purposes; and in order to do this, he must enjoy the confidence of the men submitted to his care and the esteem of his commander. This confidence and esteem are acquired, less by his science, than by the energy and influence of his character. M. Desgenettes merits, unquestionably, both the one and the other, since he remained during twentyfive years the physician of our armies. Napoleon, who understood admirably the value of men and the purposes for which they were suitable, even when the affairs which he confided to them were altogether foreign to his own pursuits, distinguished M. Desgenettes with his confidence. Notwithstanding the kind of division which existed between them in Egypt, in regard to a measure variously related and interpreted in France and especially in England, he employed him on his return from the East and required his attend-

ance in Spain, in Poland, in Prussia and in Russia. In 1814, he again chose M. Desgenettes and appointed him chief physician of the army and of the imperial guard. Thus, after having assisted at our conquests in Italy and dressed the first wounds of our soldiers, he was also present at the field of Waterloo, to witness their last efforts. M. Desgenettes understood, equally, the character of his mission amid the miseries of war and the respect which was due to it. Made prisoner in the retreat from Russia, he demanded boldly his liberty, not as a favor, but as a right ; he invoked the sacredness of his ministry and in particular the cares which he had lavished alike on the Russians and on the French. An imperial ukase immediately rendered him his liberty. The emperor Alexander called him into his presence and expressed to him his sentiments of high estimation and regard. He received soon after from Sweden the order of the Polar Star.

While strangers were thus paying him their tribute of gratitude, M. Desgenettes was exposed in France to the machinations of a crowd of enemies, emboldened by political circumstances. He desired, as an honorable retreat, the place of first physician to the Hospital of the Invalides, which had become vacant; this was refused him, and, as it was impossible to separate him entirely from the army, the health department of which he still directed, the chair of professor of the Faculty of Medicine was given him. An insignificant tumult occurred during a public discourse which he delivered. This tumult was declared seditious, the professor seditious, the whole school seditious. We have already stated the consequences. Medical instruction suffered no less than the army. The public lectures of M.

Desgenettes were models of clearness and order, and his lessons were rich in valuable and original matter. As an orator, he was distinguished by a peculiar and winning familiarity. In his various discourses before the Faculty and in the daily discussions of the Academy of Medicine, he constantly exhibited great powers of reasoning, joined to the charm of an easy and animated elocution. His language is especially remarkable for propriety, appositeness and that delicate tact which depends, even in men of powerful minds, on varied learning, and distinguished social relations. In general literature, M. Desgenettes is not less worthy of praise. His duties of the camp have not prevented him from reading much and well, and he has drawn from books a solid and well discriminated erudition.

I do not intend to examine in detail the works of M. Desgenettes. A stranger to the medical discussions of the present day, his various memoirs turn in general on points of physiology and pathology which do not offer any great degree of interest, except to physicians of laborious research and to those who wish to go into the ultimate details of science. Besides, as I have already said, M. Desgenettes has done more in action than in writing, and we must consider him less as an author than as a public man. His name and his glory are attached to the history of our armies.

M. DUBOIS.

THE name of M. Dubois does not occupy an extensive space in our libraries, because, for some reason, he has written but little; but there are few men in France who have not heard this name pronounced as worthy of the most exalted esteem. It is not in books then that we must seek the character of this illustrious veteran. We must interrogate those practitioners who, like himself, already advanced in age, have been witnesses of the career which he has run with so much honor; we must go particularly to the students who have heard him at the *Hospice de perfectionnement* and who lament, equally, his absence and the presence there of his successor.

Note.—DUBOIS (Antoine,) was born at Gramat, July 17, 1756. After having received the degrees of Doctor of Medicine and Master of Surgery, he was appointed professor at the college of surgery in 1790. At the time of the organization of the faculty of medicine, M. Dubois was chosen one of the professors. He attended the empress Maria Louisa, at the birth of her son, in 1811. He has been for a long time professor of Obstetrics at the *hospice de la Maternité* and of clinical surgery at the *hospice de perfectionnement.*

The public, not very well qualified to judge correctly of the extent of an individual's acquirements, has at least discovered and appreciated in M. Dubois the nobleness of soul, the independence of character and frankness of disposition which distinguish him. These exalted moral qualities crown beautifully his fine talents, and this happy alliance gives to the practice of the art of healing, something venerable and almost divine. When skill alone exists, unaccompanied with these excellences, we seek it and remunerate it well, it is true, because it is a quality at once rare and necessary ; but the practitioner who, by this discordance, of which there are examples, unites vices of character to genius in his profession, is a workman who is gladly dismissed when his task is finished. Like the mysterious dwarf of Scott, the fear of death and necessity draw many suppliants to his door, but he receives the maledictions of those even who implore and pay him.

The Faculty of Medicine, the *hospices de perfectionnement* and Maternity, and private practice, are the theatres where the talents and the knowledge of M. Dubois have been displayed in all their variety and solidity. Endowed with a vigorous mind and remarkable soundness of judgment, quick in captivating the attention and obtaining the confidence of his patients, a surgeon of the first order, a physician somewhat too sceptical perhaps, but, above all, a man of good sense, he has succeeded in obtaining over an entire medical generation, of which he is almost the senior, an ascendency which is never contradicted. Thus, notwithstanding his great age, he is daily consulted by young practitioners, who admire his medical tact, so delicate and so sure, his accuracy of diagnosis and that frank-

ness, sometimes carried to extremes, with which he often announces the impotence of art. Is it the habit of seeing therapeutics ineffectual in so many cases, or is it a natural leaning towards scepticism which produces in a superior mind such extreme distrust? Both these causes, perhaps, contribute to produce this result. It is certain that this disposition is a distinctive trait in the character of M. Dubois. But perhaps this physician doubts too much, only because others are over confident.

It is in consequence of this tendency to scepticism, that M. Dubois, without declaring himself openly against certain late innovations, receives them only with restrictions and under the reserve of more extensive experience; leaving to time the confirmation of new discoveries, and to younger talent and research the emulation and labor necessary to invent and perfect them. It is only when any system of practice seems to him evidently injurious, either in its nature or by its abuse, that he meets it boldly with the whole weight of his disapprobation, regardless of the shock given to the self-love of its projector.*

*'I have seen the time,' said M. Dubois in one of his lectures, 'when the application of the forceps had become so fashionable that certain practitioners made continual use of them. Women could not be delivered without the use of this instrument. Afterwards came the Cesarean operation; this was more serious but it continued in vogue for a considerable time. Symphysotomy replaced the Cesarean section and had numerous partizans. All these things passed away, and women are now very well delivered without forceps, without the Cesarean operation and without dividing the pubis. You will see in a little time hence, patients dispense with the use of leeches and be cured notwithstanding.'

It is easy to conceive the value of such a character in an establishment destined to complete and perfect a medical education. Thus the clinic of this hospital had become the rendezvous of all those young physicians who came to finish their education in the capital and to familiarize themselves with the practice of the great masters of their art. 'This,' said M. Dubois, 'is not a course for those who are beginning their studies, but for young physicians, who are about commencing their practice without guidance or control.' There was then nothing scholastic, nothing magisterial in his manner. The subtilties of books were discarded at the bedside of his patients; systems were condemned and medicine became more simple and rational. The young physician went from the hospital with his mind stored with things instead of words. He had seen, and what is still better, he had learned to see whatever is essential, and that only, in the diagnosis and treatment of diseases. Such was the method of the ancient masters, who, neither reading books nor making them, taught medicine by tradition. M. Dubois had the advantage over them of being born some centuries later. His clinic has been justly cited as a model of this species of instruction. Can some one inform us of what kind is that of his successor?

The lying-in hospital has presented to M. Dubois a field of daily observation on the obstetric art, and it has been a school where he has educated an immense number of midwives capable of rivalling many surgeons who call themselves practitioners in this branch of medicine. It is difficult to form an idea of the ignorance of midwives before the establishment of this useful institution. We can only do it by comparing

the acquirements of those who have been educated at this school with such as have not profited by its advantages. It is especially in the provinces remote from the capital, that we may convince ourselves of the difference. The instruction of midwives is one of the elements which ought to serve as a basis in estimating the causes operating favorably or otherwise on the increase of population.

In the absence of positive information as to the ideas of M. Dubois in relation to the general principles of medicine, and in the fear of misinterpreting them, since they are nowhere recorded, I shall confine myself to a few words on his doctrines of midwifery. It was in 1820 that he gave, at the *Hospice de perfectionnement*, his last course on this branch of surgery, and all that I have been able to gather from it confirms the idea I had formed of the genuine spirit of observation and the excellent good sense of this great practitioner.

Up to the time of Baudelocque, the obstetric art was a complete chaos, in which the best principles were mingled with the most pernicious, where routine predominated over scientific principles, and where every one adopted, under the influence of common sense or caprice, rules of action arbitrary and devoid of all systematic arrangement. Baudelocque reduced this confusion to order. He laid down fixed principles, gave positive rules, and created a nomenclature which was generally adopted. But as a single individual cannot definitively establish an entire science, there were not wanting commentators, who, under the pretext of correcting and completing, gradually obscured the best founded rules of practice; and as nothing is easier than to modify nomenclatures, each writer formed one

for himself, continually adding new divisions to those already too numerous which Baudelocque himself had laid down. The consequence was, that what are called the diameters of the pelvis and the positions of the fœtus were almost infinitely multiplied by suppositions and hypotheses having no foundation in nature. M. Dubois laid a strong hand on all these subtilties, these divisions and sub-divisions without end, calculated only to confuse and obscure an art simple in itself and almost entirely mechanical. The divisions adopted by him are clear and rational. The essential and nothing but the essential constitutes invariably the method of M. Dubois. He enlarges the boundaries of art in rejecting whatever is superfluous, he perfects by simplifying it. Instead of losing himself in detailed and fanciful speculations, it is only when laying down important practical principles that he pauses, to give his opinions on disputed points or to condemn wrong and injurious doctrines. It is plain that he addresses himself to students already well instructed. What is positive is given by the professor as positive ; what is uncertain is presented as uncertain, and what is purely hypothetical has with him no other value than that of an hypothesis. The only one which M. Dubois adopts in his whole course is certainly ingenious. He supposes that the process of labor commences at the time of conception. According to him, from this moment there is established an antagonism between the fibres of the neck and those of the body of the uterus, an antagonism which continues nine months, which is in favor of the fibres of the neck during the whole period of pregnancy, but which results in the triumph of the fibres of the body, the contractions of which, at the

time of labor, overcome the resistance of their antagonists. This hypothesis enables the professor to explain certain phenomena which occur during pregnancy, but he attaches so little importance to his theory, that, in giving these explanations, he adds, 'I explain this to you in such a manner because I am prejudiced in favor of this idea.' We feel that a man who speaks thus of his theories is not likely to form many.

M. Dubois may be cited as one of the most distinguished among our surgeons. He has carried into all the branches of this art his characteristic sagacity and soundness of mind. He was the first who proposed the ligature of the primitive carotid for the cure of aneurism, and was on the point of performing this operation, when the patient was suddenly carried off by apoplexy. A skillful lithotomist, he has adopted a new method in performing this operation on women, possessing many advantages over those generally employed. He has often practised on children the transverse operation after the manner of Celsus; consisting in the incision of the perineum on the stone previously fixed opposite this space by the finger introduced into the rectum. He has made important modifications in the construction of the forceps, and improved and invented various surgical processes.

I have little to add to this article; there are others better qualified than myself to speak worthily of M. Dubois, because they better understand the extent and variety of his acquirements and the services which he has rendered to science and humanity; but no one can profess for this excellent man, this superior spirit, this mind so happily and so richly endowed, an admiration more profound and sincere. At the present day,

persecuted by vile and ignoble enemies, there remain to him only the friendship and esteem of the great and the good, and it is delightful here to recall him to the recollection of the students of the school of Paris who have not yet lost the hope of seeing him restored to his public avocations. Although the weight of many years is accumulated upon him, he still preserves a vigor of intellect and a warmth of soul which I am sure would still be consecrated to the service of instruction.

M. PELLETAN.

'Philip Joseph Pelletan! the ancient surgeon in chief of the Hotel Dieu, is he yet among the living?' will be the exclamation of many on beholding this article. A profound forgetfulness has covered the name of this celebrated professor. Successively deprived of all his high offices, which are ordinarily relinquished only with life, he has long since ceased to act, to write and to speak. Thus there remains of him in the minds of his innumerable pupils and auditors only a confused recollection which leads them to doubt the

Note.—Pelletan (Philip-Joseph) devoted himself at an early age to the study of the physical sciences. He has been professor of many of the principal branches of medicine. Successor of Desault at the Hotel Dieu, he was appointed professor of clinical surgery at the faculty of medicine of Paris. In 1815, he became professor of operative surgery, and passed from this chair to that of obstetrics, in 1818. At the new organization of the faculty, he was allowed only the title of honorary professor. M. Pelletan has been corresponding secretary of the Royal Academy of surgery. He is a member of the Institute and of most of the learned societies of Europe.

life even, of a man whose reputation was once so extensive. I am happy here to recall to them a name formerly so well known. Unable to judge myself, I have consulted tradition, and it has informed me how unjust is this sort of annihilation which covers the memory of the successor of Desault.

It is less as a great surgeon, than by his brilliant success in oral instruction, that M. Pelletan has so long enjoyed an European reputation. At the age of twenty four years he was already distinguished as a teacher, and during more than thirty years he was followed and admired at the Hotel Dieu and in his courses at the Faculty as the most remarkable professor of our modern school. His great copiousness of language, the happy choice and elegance of his expressions, his animated and winning vivacity, the admirable clearness and order of his thoughts, and the literary beauty of all his extemporaneous speaking had spread abroad his fame far beyond the boundaries of his school. His oratorical superiority was such that we could have wished, for its full display and development, a more extensive theatre and more popular subjects. Placed in a chair of philosophy or literature, he would have dimmed the comparative brightness of many academical names. When compared with Desault, in regard to anatomical instruction, it was common to say that Desault's knowledge was greatest but Pelletan's the best. Among the professors of his time, Fourcroy was the only one able to rival him, and they who have heard them both assure us that the physician was in many respects superior to the chemist.

M. Pelletan is one of those men whose genius requires, in order to manifest itself, the presence of an auditory and the sympathetic enthusiasm of an attentive multitude. In men thus organized, thoughts are a train of inspirations ; they are copious, powerful and various, in proportion to the interest and excitement of the occasion. Their minds are dependent on the stirring influence of their awakened feelings ; remove them from the public, place them in solitude and silence, and they become powerless ; reduced to the necessity of deliberately calculating, their intellect loses its elasticity ; oblige them to write, and their books will give no evidence of the talents which distinguished their discourses. Their style has no longer the same warmth and brilliancy, and their ideas lose not only their force and variety but also their clearness and precision. They do not enjoy the plenitude of their faculties but when moved by the factitious and momentary excitement of a public assembly, by the enthusiasm of a crowd, and by the sound of their own voice, creating a sort of cerebral fever, which, while it continues, imparts to them unwonted power and activity. Thus constituted, M. Pelletan has not exhibited in his writings the superiority which marked his scientific discourses.

I shall say nothing of the surgical merit of M. Pelletan, because though a skillful operator, and a distinguished practitioner, he has added little to the discoveries of his predecessors, and he is blameable even, for having sustained with undue obstinacy some errors now generally discarded. He rejects the plan of union by the first intention, an important modification in the treatment of wounds, favorably received by other sur-

geons although derived directly from the English. But if he has not enriched French surgery with his own discoveries, we ought to take into the account, in estimating his character, the influence which he has exerted on surgical studies by his public lectures. Prodigal of his time and his exertions, he has educated thousands of pupils, who have drank deeply from the inexhaustible fountain of his instruction, and among the practitioners and professors of the present day there are few who are not indebted to him for a part of their attainments.

The career of M. Pelletan has been marked with unusual vicissitudes. Few of his cotemporaries have occupied so many eminent posts, few among them have been loaded with so many literary honors. He has been successively or simultaneously, chief surgeon of the Hotel Dieu, professor of clinical surgery at the Medical School, and professor of midwifery ; he is a member of the Academy of Sciences and is associated with almost all the learned societies of Europe. Napoleon decorated him with the cross of the Legion of Honor on the day when the order was founded. Ten years ago his name was on every tongue, to day I sometimes hear it doubted if he is yet alive. Whence arises this forgetfulness of glory and services so recent ? Whence comes it, that full of intellectual vigor, he has been, while living, removed from a station in which all his predecessors are dead, and while the celebrated Boyer preserves with the true modesty of talent the title of *second* surgeon of *La Charité* under a chief, sickly and in his second childhood? We can attribute it only to the monopolizing efforts of ambitious and exclusive men, in too much haste to await

their regular succession and skillful enough to anticipate it.

M. Pelletan was one of the victims of the *ordonnance* of 1822. He is now only an honorary professor in a school of which he witnessed the foundation and which he has powerfully contributed to distinguish. Deprived of all the places which he so long and so worthily occupied, there now remains to him only his seat at the Academy of Sciences and the esteem of all that is honorable among his cotemporaries in Europe.

M. MARJOLIN.

Among the professors not driven from the school in the fatal year 1823, we congratulate ourselves in finding M. Marjolin. This physician is better known by his public courses than by his writings, which latter are not numerous. Medical students, whose judgment in regard to the merits of their teachers is so sure, and, so to speak, so instinctive, throng continually his lectures, and testify their delight and approval by the most sincere and flattering evidence that a professor can desire, assiduity and attention. Devoted for more than twenty years to the labor of instruction, M. Marjolin is distinguished in this difficult art by many excellent qualities. Gifted with a sound mind and a

Note.—Marjolin, (Jean-Nicolas) was born at Ray upon Saône, Dec. 6, 1780. He was a candidate, in 1812, for the chair of operative surgery, made vacant by the death of Sabatier. In 1818, he obtained the place of second surgeon of the Hotel Dieu. In 1819, he was appointed professor of surgical pathology, and became a member of the Royal Academy of Medicine, when this society was established.

correct judgment, qualified by a finished and profound surgical education, he understands thoroughly the science which it is his duty to teach; a circumstance, as the times now go, worthy of notice. He has successively obtained, by honorable competition, the places which he has occupied; that which he now fills so worthily, is the merited recompense of a laborious life, and not the mere gift of ministerial favor.

The lectures of M. Marjolin on surgical pathology are less brilliant than solid. The professor, laying aside all theories, contents himself with communicating to his students the results of his own knowledge, acquired during a long and extensive practice. He has witnessed the cases which he relates, and the precepts which he gives are the results of direct and personal observation. Erudite and well versed in the history of his art, he is able, as occasion requires, to invoke, in support of his statements, the authority of ancient practitioners. His lectures are especially remarkable by their clearness, order and simplicity. He is aware that nothing wearies so soon as attention, and in order to captivate and sustain it, he endeavors to be brief without becoming superficial. Expressing himself explicitly and distinctly, he avoids the insupportable monotony of continued repetitions. His diction has all the simplicity of a grave but familiar conversation. He has the good sense to know, that it is not necessary to mount the tripod in order to teach the nature of a varix, and he does not imitate the declamatory emphasis and tumid rhetoric of some charlatans in office. Learned without pedantry, simple without triviality, concise though substantial, he gives to his

lessons all the eloquence of which they are susceptible; he makes himself listened to and understood.

One of the great advantages of M. Marjolin, as professor, consists in his sagacious and extensive personal observation. He is a popular practitioner and makes every day some new acquisition. The consequence is, that his lectures are always new, and filled with other instructions than such as may be found in all the treatises on surgery. He discourses to his pupils of his own experience, instead of reciting to them lessons freshly learned from the books, though there are some cotemporaries of M. Marjolin who have adopted this method of instruction, relying on memory instead of their personal knowledge. The example of M. Marjolin very well demonstrates a fact which certainly is not new, but of which the world is not sufficiently aware, to wit, that long experience, and a life devoted to study, are essential in order to teach worthily and successfully so difficult a science as medicine. The fiat of a minister may create a machine that can talk and gesticulate, but it cannot make a professor.

I believe all that I have said in praise of M. Marjolin, to be rigorously true; but the reader who has not attended his lectures, will be disappointed if he expect to find in him talents of the most superior order. It is not Desault, nor Sabatier, nor Pelletan; he has neither the originality, nor the depth, nor the brilliancy of these extinguished luminaries of the school. Compared with many of his illustrious predecessors, he is but an ordinary man; compared with many of the professors of the present day, he is above and superior to them. Considered in himself, M. Marjolin is a finished

practitioner, a useful professor, and most certainly a man of capacity and merit.

M. Marjolin does not enjoy, as an operator, a reputation proportionate to the surgical knowledge which is allowed him, and which he actually possesses. He lacks, it is said, coolness of mind and self-possession; qualities which are imparted only by practice, but which, notwithstanding, some men are incapable of acquiring. I believe, however, that if M. Marjolin had had the good fortune to exercise his art in some establishment better known, as the Hôtel Dieu, or La Charité, for example, there would have been fewer doubts in regard to his operative skill. However it may be, if my evil star should oblige me to run the chances of what is called a fine operation, it is possible that I might prefer to see the ominous bistouri in the hands of some other than M. Marjolin, but also should I strongly desire to find him at the foot of my couch, ready to serve me with his head while others should serve me with their hands.

It is somewhat generally supposed that a surgeon must necessarily be a great operator, and these words are regarded as synonymous. But this is not altogether true. There are certain practitioners, very celebrated, and justly too, for their dexterity, to whom I would not willingly confide the treatment even of the simplest wound. It is more difficult to direct methodically, and with sagacity, the cure of an important surgical disease, than to manage with address any cutting instrument. The best surgeon is not he who executes most skillfully an operative manœuvre, but he who succeeds in rendering it unnecessary. M. Marjolin is one of the last, a circumstance which

ought not to put in doubt his manual dexterity, but which only shows that this professor is less distinguished as an operator than as a physician.

M. Marjolin has written but little. An excellent manual of Anatomy, composed after nature, in the dissecting room, and distinguished by its clear and methodical arrangement and its accurate descriptions; a thesis on various subjects of surgery and medicine, and a dissertation on the operation for strangulated inguinal hernia, are his principal works. This last is one of the best monographs that we possess on the malady of which it treats. We ought not to forget that M. Marjolin is one of the ablest conductors of the *Dictionary of Medicine*. He was associated with Roux, Cloquet, and Murat in the departments of surgical pathology and operations, and after the death of Béclard he had charge of the anatomical part of this work. All his articles show the hand of an excellent observer, an erudite, laborious writer, and an experienced practitioner.

Belongs to the Institute
Library of John. C. S. Monkur M.D.

M. RICHERAND.

It will soon be thirty years since M. Richerand, now first surgeon of the hospital of Saint-Louis, and professor of the Faculty, began to build up a name in France. Much may be accomplished in thirty years, especially in those sciences where time, well employed, is an indispensable auxiliary of genius. This celebrated physician, not illustrious as has been erroneously said, has had all the eclat, and been subject

Note.—Richerand, (Anthelme) was born at Belley, Feb. 4, 1779. He removed to Paris, to pursue the study of medicine, in 1796. In 1799, he was admitted to practice. In 1800, M. Richerand was appointed adjunct surgeon in chief to the hospital Saint-Louis; he became also major surgeon of the National Guard of Paris, and of the Departmental Guard. In 1807, he was called by the School of Medicine to the chair of surgical pathology, become vacant by the death of Lassus. He was chosen, in 1814, member of the Legion of Honor, and obtained, in 1815, letters of nobility with the title of chevalier. M. Richerand is now professor of surgical operations at the Faculty, first surgeon of the hospital Saint-Louis, member of the Academy of Medicine, and of many other learned societies at home and abroad.

to all the disadvantages of precocious talents. He promised much, and has accomplished little ; not because he has abandoned a career so well commenced by the prodigious success of his *New Elements of Physiology*, for far from this, he has not ceased, either by new works or the republication of old ones, to call upon himself the attention of a public the most indulgent, but perhaps also the most forgetful of Europe. It cannot be said, precisely, that his efforts have been lost, but it is still true that this physician finds himself in possession of a reputation altogether different from the one he seems to have sought. The author of the *Elements of Physiology*, of *Surgical Nosography*, of the *History of the recent progress of Surgery*, *&c*—works certainly well known, and whose sale is attested by numerous editions—the author, I say, of these scientific treatises is nowhere cited, either as physiologist or surgeon ; a fact incredible but positive ! M. Richerand is one of those men whose names are always pronounced with some of those exclamations of admiration, harmonious enough to the ear, but so vague and general, that they seem like the mere echo of a popular noise, and have no more signification than it. In effect, there are few who can give the reasons for his celebrity. Demand of a practitioner his opinion of the surgical writings of M. Richerand; he will answer you, that he writes very well. Question whoever you will on his skill as an operator; no reply. Interrogate one of the learned, or a lady, in regard to his *Physiology;* the former will tell you that the style is agreeable, the latter that the book is very amusing. As to the *History of Surgery*, opinions are somewhat more definite. Here, the interest of the matter swallows up

that of the manner. The historian has dealt with so many reputations, cited so many facts, and pronounced so many names, that the question of literary merit is stifled by the stirring up of so many personal interests, met at each page with a criticism, accused by the moderate of exaggeration and incorrectness, and by the more dissatisfied, of unfaithfulness, malevolence, injustice and partiality.

From what has been said, it may be seen that public opinion, without positively refusing to M. Richerand the talents and science of a practitioner, expressly allows to him only literary merit and the ability of a good writer. This eulogy cannot, in itself, be displeasing, but the sort of exclusion which accompanies it is unwelcome. It may be doubted whether M. Richerand would be perfectly satisfied with it. A physician, that is to say, member of a body essentially scientific ; surgeon of a vast hospital, a post which does not always prove the presence of ability, but which at least supposes it ; in possession of one of those chairs, which were formerly won by merit, but which are now bestowed by favor, he ought to give proof of knowledge, extended and capable of enlarging the boundaries of art. He ought to have striven for the approbation of the learned, rather than for that of literary men. In this case, to say that he had obtained only that of the last, would be reproach instead of praise. In this point of view, M. Richerand finds himself nearly in the same position with M. Alibert. The surgeon and the physician of Saint-Louis might furnish matter for a parallel. Like M. Alibert, M. Richerand writes much, and passes, equally, for an incomparable writer ; like him he aims at a high scien-

tific reputation, and like him, also, he has too zealous admirers.

Continuing the parallel to the end, shall we pass the same judgment on this last physician, that we have on the first? The examination of his principal works will decide the question. Let us say, simply, in anticipation, and to the advantage of M. Richerand, that he writes less and better; that his science, though less universally admired, is much more appreciable; that it may be proved he has rendered some services to his art, and that, finally, if his reputation is less extensive than that of his associate, it is most certainly established on a more solid basis.

The first edition of the *New Elements of Physiology* appeared in 1801; the ninth and last was published in 1825. Few books have met with an equal fortune. Its success has been genuine and well established, and we must look for the reasons in the utility and merit of the book itself and not elsewhere; for no other cause can account for such continued success. At the epoch of their first publication, the *Elements of Physiology* were truly *new*, in many respects. But just emerging from the stormy sea of our political struggles, the public attention was turning anew towards science and letters. During a long time, we had printed only the bulletins of our victories; the minds of men longed for a future of repose, and turned gladly towards peaceful and serious studies. The public, then, was well disposed, and the state of science was not less favorable. Physiology took birth at the school of Paris; the lessons of M. Chaussier had imparted a taste for it, in demonstrating its importance. The labors of Haller had already given it an experimental

march which gave promise, not of mere ingenious fancies, but of positive facts and practical results. Bichat had published his *Researches on Life and Death*, and his *Treatise on the Membranes*, both works of a vast and brilliant genius. His works, so original and rich in new ideas, at once astonished and delighted. Finally, this was the moment when Pinel, introducing philosophy into medicine, opened to the art of healing a new and brilliant prospect.

Under such auspicious circumstances appeared the work of M. Richerand. It was thankfully received, for the necessities of instruction demanded it. There then existed no treatise on the entire science of physiology, esteemed by students. The facts accumulated by the recent labors of learned Frenchmen and foreigners were sufficiently numerous to be brought together and systematically arranged. M. Richerand undertook this task, and successfully accomplished it. All that his book contained, both of fact and theory, had already been said, but everything was dispersed in a crowd of scattered memoirs, or in books difficult to be consulted. New beginners were unable to refer to these sources for information. M. Richerand presented them the science, already made, with a luminous method in the whole, an admirable clearness and precision in the details and in harmonious, flowing and elegant language. The book was in an eminent degree elementary. It is a model of its kind, with no tiresome digressions, with no ostentatious display of science or erudition, and characterized throughout by a simple and rapid exposition of the best established facts. Some critics have changed these qualities into defects; they have found the work superficial and in-

complete ; but they have not sufficiently considered that M. Richerand prepared his treatise, especially, for students altogether strangers to a science of which they hardly knew the name. It was necessary, then, for him to adapt himself to their capacities, and not to overwhelm them with difficulties. For this reason he contented himself with marking only the distinct outlines of the natural history of the functions, without going into more minute and more doubtful details; for this reason, also, he has not promulgated in his book, the results of his own researches, nor those points of doctrine, peculiar to himself, wishing to avoid matter for controversy in a work purely didactic.

This production, examined in this point of view, is exempt from the charge which has often been made of its being only an imperfect and mutilated compilation. If M. Richerand has borrowed his principal divisions from Bichat and Grimaud, and the greater part of his details from Haller, Bordeu, Barthez, Chaussier, and others, it is a matter of commendation rather than blame ; for how could he have done better ? and if he has never named his authorities, either among the living or the dead, is it not because their opinions were so easily identified in his book, that the precaution was unnecessary ? M. Chaussier should have remembered this, instead of showing his ill-humor, as he has somewhat *mal apropos* done, towards the author.

It seems to us evident, then, that M. Richerand made no pretensions to the title of a great physiologist. He wished, simply, to make a book useful to students and he succeeded. If, however, he had higher hopes, he deceived himself, for his book never has been and is now only an elementary treatise. At the time of its

appearance it was excellent; it needs now to be remade and the author himself ought to undertake this task. No physician in France possesses in a higher degree the art of illustrating, relating and explaining. The most complicated phenomenon in the grand circle of our organization is described by M. Richerand with a graphic clearness and order that enable the mind at once and distinctly to comprehend it. Herein, especially, consists the incontestable merit of the *Elements of Physiology*, and it is this character which has given them so durable a success, and which still bears up the book against the influence of its age. In vain, after twentyfive years and nine editions, does the work claim the appellation of *new;* it has grown old in almost all its parts. M. Richerand relies too much on the charm of his style. In order to place the work on a level with the actual state of science, it is not enough to add a few notes, and to erase a few lines. The author ought to recompose the whole on a more extensive plan; he ought to introduce into it what is wanting—a little more science—and to lop off what is needless, that is to say, superanuated errors and truths too generally familiar. Without this precaution, M. Richerand will soon see his book superseded by one more suitable to the times, and it is astonishing that this enterprise has not already been undertaken. We have in France but three other treatises on physiology. Although published subsequently to the *New Elements*, and very superior to them in a scientific point of view, they are read but little and have not deprived M. Richerand of his popularity. That of *Dumas*, overloaded with erudition and metaphysics, is not suitable for students, and the physicians of the school of Paris

dislike too much the reasoning and speculative philosophy of the Montpellier school, to resort to this work even for the many profound and excellent views which it contains. That of M. *Adelon*, very valuable, historically speaking, is badly written, destitute of criticism and much too long. The third is that of M. *Magendie*; but in this the personal opinions of the author occupy too much space, and far from being a summary of physiology, it is only an exposition of new ideas and ingenious experiments which are not yet verified and established. It is a book written solely for the learned. He supposes in his readers the actual possession of extensive knowledge. It is this absence of a work at once elementary and solid which has thus far preserved the popularity of the *New Elements*.

Two years had scarcely elapsed from the publication of the *New Elements*, when M. Richerand gave to the public his *Surgical Nosography*. The editions of this work have also been very numerous. It recommends itself to public favor by the same kind of merit and is marked by the same defects as the first. Beginners may learn something from it, practitioners almost nothing. The divisions, the clearness of exposition and the disposition of the subject have been generally praised, and these praises are merited, for M. Richerand understands admirably the art of making a book. He has the true talent of an artist; give him the ideas and he knows well how to make the most of them; furnish him with the materials and he will arrange and dispose of them better than any one else. His *Nosography* contains but little original matter. The substance of it is borrowed from the best practitioners of our times and especially from the old Acad-

emy of Surgery. I do not wish to carry this reproach too far, for these plagiarisms are unavoidable in science. Facts belong to the whole world, and when an operation is sanctioned by general usage, or a therapeutic process is adopted, every one is permitted to describe and recommend them. If we cannot require of an author that he should give us only what is new, and create, himself, an entire science, we ought at least to expect, that, rich in his own stores of knowledge, he should add something to the labors of his predecessors, and not content himself with the single quality of a good compiler. This reproach, thus modified, M. Richerand deserves, and the more justly, since for twenty years he has been professor of the school of Paris and at the head of a vast establishment. From his position and advantages, the public expect more from him than from others, and it is unfortunate that he has not been able better to satisfy these expectations. It results from this sterility, that his works, though read and re-read by everybody and enjoying the reputation of great and unquestionable usefulness, have not been able to guaranty to him a solid scientific reputation.

M. Richerand deserves another and more serious censure. He has the prominent defect of warm imaginations and popular talents; he is indolent and superficial. He speaks readily upon all subjects, but with great carelessness. He is not sufficiently desirous to keep pace with the progress of science. Thus, the editions of his works and particularly of the *Nosography* are mere re-impressions with no important alterations. He is not enough aware that books do not long continue new. Many things received as truths

at one period are rejected as errors at another, and an author who reprints his works, ought not to persist in repeating to his cotemporaries of today the same things that he said to his cotemporaries of the past. I know that it is difficult to forget what has been learned with so much labor, painful to acknowledge that we have been deceived, and more painful still to be always doomed to the benches of the school and to unceasing study; but this is the inevitable lot of all those who are occupied with science; there is no possible repose for the physician or the surgeon, and especially if he wishes to write successfully and appropriately on any branches of the art. These reflections are directly applicable to the *Nosography* of M. Richerand. The last editions resemble the first, and the actual state of science is thus but imperfectly represented. Among the methods of operating described in this work, many are now abandoned, others have undergone important modifications, and the author, though secretary of the Section of Surgery, and notwithstanding some pretensions to erudition, takes no notice of these changes. All these defects and many others to which I have not alluded, have been generally noticed by critics, and they are incurable.

Where then shall we look for the success of this work? I answer again, to the clearness of its divisions, the arrangement of its matter and the elegance of its style. Surgical operations are described with great talent; however numerous and complicated may be the manœuvres of an operation, whatever difficulty may attend the anatomical descriptions, M. Richerand accomplishes the whole with inimitable skill. We *see* what he describes

It was in the *Nosography*, that M. Richerand first established the three grand divisions of lesions ; *physical, organic* and *vital.* This division has been much admired, though it is not entirely satisfactory, and is far from accommodating itself to all the details of pathology. The author himself does not give it as perfect, but merely as less arbitrary than the divisions of other authors, and he is right. He considers diseases successively in each system and indicates the lesions, whether physical, vital or organic to which each organ is liable.

I have said that M. Richerand often makes his decisions with a carelessness and precipitation which expose him to many errors of fact and to contradictions that he ought to avoid. Independently of these defects of mind, M. Richerand appears to be of an irritable and passionate character. He praises today what he condemned yesterday, and proscribes at present what he formerly admired. He cannot sufficiently separate men from things, and he too often forgets that anger is a bad counsellor. Examples of these prejudices and these contradictions are not wanting in the *Nosography*, but I shall more particularly notice some instances in speaking of the *History of the progress of Surgery*, a work in which the author has abundantly accumulated them.

I think, after all these observations, that M. Richerand has accomplished as little for surgery as he has for physiology. In both these branches of medicine he has composed treatises, useful for those commencing the study of science, but from which the practitioner can derive but little instruction.

If I have thus far neglected to speak of the chief surgeon of the hospital of Saint-Louis in regard to surgical skill, it is because I know but little of the subject. No one doubts that M. Richerand has acquired, during his long practice, sufficient adroitness in the use of instruments suitably to execute the ordinary operations of surgery. There is a certain degree of dexterity to which all men can attain, if their situation gives them the assistance of considerable practical experience. This is less difficult than men of the world suppose. Nothing is more common than passable operators, for with two months' experience, a student may, on the dead body, disarticulate an arm like M. Lisfranc, and arrive at the bladder with the rapidity of M. Roux. It is not manual dexterity which is ordinarily wanting, but the self-possession which renders the hand sure and leaves the mind unembarrassed, and that surgical genius which is never disconcerted by sudden and unexpected occurrences. M. Richerand, notwithstanding his favorable position, has, I suspect, only the skill common to most other surgeons, and cannot, as an operator, rival in any manner the masters of the art, such as M. M. Dupuytren, Roux, Delpech, Lallemant and many others.

In defect of surgical genius, M. Richerand possesses boldness or rather temerity. He never shrinks from the most doubtful operations. There was much excitement a few years since in regard to his operation of the resection of the ribs and removal of a portion of cancerous lung. It was widely discussed in the journals and opinions were divided. The majority of critics, however, declared themselves opposed to the attempt. The patient recovered from the operation, but

died soon after from the reproduction of the cancer. Whatever censures may have been bestowed on M. Richerand in relation to this matter, it must justly be allowed that the operation succeeded, and that if the disease had not been kept up by an internal cause so formidable, there was every promise that the cure would have been complete and durable.

Such are the grounds of M. Richerand's reputation as physiologist and surgeon. If the preceding observations are just, the reader ought to have now a pretty correct notion of the professor's character. The examination of his last work, the *History of the recent progress of Surgery*, will show us the nature of his claim to the title of historian and critic.

This history, published in 1825, created a lively sensation, not that it is remarkable in a scientific point of view, but from altogether different causes. The medical public, already familiar with the writings of this professor, expected to find one species of merit, that of literary execution, and the fault so common in writers of cotemporary history, passion and partiality. In this instance the public has been deceived, for it has found the defect only and not the merit. M. Richerand in thus disappointing his readers in one respect, has liberally indemnified them in the other. He does not seem ever to have seriously attempted the composition of a *history*. This would be supposing in him too much inexperience and unskillfulness, seeing how poorly he has succeeded. A writer so well practiced could not be so ignorant of the fundamental rules of historical composition. We must believe, rather, that he has acted intentionally, and that it was with full knowledge of his purpose, that he has sinned,

in the language of the church, in thought, in action and in omission, as abler pens than my own have already shown.

Thus, he has sinned, and this is the proper word, for the hatred of our neighbor is a sin before God and before men; he has sinned, I say, in action, when he attributes to one surgeon what belongs to another, as has happened in regard to Desault and Anel for they were his countrymen, and also in regard to M. M. Roux, Dupuytren and Sanson, for they are now living; he sins by omission when, in citing a new method of operating, he suppresses the name of the inventor; when he passes in silence a multitude of works that reflect honor on our country, and with which, in his quality of Secretary of the Section of Surgery, he ought to be acquainted; he has sinned in thought from one end of his book to the other, by the irony of his praises, the injustice of his judgments and by his culpable and intentional concealments.

It is difficult to speak in cool blood of this work which has roused the indignation of so many critics. Happily, among so many blameable things there is much also which is ridiculous. For my own consolation and the refreshment of my readers, I shall cite some examples of this sort.

Among these, is his great fondness for England, a country that M. Richerand loves above all others.* It is to this passion, that the admirers of sentimental pathos and academical enthusiasm are indebted for the following magnificent apostrophe, so happily introduc-

* Probably because the Edinburgh Review has spoken of his operation on the ribs under the name of *Richerand's operation*.

ed by his consideration of the treatment of hydrocele by injection : 'I salute thee, classical land of liberty, of science and of philosophy ! the country of Harvey, of Locke and of Newton !—thou, who, formerly, in the midst of Europe prostrate before the absolute will and the good pleasure of kings, first exhibited the imposing spectacle of a compact sealed between the monarch and his people, and who, since that happy epoch, placed at the head of civilization, hast preceded all other nations in the progressive amelioration of our species ; so many times aspersed by servile tongues and venal pens, receive with favor the homage of a free and disinterested man !' A genuine Ciceronian period, truly ! and worthy the gratitude of the English, as is also the long note in which the author has explained and developed his motives. In this precious commentary of so precious a text, we may learn that love of country is only an odious egotism and the passion of a savage : it is here too that the Chevalier Richerand—insolent profanation!—has affixed to the great name of Napoleon the words *sycophant* and *miserable !* Yes, he has written it. Read at page 322 of his book, where the truth, says its author, has been scrupulously sought, and proclaimed with courage ; mark particularly the courage, and then read the fable of the sick lion ; it is one of the best of Lafontaine.

Let us notice, also, the complacency with which on every occasion he discourses of himself ; making us the confidants of his secret emotions ; continually talking of his profound conviction ; telling us, often and loudly, lest it should be forgotten, that he is impartial, the friend of truth, full of uprightness and integrity ;

forever reminding us, with the gravity which the subject merits, of his new method for the cure of varices, a method which is neither new nor useful; for fractures of the humerus, an invention known since the time of Hippocrates; for the removal of cancers from the lower lip, in which, with great genius, he has substituted curved scissors for the common bistoury, and reciting, finally, through ten pages, the history of his resection of the ribs, an operation which succeeded and which did not succeed, and which was performed by Percy twenty years ago.

M. Richerand has so much versatility of mind and such confidence in the charm of his diction, that he has endeavored, in his notes, to fling off the rules of regular composition and to descant, in passing, on all kinds of subjects. He has crowded into them every thing that remained in his portfolio; historical sketches, funeral orations, formal discourses, philosophical, literary and political digressions, and tirades against his cotemporaries. He passes

'From grave to gay, from pleasant to severe,'

and never wearies in his eloquence. Unfortunately, he succeeds but awkwardly in this difficult art of making a paradox with spirit and of rambling with grace.

But, for these matters of ridicule, we ought to be obliged to M. Richerand, since the smile which they provoke serves to temper the more serious feeling excited by the hostility of his criticisms. I pronounce the word hostility, because the thing exists. The formal politeness with which he envelopes his attacks, only increases the severity and pungency of their irony. Some of the criticisms of M. Richerand are well

founded, but the bitterness with which he expresses them prejudices his readers against him.

I shall notice only one of the many instances of departure from truth and candor into which passion often forces our historian. M. Dupuytren, however unwelcome the fact may be to M. Richerand, is a surgeon of the highest merit. Perhaps there is no one in France whose surgical skill and practical knowledge can be compared with his. His reputation is European. Nearly all competent judges agree on this point. M. Dupuytren, it is said, has enemies; I do not doubt it, but prudence and their own interest ought to teach them to be silent. They ought to see, if they are men of wisdom and sense, that M. Dupuytren is impregnable both from his position and superiority, and content themselves with suffering in silence. M. Richerand seems to question his claims to distinction, from mere spite; he has, apparently, particular reasons for depreciating the value of everything that M. Dupuytren has done, and as his name continually presents itself in the history of French surgery, occasions for speaking of him are not wanting. M. Richerand seizes them with great joy and dwells upon them with much satisfaction. According to him, this surgeon has neither invented nor improved anything. If he has exerted some influence on science it has been more injurious than useful, and his labors have retarded instead of advancing its progress. All these observations and insinuations are so destitute of foundation that a formal refutation of them is wholly superfluous. I do not think even, that M. Richerand imagines that any one will believe the truth of these accusations. He blames, to all appearance, for the mere pleasure

of blaming. I repeat it, there is consummate foolishness in denying the talents of M. Dupuytren; this is not his weak side. I must pursue this subject no farther, and simply add, in conclusion, that among the faults of M. Dupuytren, the historian has forgotten to notice the most prominent, that of his being chief surgeon of the Hôtel Dieu. M. Richerand is so prejudiced against the surgeons of this hospital, that he seems even to dislike Desault for having been one of them thirty years since, and he now denies that he ever possessed that genius which he formerly admired, and speaks of him as one who has most powerfully retarded the progress of surgery.

To resume in a few words our opinion of the *History of the recent progress of Surgery*, we should call it incomplete, inexact and unfaithful in its facts; partial and passionate in its criticism, and, in a literary point of view, pedantic, strained and unworthy of its author.

Although M. Richerand has exempted no one from the effects of his ill-humor; although he is not generally very liberal of his praises, except of himself, the English and the Scotch of the Edinburgh Review, I earnestly wish that I could have found less to censure in his writings. I should have desired even, if it had been possible, to recommend him as a great professor; but this would have been violating the truth. His lectures on physiology were formerly well attended, and they were distinguished, like his books, by their method and clearness. Those which he now gives on operative surgery cause us to regret the absence of his predecessor Lassus. They are neither so learned nor so well delivered. M. Richerand has a very laborious utterance, which the slightest agitation renders more

difficult. If he becomes ever so little animated, his enunciation is embarrassed, thus depriving his language of its principal charm. On the whole, he is a professor much like many others. It is even singular that he passes for one of the best among those who in the year of grace, 1828, find themselves occupying the chairs of Pinel, Sabatier, Dubois, &c.

Besides the works of which I have here endeavored as well as I was able to appreciate the merits, M. Richerand has published a volume in 8vo, on the *popular errors relative to medicine ;* the *Lessons of Pere Boyer on diseases of the bones;* many academical discourses, pamphlets, and a great number of memoirs and articles in the various literary and scientific journals. He is one of the conductors of the *Dictionary of the Medical Sciences.*

M. CIVIALE.

M. Civiale has recently attached his name to an admirable surgical operation, called *lithotrity*. Discoveries of this kind, though not always the result of superior genius, invariably render celebrated the names of their authors. 'Lithotrity is glorious for French surgery, honorable to its inventor and consoling to humanity,' say M. M. Chaussier and Percy, skillful and competent judges, after having seen the ingenious operator seize large calculi and break them down within the bladder. Such was the opinion of these worthy and learned men, distinctly expressed in a report to the Academy of Sciences. The greater part of the medical public agreed with them, and M. Civiale, supported by this decision, which was proclaimed before the Academy and countersigned by M. Cuvier, considered himself justified in claiming the merit of an invention useful to suffering men and honorable to himself and his country. There were critics, however, who, from some motives, disputed his title to the distinction which he honestly claimed. They said

that the process of destroying the stone in the bladder was not new, that it had been spoken of twenty years ago; and then, after having proved that he was not the inventor of his instruments, they attempted to show that the instruments themselves were detestable, and farther, that M. Civiale did not know how to use them. It was in vain that he cited more than forty cases in justification both of his skill and the value of his apparatus, thirty of which at least were decisive in his favor. These cases, according to his critics, proved nothing. Many of the patients, said they, are dead, and this result is attributable to the operation; others have had fever and suffered some pain, and a good lithotritic process ought to occasion neither; while some were affected with incurable irritations of the bladder, the consequence always of the instruments and not of the anterior presence of a calculus in the bladder during five or six years, &c, &c; while M. Civiale himself, more skillful in destroying stones than in defending his rights, knew not whom to listen to.

Happily for him, the Academy of Sciences thought differently from his critics. It did not appear to his learned friends in this institution that the assertions of his opponents were sufficiently well founded to rob him of his glory and his invention of its incontestable utility.* In effect, the only true proprietor of a surgical improvement is he who applies it successfully, all fine theoretical reasonings and the cavilling of chronologists to the contrary notwithstanding. It is with

* In June, 1826, the Academy of Sciences awarded to M. Civiale the sum of six thousand francs, and in June, 1827, the further sum of ten thousand francs (the Montyon prize,) for having first practised lithotrity with success.—AUTHOR.

a bad grace that the adversaries of M. Civiale dispute his right to this claim. As to priority of invention, it belongs no more to them than to M. Civiale. It is very certain that from the remotest antiquity, various methods of this kind have been proposed, that there exist even, some examples of success; but it is also as certain that all these attempts had long since been totally abandoned, and that the destruction of the stone in the bladder was considered a surgical impossibility. No one spoke of it, at least in public; and it is only since the experiments of M. Civiale, that lithotritic operators have appeared on every hand. As to his apparatus for operating, they are unreasonable who suspect its advantages, proved as they are by numerous and authenticated cures, and still more so in proposing, as better, others which have been employed in only two or three operations, and these unsuccessful.

The medical public has been shocked with this bitter polemic and I have thus referred to it, in speaking of M. Civiale, because it seemed to me proper that some one, uninterested in the controversy, should make himself the interpreter of public opinion. It is just that M. Civiale should be paid for his long continued labors, and that he should be rewarded for his exertions by the gratitude of the friends of humanity and the esteem of his cotemporaries.

In order to justify these commendations, it is necessary to give some account of the ingenious operation. M. Civiale did not accomplish at once and without difficulty his happy invention: science is not improved so easily. His first idea was to discover the means of destroying the stone in the bladder by the application of an appropriate solvent. This attempt was not

new, it having been repeatedly tried without success. Two difficulties always presented themselves ; the necessity of protecting the bladder against the action of the chemical agents destined to dissolve the stone, and the uncertainty in regard to the employment of the appropriate solvent from not knowing the chemical composition of the calculus to be destroyed. To overcome the first of these obstacles, M. Civiale invented a bag, which, enclosed in a straight tube, was to be introduced into the bladder ; it was then to open like a purse with clasps and enclose by a peculiar mechanism the stone. Re-agents were to be introduced through the tube to the sac thus containing the stone isolated from the coats of the bladder. The operation might have succeeded had it not been for one circumstance, which, when ascertained, proved to M. Civiale that he had, like his predecessors, lost his time and his trouble. He could find no substance, either in the animal, mineral or vegetable kingdoms, which, while it was sufficiently pliable and thin for his purpose, would at the same time resist the action of chemical agents directed against the calculus, and M. Thenard, whose opinion was but too well founded, informed him that he must abandon this project, and if his patience were not exhausted, seek some other means of accomplishing his designs. M. Civiale, still inflexible, was not discouraged. According to his first plan, even in supposing that he should succeed in the construction of the bag, it would be necessary to obtain, previous to the operation, some fragments of the calculus to be acted on. In order to procure this indispensable specimen, it was necessary to introduce into the bladder instruments strong enough to break the stone and so disposed

as not to injure the organ. Many facts laid down by authors and his own investigations of the structure of the urethra, induced M. Civiale to think that it would not be impossible to introduce into this canal tubes perfectly straight and having a calibre of four lines in diameter or more. Experiments on the dead body and on himself demonstrated the correctness of this opinion. He then invented two instruments, which were at first intended only to separate some small fragments of stone, thus serving merely as a preparatory step to the principal operation, consisting in the dissolution of the calculus by chemical agents.

These two instruments were constructed on the same principle. The second consisted of two metallic tubes, one within the other. At the extremity of the interior tube were six branches of elastic steel, slightly curved, and destined to embrace and secure the stone while it was operated on by the stylet or lithotriter, a steel instrument introduced into the bladder through the inner tube. This last, the inner extremity of which terminated in form of a trocar, was used to bore and break down the calculus.

It would seem that M. Civiale might have reflected that if he could succeed in obtaining a small fragment by means of this apparatus, there was nothing to hinder him from going further and destroying the entire stone in the same manner. He did not, however, attempt this till he was obliged to abandon his project of enclosing the stone in a sac and dissolving it with acids and alkalies.

Of the two instruments, the one which has been briefly described possessed many advantages over the other, both in regard to its solidity and the facility with

which it could be used. It is the same as M. Civiale now employs, though variously modified and improved. The six elastic branches are reduced to three, the lithotriter is terminated by a small head armed with teeth, &c. It is with this ingenious instrument that M. Civiale has been able, in ten or fifteen minutes, to reduce to powder a stone of ordinary size. The operation is truly admirable, both for its safety and its results. Whoever has seen, like myself, M. Civiale introduce with the utmost ease his instrument into the urethra, pass it with a single effort to the bladder, seize almost immediately the stone with his fingers of steel and apply to it his lithotriter, cannot but applaud this *chef-d'œuvre* of patience and of difficulty, overcome. The stylet once put in motion, a more or less dull sound is heard, announcing the action of the perforator on the calculus. At the end of two or three minutes, this sound becomes suddenly more obscure, and the practised hand of the operator feels that a portion of the stone is detached. The elastic branches are then drawn within the tube, holding as they approach each other, a more or less considerable quantity of detritus. The remainder is expelled with the urine. In a few minutes the operation is again commenced if the patient is not too much fatigued. Sometimes, if the stone is small and friable, it is entirely destroyed at one operation; but in the majority of cases it must be repeated several times.

The advantages of this operation are immense; the pain which it occasions is trifling, and the canal of the urethra, previously dilated by the use of sounds of different sizes, easily accommodates itself to the reception of the instrument. The patient, after the

operation, is not encumbered with dressings and bandages, and is commonly much relieved by the diminution of the calculus, and, especially, by his conviction of an approaching cure.

But its great value consists in its doing away, in a majority of cases, the necessity of lithotomy, an operation terrible to the imagination of patients, always attended with extreme suffering, and too often followed by death or incurable infirmities. It is true, that lithotrity is not always applicable. Calculi, which are encysted, sacculated, or of too large a volume, cannot be seized and ground to pieces; but in these cases, cystotomy, even, offers few chances of success. Besides, M. Civiale very correctly observes that most of these obstacles are encountered only because persons afflicted with stone, dismayed by the idea of lithotomy, always shrink from the operation, enduring for years the most violent pains rather than submit to it, and thus permitting the formation of calculi of enormous volume and variously complicated. These inconveniences would not exist if lithotrity were familiar to a great number of practitioners. Relying on the safety of the operation, patients would have recourse to it as soon as pain and the sound had detected the commencement of a calculous concretion, and the stones, while they were yet small and friable, and had not injured the constitution by their long continuance in the bladder, might be removed with the greatest facility.

It has been supposed that the use of straight sounds was impracticable ; but the contrary is proved by the testimony of many practitioners, ancient and modern, and among others by the celebrated Lieutaud, who expresses himself positively on this subject. Straight

catheters have even been found in Herculaneum. Their use, however, had become so generally proscribed or neglected, that M. Amussat obtained the credit of a discovery in demonstrating, very recently, that the structure of the urethra opposed no obstacles to the introduction of straight sounds. This objection then to lithotrity falls of itself. The large size of the instruments, the pain of the operation, the length of the treatment, its dangers and consequences, have furnished no better arguments.

The urethra is very dilatable, and, except where there is some peculiar conformation, it may be so enlarged in a few days as to receive, easily, tubes of three, four, and even five lines in diameter. The pain of the operation is slight, and if it cannot be entirely avoided, it furnishes no objection to lithotrity. Besides, it is most frequently the case that the pain is principally attributable to the irritation produced by the long continued presence of calculi in the bladder and to the consequent extreme nervous susceptibility, causes that would not exist if the operation were performed at the commencement of the disease. The treatment is not commonly very long, though it may be much protracted by various circumstances. This is certainly an evil ; but it seems to me, after all, that a calculous patient ought to esteem himself very fortunate if he can purchase the cessation of his sufferings, and perhaps his life by some efforts of patience, and that at the worst he had much better remain three months in the hands of the most dilatory lithotriter than two minutes under the bistoury of the most dexterous lithotomist.

The immediate dangers of the operation are illusory. It is said that the bladder may be pinched, wounded, &c. It is true that this may happen if the instruments are imperfect or the operator unskillful; but the same inconveniences exist in regard to all surgical operations. The skill of the operator is always supposed. The most simple operation, venesection, for example, may be followed by the most serious consequences and even by death from the awkwardness of an ignorant practitioner.

The more remote dangers, such as chronic inflammation of the bladder or urethra, the continuance of some fragments of stone not triturated, &c, are presumptions which have not been verified by experience. No one of the patients treated by M. Civiale has exhibited severe symptoms, either local or general, in consequence of the operation, and in many, since dead, examination has proved the cause of death to have been altogether independent of the operation, and that the bladder contained no fragments of stone.

After these considerations, we cannot but desire that lithotrity should obtain the attention of practitioners, and we must applaud the Academy of Sciences for having, as far as possible, encouraged and rewarded the labors of its author.

The operating instruments have been variously modified by M. M. Leroy, Heurteloup, Amussat and Meirieux, but experience has not established the value of these alterations. It appears that the operation of lithotrity, notwithstanding its apparent simplicity, is attended with many difficulties, and that repeated trials on the dead body and great skill in the manipulation of the several pieces of the operating apparatus are

necessary in order to succeed in it. M. Dupuytren, whose surgical dexterity is so justly celebrated, failed in an attempt lately made at the Hotel Dieu.

The results obtained by M. Civiale from the time of his first operation in 1823 to 1827, have been highly satisfactory. Out of fortythree patients on whom he has operated, fortytwo have been cured—of their calculi, let it be understood, not of all their diseases present and to come, as M. Heurteloup seems to desire. Several have since died and examination has proved the safety of the *Civiale process.*

Time will at length solve the doubts which prejudice and unsuccessful efforts have created in regard to lithotrity. The discovery is yet in its infancy, but like everything of positive utility, it will be matured, perfected and generally adopted. We have every reason to believe that M. Civiale will see, daily augmenting, the esteem and the gratitude which he has received from his fellow citizens and which is justly due to him from every friend of science and humanity.

[Since the foregoing article was written, the excitement created in the medical public by M. Civiale's operation, has in no degree subsided. It has been gradually advancing in favor, as it has become better understood, and as more extensive trials have confirmed its utility. During the early and violent controversy between its advocates and opponents, both parties becoming ultra and excited, went too far in their extravagant assertions. Its friends overrated its importance, great as this unquestionably is, and its enemies opposed it with unreasonable violence. The public has been disposed to decide in favor of those who adduce facts in support of its value and successful application, rather than with such as, from various motives, have resorted to speculation and abuse in decrying it. The precise limits within which litho-

trity is applicable have been better defined, and the requisites for success and the causes of failure ascertained and pointed out. The necessary consequence is, that disappointment will be less common, and confidence in the operation will be increased.

It appears to be pretty well established, that in simple cases, where the disease is recent, the calculies small, the urinary organs and the general health unimpaired, the operation is safe and expeditious, attended with certain success and with little or no pain. The patients suffer no confinement during the treatment and are frequently cured by one application of the instruments. When the disease has existed long enough to occasion irritability of the bladder and to produce commencing organic alterations, there is more difficulty; but even when there is considerable organic mischief, such as catarrh of the bladder, excessive irritability, enlarged prostate, &c, lithotrity will often succeed. But these cases require great care and caution in its application, and previous attention to the general health and to the local complications. Finally, when the calculi are numerous and very large, the urinary apparatus extensively diseased and the general health destroyed, the operation is inadmissible.

The Academy of Sciences awarded the Montyon prize, (five thousand francs) to Baron Heurteloup for his improvement in lithontriptors, and a medal of one thousand francs value to Dr Gruithuisen for first proposing the plan of breaking down the stone in the bladder. Various other modifications have lately been made in the construction of lithontriptic instruments, among which we mention those of M. Rigal and of M. Zanabi Pecchioli, a young surgeon of Tuscany.

On reviewing dispassionately the entire subject, it seems to us certain that lithotrity will eventually be generally adopted. As a knowledge of its advantages becomes more universally diffused, it will be resorted to in the early and simple stages of the disease, and the difficulties which it now has to encounter will gradually be removed. The question of general success or failure in this operation is one of immense importance. Lithotomy is a common and one of the most terrible operations in surgery. Its results even in regard to life are always doubtful, and we know from personal observation that the operation, a few years since, in some of the great hospitals of Paris, when done by the most skillful and distinguished surgeons, was deplorably unsuccessful. The ques-

tion which lithotrity is to settle is, whether the great number of lives annually lost by lithotomy, are to be saved, and the vast amount of suffering occasioned both by the disease itself and its usual frightful remedy to be avoided. We cannot but believe that the invention of M. Civiale is yet destined to accomplish all that its most enthusiastic friends and advocates have hoped, and that a high and permanent rank among the benefactors of his species will one day be awarded him.

The operation has already been successfully applied in more than two hundred cases. Sir Astley Cooper, on lately witnessing the operation performed by M. Castello, formerly the associate of M. Civiale, exclaimed, 'Really, gentlemen, this appears to me quite extraordinary; it is unquestionably the most valuable improvement of modern surgery.'—*Trans.*

THE END.

Read this book
March, 1849.
J. C. S. M.