blindness ; and if the dose be unduly large, there is a sense of impending death ; sometimes slight delirium, and a want of power to execute what the will directs, but without any loss of consciousness ; no hypnotic effect is produced, but by inducing serenity or deadening pain, it may predispose to sleep." And again, when speaking of it in doses adequate to occasion death ; " there is a perfect possession of the mental faculties, and no tendency to stupor or drowsiness."

From my own observations, I would thus sum up the most remarkable symptoms, as exhibited by animals : weakness, staggering, gradually increasing insensibility of the surface, slowly increasing weakness of the voluntary muscles, ending perhaps in paralysis, great languor of pulse, more or less blindness, and convulsive twitchings before death.

ART. IV.—*Rare Cases, with Observations.* By L. BYRON, M. D., Surgeon of the County of Meath Infirmary, &c. &c.

THE singularity of a case may be a good reason for its publication ; but its importance is a better ; and, in general, the greater the singularity, the less its importance.

This axiom is, in a general sense, most true in reference to subjects connected with the healing art ; yet facts are not wanting which, although they be extremely singular, are nevertheless of high practical value.

The following cases will, it is hoped, prove the truth of the foregoing rule, and also afford me an opportunity of performing the pleasing duty of giving publicity to certain isolated facts of a practical nature, which I find interspersed through my case-books.

The arrangement here adopted, that of separate Essays, seems best adapted to my design ; and it is my present intention, under Providence, thus to prosecute the arrangement of those miscellaneous cases, as opportunity may be afforded me.

PULMONARY APOPLEXY.*

It is generally supposed that some organic change, antecedent or co-existent—some lesion or change of place or form in the lungs themselves, the heart, liver, or some more remote organ or tissue, can always be traced as giving rise to discharges of blood from the air-passages; or, if such causes be not discoverable, those appearances are said to be vicarious of other evacuations or discharges; or they arise from certain specific actions.

This opinion is undoubtedly true in a general sense, and opens a field of inquiry, extensive as it is important, and deserving the further cultivation of those who have the ability and the opportunity of doing so *practically*: but blood is sometimes poured into or expelled from the pulmonary apparatus, independent of any appreciable organic change, action, or sympathy, such as I have referred to, or having been so induced, persists after the withdrawal of such causes.

The terms pulmonary apoplexy; hæmoptysis, bronchial hæmorrhage, are too often used as synonymous terms.—The distinction *quoad* the first term, is well marked in the following description of that affection by Andral:†—"There is yet," he says, "another species of hyperæmia of the lung,

* The term Apoplexia, from *αποπληττω*, *percutio*, was employed by the Greeks, and is still used to denote a disease in which the patient falls to the ground, often suddenly, and lies without sense or voluntary motion. Persons instantaneously thus affected, as if struck by lightning, were by the ancients denominated *attoniti*, *siderati*.

Apoplexia Pulmonalis, a term first used by Laennec, differs materially from the foregoing, which had reference to cerebral apoplexy only; here, for example, the terms "percutio" and "attoniti" are inappropriate, as individuals struck with apoplexy of the lungs never "fall suddenly to the ground without sense or voluntary motion."

An anatomico-physiological consideration of the brain and pulmonary apparatuses, together with a just appreciation of their relative offices, sensibilities, and functions, will explain the differences here referred to.

† Path. Anat. by Townsend, vol. ii. p. 516.

in which the blood, instead of accumulating in the parietes of the bronchia and air-cells, escapes from its vessels, ruptures their parietes, and is collected into a clot in a cavity formed for itself in the parenchymatous substance of the lung."

The opinion of Louis may be referred to as expressing the sentiments of the best informed men on the subject of hæmoptysis. He thus expresses himself :—" I am well aware that Broussais did not confine himself to denying that hæmoptysis was the effect, or denoted as a matter infinitely probable the existence of pulmonary tubercles, but that, in his opinion, a multitude of causes besides tuberculization might bring on hæmoptysis, and that Laennec, in making pulmonary apoplexy the cause of hæmoptysis of any severity, had been much more correct than myself.

"But this assertion on the part of the illustrious inventor of auscultation is an erroneous one, for pulmonary apoplexy is frequently met with in the bodies of individuals who have had no hæmoptysis during life, and the converse is not less common. I may add that pulmonary apoplexy was very frequently found in the bodies of those carried off by the epidemic yellow fever of Gibraltar in 1828, whereas not a single individual (I obtained most accurate information on the subject) had had hæmoptysis at the time. Again, I have very often, during the last fifteen years, had occasion to observe phthisical patients, while actually suffering under severe hæmoptysis, or very shortly after, and in no case did I discover the symptoms pointed out by Laennec, as those of pulmonary apoplexy.

"Unless then, we determine to set aside altogether the evidence of facts, it is impossible, as it appears to me, not to admit, that with a few, unfortunately too rare exceptions, hæmoptysis, when at all severe, denotes tuberculous disease of the lungs."*

* Louis on Phthisis, 2nd ed., p. 168.

And again: "so that, unless extremely attentive and repeated examinations of the upper portion of the chest, by means of auscultation and percussion, have proved the absence of tuberculization in individuals who have had hæmoptysis, without subsequent symptoms, for a *series of years*, these cases afford no satisfactory proof that hæmoptysis may occur independent of pulmonary tubercles.

Besides analogy is here, for once at least, in accordance with observation, for when hæmorrhage occurs in an organ more or less deeply placed in the frame, it is almost invariably the signal of some radical alteration of its structure."*

Bronchial hæmorrhage usually occurs below the bifurcation of the trachea, where the subdivisions of that tube are of considerable size; seldom from the trachea between the larynx and the bifurcation; less frequently from the vesicular and parenchymatous portions; and I am not aware of any *large* discharges of blood from the mucous surface of the larynx, unless produced by wounds or ulceration of that membrane.†

Acute bronchitis, by whatever cause occasioned, seems to act as a bar to large hæmorrhages from those mucous surfaces. We find an admirable illustration of this and the foregoing facts in the case of foreign bodies, accidentally received into the trachea and bronchi. From thirty-four such cases, now before me, comprising, if not all, certainly the great majority of such accidents hitherto placed upon record, but five examples are afforded, where blood to any considerable amount was poured out, and in each of those cases the cause was apparent, namely, an abraded or wounded blood-vessel. The cases here referred to are as follows, viz.:

* Op. Cit., p. 169.

† This proposition is established by the entire history of laryngea, first explained in a scientific manner by Drs. Farre, Laurence, and Percival (Med. Ch. Trans., vol. iii. art. 6 and 19; also vol. iv. art. 16; and vol. viii. same Trans., p. 221); and subsequently by various authors, the most distinguished of whom are Laennec, Broussais, Bretonneau, Louis, Andral, Carswell, Porter.

1st. Louis' case.—The foreign body, sharp piece of a veal bone.*

2nd. Langlet's case.—The foreign body, a sharp piece of bone.†

3rd. Holman's case.—A fragment of bone three-quarters of an inch long.‡

4th. Howship's case.—The foreign body an iron nail.§

5th. Sue's case.—The foreign body, a portion of the vertebral column of a pigeon.||

The Greek and Arabian physicians made use of the same therapeutic agents as we do; indeed it might be confessed that but little progress has been made in modern times, in the treatment of hæmoptysis, and that this progress has reference *chiefly* to the more appropriate use of the means which were known to the ancients as well as the moderns. If we except the use of ligatures to the limbs and the hæmatite, or blood-stone, there is no part of the treatment recommended by the Greeks that may not be applied with advantage, and is not now in use for this complaint.¶

But whence arises the difficulty of diagnosis and consequent uncertainty in the application of remedial agents, so apparent at the present day in this, one of the most common varieties of hæmorrhage? The unbounded extent of the subject will answer the inquiry; presenting, as it does, a list of cases which seem to bid defiance to arrangement, as they undoubtedly do to analysis.

* Mem. de l'Academie de Chirurgie.

† Mem. de l'Acad. de Ch., tom. v.

‡ London Med. Journal, vol. iii.

§ Practical Observations on Surgery, &c., London, 1816.

|| Mem. de l'Acad. Royal de Ch., tom. v. p. 535.

¶ Ligatures to the extremities, or compression of the abdominal or ascending venæ cavæ, may be found of temporary use in the relief of certain cases of hæmoptysis, arising from a congested state of the venous circulation. I am not aware that they are often used.

In order to be more intelligible, I shall glance at some of the most obvious causes of pulmonary apoplexy, and divide them into physical or automatic, and moral or specific.

The former admits of illustration by referring to the very extensive vesicular surface to which the blood is circulated, for the purpose of undergoing the requisite changes during respiration; to the delicate conformation of the capillaries; to the liability of the lungs to congestions from obstructions of the veins, and of the circulation through the heart; from tubercular and other lesions of the substance of the lungs, and to the liability of this organ to derangements of its circulation from various lesions of remote organs, as the liver, spleen, pancreas, &c.; and from obstructions of blood-vessels.

Under the latter head, "moral and specific," I arrange the various diseased conditions of the blood, as in fever, measles, scarlatina, gout, rheumatism, &c.; the various sympathies, proximate and remote; and lastly, the passions and other secret operations of the mind, most of which remain as much hidden from our view, as they were from Socrates and Plato, who, no doubt, were as sanguine in their hopes of success on this subject, as are Müller or Liebeg, at the present day, in their microscopical and chemical examinations of the blood, &c.

In the present state of our knowledge on those subjects, the observation of M. Voltaire applies with peculiar force:—"We cannot," says he, "take a single step towards arriving at the slightest knowledge of the cause of life and thought. These questions appear sublime: what are they? The questions of the blind, who ask of others equally blind, what is light?"* Thus are the causes of pulmonary apoplexy, like

* "Nous n'avons point le moindre digne, ou nous puissions poser le pied, pour arriver à la plus légère connaissance de ce qui nous fait naître et de ce qui nous fait penser.

"Ces questions paraissent sublimes, qui sont elles? Des questions d'aveugles qui disent à d'autres aveugles, qu'est ce que la lumière?"—*Dictionnaire Philosophique*.

apoplexy of the head, heart, or spinal sheath, to be received under two great heads, namely, physical or automatic, and moral or nervous.

Admitting the causes above referred to as alone possessing a modifying influence; and that every possible case admitted of accurate diagnostic demonstration, still the appropriate application of therapeutic agents would be a task of no easy acquirement. But if we view the subject as it really stands—a host of physical causes, not well understood nor accurately diagnosed, more or less under the influence of moral or nervous agencies, of which we are totally ignorant, but by a few of their *operations or results*, how immense a subject does this appear!

A patient inductive analysis of those “operations or results” has, however, done something, and, it is hoped, will do much more towards dispelling the cloud of ignorance which overshadows this interesting and highly important subject.

Having, not unfrequently, met with examples of pulmonary apoplexy, which seemed not at all under the influence of any of the above-named physical causes; were not vicarious of other natural or acquired discharges; nor of the “specific” character referred to, and yet possessed the rare feature of being, for the most part, curable, I claim for them, in accordance with my *text*, the character of rarity, and for the sake of perspicuity, have arranged them under the four following heads:—Sthenic, Asthenic, Simple Congestive, and Cataleptic.

STHENIC PULMONARY APOPLEXY.

This form of apoplexy of the lungs is of such frequent occurrence, especially with young subjects, as scarcely to entitle it to be regarded as a rare affection. Stoll and Portal mention this species, which they consider as symptomatic of dentition or worms :* Billard thus speaks of it: “This is of

* Portal, p. 62.

more common occurrence in new-born children than in adults or old people."* It is also well described by Gendrin and M. Bonellard.† M. Denis has also mentioned it in his work.

As pleuritis is rarely combined with pneumonia or congestion of the lungs in children, and blood is rarely expectorated by them, great caution is necessary in frequently exploring their chests in all suspicious cases.

The following affords a good example of sthenic pulmonary apoplexy in an adult:

A gentleman, æt. 27 years, of sanguineous temperament, fair complexion, and light hair; distinguished for his muscular prowess, and proud of excelling in gymnastic exercises, addicted also to luxuriant living and occasional excess in vinous potations, awoke about one hour after going to bed, on the night of the 15th of August, 1837, finding his mouth full of blood; about four ounces of which, fluid and partly mixed with air, was thrown up, with little or no exertion, during the night. In this state I found him early the following morning; his countenance was pale, apparently from alarm; his skin hot; pulse 85, regular, but full; felt perfectly well, with a sense of heat only in his chest, which sounded on percussion clear in every part; and auscultation elicited a mucous ronchus only towards the right side of his sternum. A *full* bleeding was taken from his arm; his bowels were opened; a blister laid upon his chest; Acet. Plumbi, two grains for a dose, with four of P. Ipecac. Comp., three times daily; the temperature of his room was reduced; his head and shoulders elevated, and he was ordered cold acidulated drinks; and he had a strict injunction to refrain from speaking, or using any bodily exertion.

The following day the temperature of his skin had come down to the normal standard; his pulse had lost its fulness, and in all respects he seemed progressing to perfect reco-

* Billard, translated by James Steward, M. D., p. 387.

† Archives Generales de Med., 1826.

very, when on the sixth day he attempted to walk in the open air, and a return of the hæmoptysis took place. About two ounces of blood were discharged as before, followed by portions of coagula, bearing the impress of the bronchial tubes in which they had been retained.

A second full bleeding from his arm, followed by a strict observance of the foregoing rules, seemed to subdue the complaint, so as at the end of five weeks from the first seizure, he was able to take moderate carriage exercise, having had no subsequent discharge of blood, unless coagula, which came off from time to time. Occasional small bleedings were ordered, from six to eight or ten ounces, every fortnight, followed by a small blister. His chest was repeatedly explored, but no abnormal sound elicited, beyond the ronchus already referred to, and that went off when the expectoration ceased. The blood, when drawn, always bore marks of inflammation; was ordered to live low, and avoid violent exertions of every kind.

Six months afterwards he appeared perfectly well, so much so, he then returned to his former habits of living, and soon after, little more than ten months from the date of the first illness, a fresh attack came on, and in an aggravated form. He was, as on the former occasion, awakened at night, finding blood in his month; several ounces of which were thrown up in quick succession, so much so his friends were for some time apprehensive he would be suffocated. I found him in this state, his countenance pale; extremities cold, pulse feeble, but distinct and regular, at 80 in a minute.

Having equallized the circulation, a small bleeding was taken from his arm, and the treatment adopted on the former occasion repeated, with the addition of ice to his chest. The most careful exploration of his chest could elicit no abnormal sound, in addition to the ronchus, like that of mucus, but which evidently arose, in this instance, from blood in the bronchi of his right lung.

In two months from the date of this second attack, he was again in apparent good health, which did not forsake him for fourteen months, when he was again seized as before, in consequence, it was believed, of irregularity in his mode of life. A large quantity, fully twelve ounces, of blood was now coughed up within the first hour. I found him two hours after the seizure, gasping for breath; the pulse at his wrist was indistinct and scarcely perceivable; from this state he gradually emerged within two hours; the hæmoptysis had nearly ceased, but the dyspnœa was very great; he also experienced a sense of heat extending from the epigastrium upwards to his throat; his chest was dull on percussion over the mammary and hypochondriac regions, on the right side; and the respiration was here null, for a corresponding extent; the infra-clavicular sounds are clear on both sides of his chest, but there is a mucous ronchus with puerile respiration in both these situations.

Every effort was made to relieve the embarrassment of his chest, first by depletion to the utmost extent that could be borne; by balancing the circulation; by derivatives and revulsives; by an emetic, but one could be borne; and lastly by mercury, promptly and vigorously given. From this period to the hour of his death, which took place on the evening of the third day, but little blood was expectorated; the dulness on percussion, however, progressively advanced, first to the superior lobe of his right lung, and subsequently, to the left side of his chest. He died asphyxiated.

Autopsy.—The right bronchi are nearly filled with blood, partly coagulated; the entire lung, except a small portion of the superior lobe, is dark coloured, solid, but brittle to the feel; the fingers pass easily into its substance; the middle lobe presents a ragged excavation, filled partly with fluid and partly with coagulated blood, intermixed with portions of the engorged and lacerated pulmonary tissue.

The left bronchi were partly filled with blood, for the most

part thin and frothy; holding, as it were, portions of coagula suspended therein; the lung itself is highly vascular, but no rupture nor interlobular effusion seemed to exist in it. All the viscera of his chest were perfectly sound, and there was no reason for suspecting any remote organ.

Many cases of recovery from this form of pulmonary apoplexy might here be given, but the recital of them would be but the echo of what has been already written on the subject. Large bleedings in the first instance, with purgatives, blisters, probably emetics,* and other suitable revulsives and derivatives; also rest and the antiphlogistic treatment, comprise the leading indications in those cases. Should dullness remain in any portion of lung, whether it be from inflammation, pneumonia, simple congestion, or effusion, mercury holds out the fairest prospect of cure.

ASTHENIC PULMONARY APOPLEXY.

This affection, arising from enfeeblement of the system, affords one of the several examples, in which the want of due determination of blood extends within the limits of disease, and however paradoxical the coexistence of two states, fulness and debility, thus apparently opposite, may seem, as

* The propriety of using emetics in apoplexy has been a contested point since the practice was first proposed by Aretæus. Sydenham, Fothergill, Pitcairne, Kirkland, Salle, and others, recommend the practice, whilst Forestus, Cullen, Cheyne, and many others, forbid it. I think, with Cullen, it is an "*anceps remedium*," and should be used as such, in cases like the foregoing, after bleeding and the other remedies seemed to fail. If emetic medicines be at all useful, they are most suitable here, both from their sedative and diaphoretic action. Louis (Op. Cit. p. 552) uses these remarkable words: "But the danger is extreme, and the treatment called rational has failed; why then, should we not in so critical a conjuncture—when it is impossible to expect anything from the efforts of nature or art—why should we not have recourse to a system of treatment, which has sometimes been successfully employed, and consequently carries with it some chance of safety?"

a source of mischief, the fact is undeniable, and the result, if not counteracted, most disastrous. Of this description is that form of pulmonary apoplexy already alluded to, arising in the latter stages of yellow fever;* of this description is that form of the affection arising in the low typhus fever of this country, better known under the denomination of typhoid pneumonia, a term lately adopted without due consideration;† of this kind too are those local congestions

* Louis, *Op. Cit.*

† By referring to the pathological condition of the lungs, under this misnamed pneumonia, what do we find? not, as the term pneumonia properly implies, an actively morbid state of the vessels and nerves supplying the part, tending to change of structure, gray hepatization, and to disorganization. We find a congested state of the vessels and tissues, with, perhaps, a rupture of their parietes, pulmonary apoplexy; we find an altered condition of the blood; and probably an adhesive semisanguineous exudation upon the bronchial mucous surfaces, the result of imbibition.

Inflammation of a lung, pneumonia more or less genuine in proportion to the powers of life possessed by the patient, may, and no doubt does, take place in the milder or less grave forms of what is called typhoid fever; but the term pneumonia, or inflammation, is, for the most part, misapplied to what is called typhoid pneumonia, arising in the lower form of typhoid fever, adynamic fever, asthenic fever, *fièvre typhoid*, *chomel*, *nervous ataxique*, *der typhus nerven fieber* germ, &c., &c., &c. Here congestion, not inflammation, is the actual condition of the lung. This state of the lung is well described by Dr. Copeland, see *Med. Dict.*, p. 1003, in the following words: "The bronchial surface is the part chiefly affected, and is rather congested than inflamed. The pleura is rarely attacked; but the substance of the lungs is sometimes implicated, and it then commonly becomes rapidly infiltrated or condensed, a fatal result quickly supervenes. This complication is often obscure, or even latent; but it generally admits of detection by auscultation, or by attentive observation alone. The patient some times complains of stricture, oppression, or dyspnoea, but very seldom of pain in the chest. The respiration is short and hurried; is attended by the mucous rattle, and with more or less cough. The skin is seldom hot; at a later period it is cool, or even cold in the extremities, and dusky or lurid; the cheek is tinged with a dark red, and often assumes a lurid or purplish hue; the pulse is rapid and weak, &c. This state may continue for several days, with unconscious evacuations, and all the nervous symptoms prominently marked; at last the pa-

occasioned by inanition or excessive sanguineous depletion,* and other discharges from the bowels, uterus, or bronchi.

Pulmonary apoplexy, apart from any of the abovenamed physical causes, may, no doubt, occur under an infinite variety of combinations, and at any period or stage, from the purely sthenic to the asthenic, now under consideration. As an intermediate link in this extended chain of events, I would refer to a case given by that excellent man and good physician, the late Dr. John Cheyne. I make no apology for transcribing it.*

"The first tendency to hæmoptysis experienced by —, now a clergyman in the Established Church, appeared when he was about the age of fifteen, in the year 1807. From that period to the year 1823 he continued subject to several attacks of bleeding annually, but of so slight a nature as not to affect his general health, or interfere with his professional avocations.

"In the month of May, 1823, however, he experienced an attack so serious, and attended by so alarming symptoms, that, under medical advice, he was bled to the amount of twenty ounces, and took for several successive days (with a view of lowering the circulation) frequent doses of a nauseating mixture, which reduced the pulse, and, for a time, checked the bleeding from his lungs. But the complaint returning,

the patient sinks asphyxiated, the changes necessary to life ceasing to take place in the blood sent to the lungs."

This form of apoplexy is forcibly alluded to by the late Dr. Parry of Bath (*Elements of Pathology and Therapeutics*), in the following words: "Less quickly, but not less certainly fatal, is that gradual process of hæmorrhage which occasionally takes place from the nose, the stomach, the hæmorrhoidal, or uterine vessels, from which the patient dies with an accumulation of blood about the heart and lungs." In later times Majendie seems to merit the honour of being the foremost amongst those who, by their too oft repeated vivisections established this fact beyond the possibility of doubt.

* Dublin Hospital Reports, vol. v. p. 351.

and great debility coming on, he was obliged to absent himself from professional duties.

“To the hæmoptysis were now added total loss of appetite, and derangement of stomach, so that the food was rejected almost as soon as swallowed. In this state he continued for about five months, when, being advised to spend the winter on the Continent, he left Ireland, October, 1823, and proceeded to Nice, where he arrived early in December.

“An issue was inserted in his arm ; his health very much improved, but every morning he expectorated a little blood, or mucus tinged with blood. In a few days after his arrival at Nice, he was again attacked with bleeding from the lungs, and extreme difficulty of breathing, so that for several nights he was unable to lie down ; but upon changing his residence from the north to the south of the town, the asthmatic affection immediately ceased.

“The hæmoptysis also was in some degree checked, but the derangement of stomach, and expectoration of bloody mucus, still continued. At Rome, where he passed the months of March and April, 1824, and subsequently at Geneva, during the summer, he was subject to frequent returns of the complaint, occasionally so severe as to call for large bleedings from his arm, and other active treatment. In November he returned to Ireland, Dublin, and during the winter the complaint increased in violence, and became much more frequent in its returns.

“The constant recurrence of these attacks produced great emaciation, and at length such a degree of weakness, that he was unable to walk across the room without assistance.

“In this state of extreme debility he remained in February, 1825, when, every thing else having failed, it was suggested to try small bleedings from the arm at stated periods. For some months previous to the application of this remedy,

he had daily at least three, and frequently four attacks of hæmoptysis. About the middle of February, immediately after an attack, six ounces of blood were taken from the arm. For three days after he had no attack, and on the fourth a slight one, after which six ounces of blood were again taken. No attack for ten days. The attacks now gradually became less and less frequent, but every week six ounces of blood were taken from the arm. In the beginning of May he went to the country, with directions to continue the stated bleedings, which he did regularly every week, using the lancet himself, and thus being enabled at once to check an attack. The blood was invariably much cupped and buffed; the complaint gradually subsided; health and strength slowly returned. During the whole of the ensuing winter he was able to take exercise in the open air, without suffering from cold.

“In the month of June, 1826, he again entered upon the duties of his profession, from which he has never since been obliged to absent himself, and, with the exception of an occasional attack, which occurs generally in the spring and autumn, and is invariably checked by the lancet, he is now, 1830, in as good health as he has ever been at any period of his life.”

Although this case wants the satisfactory, and perhaps additional light which auscultation, not then generally practised in Ireland, might have shed upon it, still it possesses the interesting features of an extremely severe form of pulmonary hæmorrhage of the sthenic kind at first, lapsing into the asthenic, increasing in intensity as it advanced, and presenting a beautiful illustration of increased nervous susceptibility; itself, at first a consequence, being converted into a cause. Dr. Cheyne thus comments upon the state of nervous irritability present during the latter (asthenic) stages of the foregoing case.

“A very slight cause would often produce sanguineous

expectoration. When I drove up to this gentleman's lodgings, the flurry produced by a medical visit invariably caused a slight hæmoptie attack, insomuch that I found it necessary to leave my carriage in an adjoining street, give only a single knock at the door, and slip into his room without noise."* It is impossible not to be struck with the analogy to the act of blushing observable in this case; and how confirmatory does it seem of the hæmorrhage being, in this instance, an issue from the capillary system of the lungs!

The result here justified the means, and stands a beacon to guide us in similar cases; but here too rests the danger of applying a particular remedy or line of treatment to all cases of hæmoptysis. I know no words sufficiently strong to express my condemnation of this too prevalent practice.

Dr. Cheyne believed hæmoptysis to be generally but a symptom of phthisis, and laboured under the delusion that small bleedings frequently repeated had the power of assisting or curing the latter disease.†

* Op. Cit., pp. 354-5.

† The study of phthisis under the present point of view, that of its curability, has, as yet, made but very little progress. "In the cases of cure," says Louis, p. 475, "hitherto known, the morbid state has always been very limited in extent, and this limitation has not been the result of any circumstance which, although fortuitous, was still appreciable, and hence more or less easily producible at will in other cases; but the effect, no doubt, of circumstances peculiar to each individual case. The nature of these circumstances is at the present hour utterly unknown, and to the steady investigation of them, medical observers should sedulously apply themselves." Those who, like Cheyne, Broussais, and others, believe phthisis to be of inflammatory origin, imagine they have succeeded in curing it during its early stages, by antiphlogistic means and by mercury, which latter remedy, as proposed by Dr. O'Beirne of Dublin, has been found most useful in the subduction of scrofulous inflammation, not alone in morbus coxæ, but, as proposed by Drs. Stokes, Marsh, and Graves, in scrofulous inflammation of the lungs also. The cure of scrofulous inflammation, however, and the removal of tubercular infiltration or deposit, are two different things, and herein consists the error into which these gentlemen seem to have fallen.

Inflammation arising in a scrofulous constitution may lapse with the deposi-

CASE I.—A. C., the son of a farmer, born of healthy parents, with light hair and complexion, was the subject of violent epistaxis, which commenced in February, 1840, was occasioned, it is supposed, by a fall upon his face, and returned at irregular periods, sometimes so frequently as three times in a week, until the month of August following, when I first visited him. Large discharges of blood were reported to have taken place at various times, and those were only arrested by plugging the posterior nares, and even this had to be given up, owing to the irritation it occasioned, the day before my visit.

Various remedies were applied, and I believe with much skill and judgment, but any benefit derived from treatment was of short duration.

I found the young man much emaciated, so weak as to be scarcely able to stand. His face had a swollen, erysipelatous look; a thin, reddish mucus issued from his nose, the entire mucous surface of which was so much inflamed from the previous use of the plug, he could not allow a satisfactory examination of it. His pulse was what is known under the denomination of the hæmorrhagic, rapid, 120, bounding and easily compressed. He had no cough, but fearing the existence of tubercles in his lungs, these organs were explored, and found clear on percussion; auscultation elicited no abnormal sound.

A solution of *Argent. Nitrati*, gr. vi. to the scruple of water, was applied to his nares, as far back as the pharynx. He was ordered to be kept in a cool apartment, having a current of cold water applied to his face. *Acet. plumbi*, mineral acids, and light restorative diet, comprised the other indications of cure. I should mention that great attention was paid to the maintenance of the proper temperature of

tion of tubercles, but where is the proof that mercury, which, no doubt, has cured such inflammations, ever removed tubercles?

his limbs, and occasional stimulation, on the principle of derivation, was used to his legs and feet.

Under this plan of treatment he seemed to improve for about ten days, when a large bleeding from his nose returned, followed by syncope, and alarming indications of approaching death. He coughed up some reddish mucus; his breathing was laboured; and he pointed to the right side of his chest as the seat of the the dyspnœa under which he suffered.

His chest now sounded dull on percussion, for about its inferior third, and auscultation elicited no sound for nearly a corresponding extent; both these signs were most intense posteriorly.

A small bleeding, four leeches, was ordered from the congested lung, followed by counterirritants, derivatives, &c.; but he became rapidly worse, and the following day he died.

His body was examined twelve hours after death, and the following report of the *post mortem* appearances were sent me by a medical friend, upon whose ability and integrity I place the utmost reliance.

"The right pleura contained a small quantity, not two ounces, of serum; the entire of the corresponding lung was infiltrated with dark-coloured, thin blood and serum; this appearance was most striking towards the free edges of the lung and upon its posterior aspect; in one part, about the centre of the middle lobe, the substance of the lung seemed to have given way, as fibrous shreds hung loosely intermixed with portions of lung, blood, &c., bidding defiance to any thing like regular dissection. A small portion of the superior lobe seemed pervious to the air, and, unlike every other part of the viscus, floated in water; it was, however, dark-coloured, and seemed to be about taking on those appearances already described in other parts. Some of the large bronchial tubes were opened, and in many places their surfaces were lined with a soft, deep, reddish-coloured mucus.

"The left lung and all the viscera of the chest were perfectly healthy, but pale, flabby, and exsanguineous."

CASE II.—A. M., æt. 66 years, a man addicted to intemperance in drink, was seized with a slight paralysis affecting the right side of his face and arm. These alarming symptoms went off under ordinary treatment, as did two illnesses of a similar kind previously. On this occasion, however, no sooner had the complaint left his face and arm, than it fell upon the muscles of deglutition, and so perfectly lost were all the powers of those organs, it became necessary to support him by means of a gum-elastic tube passed into his stomach, and through it food and medicine.

After six weeks spent in fruitless endeavours to restore the affected part, he shewed visible signs of declension, both in body and mind; about this time too, he expressed feelings of disgust at the manner of receiving his food; besides he was harassed by a distressing dysphagia, and tenderness along the mucous surface of the pharynx and œsophagus.

From this period to the end of the tenth week, he continued to lose flesh and strength: his head felt occasionally hot; his sleep forsook him, and under these discouraging prospects, he was suddenly seized with hæmoptysis, cough, dyspnœa, and pain in his left side.

I found him in this state, gasping for breath; his extremities cold; pulse indistinct, not to be counted; the entire left side of his chest was null on percussion, as high as the second rib, where a bronchial ronchus could be heard.

He rapidly lost ground, and died the following morning, little more than twenty-four hours from the first symptoms of pulmonary congestion, and nearly eleven weeks from the first application of the elastic tube.* No examination of the body was allowed.

* Mr. Hunter (vol. i. of the Transactions of the Society for promoting Medical and Surgical Knowledge), was, I believe, the first who recommended the use of a hollow flexible tube in cases of this sort. He records a case of recovery under the use of valerian and mustard passed into the stomach twice a day for a month. I know of no case where life was sustained beyond this period. Sauvages and Cullen recommend the mastication of aromatics, and the radix pyrethri.

CASE III.—Mrs. M——. æt. 35 years, was reduced to extreme debility by uterine hæmorrhage, which persisted for four weeks, after a miscarriage, which occurred at the fourth month.

I was requested to visit her, not so much on account of the uterine hæmorrhage as with the hope of my relieving what she called a “new symptom,” namely, a cough, accompanied with oppression of breathing and slight hæmoptysis ; her alarm was increased by the fact of her not being subject to coughs or any affection of her chest.

I found this poor lady in the greatest alarm, her countenance blanched ; lips exsanguineous ; pulse feeble, rapid and easily compressed ; her breathing was hurried, and I was shewn about one ounce of frothy blood and mucus which had been expectorated.

The right lung posteriorly was dull on percussion, as high as the fourth rib ; anteriorly but little dulness could be perceived ; the respiration, however, in this part, was bronchial.

Having succeeded in extracting the shell of an ovum from the os uteri, where it had been impacted, and by which the hæmorrhage was perpetuated, that discharge was arrested, and she was gradually restored to almost perfect health.

The means adopted for the recovery of the congested lung, consisted in, first,—an equalization of the circulation ; stimulation applied over the affected part, and to her legs ; small local bleedings, when those could be borne, without lowering the system generally ; afterwards mercury was given on the principle of exciting absorbtion.

The restoration of the part was only partial ; it is now, a period of five years after the attack, dull to the extent of one-half what it was originally ; in other respects, however, she is in good health, having had two live children since then. She takes cold easily, and under those catarrhal affections the affected part feels uneasy ; is harassed with a

ringing cough, *tussa clangosa*, all which symptoms have hitherto yielded speedily to small sanguineous depletions from the affected part, followed by a blister and nauseating medicines.

Emetics, depletory, and other lowering measures of treatment are manifestly inadmissible in all cases resembling the foregoing; yet tartar emetic and calomel, in large doses, has been lately recommended in cases apparently parallel in point of debility, and with the super-addition of the benumbing influence of fever, also.*

The question, what is fever, remains unanswered up to the present moment. It might be maintained that it is but a chief mode of reaction, intended to relieve either general disease by general increased momentum and its consequences, or in morbid local affections to afford aid to parts incapable of restoring themselves by their own powers.†

I avail myself of no such excuse for this digression. The highest authority has proclaimed it to be more than this.‡

The great practical importance of the subject, in relation to asthenic pulmonary apoplexy, must be my apology.

The following brief historical sketch of the treatment of fever by tartar emetic and opium may, it is hoped, lead to a

* I here allude to these pulmonary congestions, above referred to, typhoid pneumonia so called, under the erroneous supposition, that they are of an active inflammatory nature.

† Idiopathic typhus fever, as manifested to our senses, is graphically and well defined in the following words of Dr. Copeland, *Med. Dict.*, p. 896. "It implicates the whole of the vital endowments and faculties, the fluids and the whole organization; it is acute and dangerous in its course, with lesion of the circulation, with alteration of the animal heat, and of the secretions; and with diminution of vital powers," &c. &c.

Regarding it, therefore, in the light of a specific virus, it is foreign from my present design.

‡ St. John's Gospel, chap. iv. ver. 52, "Then inquired he of them the hour when he began to amend: and they said unto him, yesterday, at the seventh hour the fever left him."

just appreciation of its value with reference to the treatment of the asthenic form of pulmonary apoplexy, in this complaint.

Rasoni and Thomanasini have generally been considered the inventors of this mode of curing fevers, but unjustly, as their plan was but a revival of the practice of the older physicians. Doctor Maryatt of Bristol has, in his work on Therapeutics, the last edition of which he published about 1790, this passage :—"Any fever may soon be extinguished by the use of the following powders: Take of antimony, five grains; white sugar or *nitre*, a drachm; let them be well rubbed in a glass mortar, and divided in six powders, one to be taken every three hours, and notwithstanding the nausea the first may possibly occasion. If they bring on a diarrhœa they should still be continued, and it will soon cease. If these are taken, which is most commonly the case, without any manifest inconvenience, let there be seven grains in the next six powders, and in the next ten. Here I beg leave to retract what I said in some former editions of this work, viz.: that till sickness and vomiting was excited, this notable medicine was not to be depended on; for I have seen many instances wherein a paper has been given every three hours, of which there have been ten grains in six powders, without the least sensible operation, either by sickness, stool, sweat, or urine; and although the patients have been unremittingly delirious for more than a week, with subsultus tendinum, and all the appearances of hastening death, they have perfectly recovered, without any medicinal aid, a clyster every other day excepted."

The practice of giving large doses of tartar emetic in acute inflammation, was brought into notice, in later times, by Laennec, from the confirmation of Rasoni's experiments; he did not, however, trust entirely to it in pneumonia. We are indebted to his pupil, Dr. Delegarde, for the result of Laennec's practice, from which it appears he did not adopt

entirely the system of Rasoni. In England several of our practitioners have followed the principles of the Italians, and about the year 1825 the practice was copied in Ireland.

The following observations of Professor Sigmond, are deserving of general notice:—"The diathesis which bears these enormous doses of tartar emetic has been much dwelt upon, but it has not as yet been pointed out to us, so that we have by no means any just data to act upon. There is too much sacredness attached to human life to allow us to trifle with it; although in diseases which quickly run their career, and would terminate unfavourably, we may assert them with boldness: still, until we are thoroughly masters of the power of each remedy, we must hesitate, and well weigh every circumstance."*

From what I myself have seen, I should prefer giving the very large doses to the intermediate ones. The very large doses I have seen administered in Italy, but I was by no means satisfied either with the practice, or with the carelessness with which it was exhibited; "other means would have been quite as certain of relieving."

I fully agree in the opinion that "other means are quite as certain of relieving."

These "other means" being less hazardous, should have failed, previous to the very doubtful and dangerous practice of giving large doses of tartar emetic.

The combination of tartar emetic or hippo with opium, was well known during the last century, as a means of neutralizing their nauseating effects. "It is well known to medical men," says Dr. Curry, "that when either emetic tartar, antimonial wine, or ipecacuanha in powder, is given, joined with opium, each counteracts the effect which the other would have had, if administered alone; the opium generally

* Lectures on *Materia Medica*, by George G. Sigmond, M. D., *Lancet*, vol. ii., 1837-8, p. 252.

preventing the emetic tartar, &c. from exciting vomiting, and the latter, in their turn, entirely suspending the stupefying power of the opium. The consequence generally is, that they operate upon the skin, and occasion a very copious sweating."—*Curry*, p. 98.

Rasoni, already referred to, has these remarkable words; after saying that he commenced with twenty-four grains of tartar emetic every twenty-four hours, he adds:—"on the second day, if no ill effects have arisen, and no untoward symptoms of any description have presented themselves, the quantity of the antimony may safely be increased; if any mischievous sign occurs, *syrup of poppies* may be added to the solution."

Dr. Graves,* indeed, has given us very interesting examples of recovery from advanced stages of typhus fever; where, no doubt, less hazardous means had previously failed, and where he was therefore justified in trying a doubtful and hazardous remedy. "*Melius anceps remedium quam nullum;*" but the Doctor has not given any unsuccessful cases, and hence junior practitioners, for whom, I presume, those lectures were mainly intended, might fancy the remedy suited to all cases of low spotted typhus fever, accompanied with restlessness and delirium. It is much to be feared that this very error has been committed.

A close inspection of Dr. Graves' cases teaches this remarkable lesson; the subjects of them were all young, free from every disease or ailment save the fever; and although subdued by it, it is fair to infer that they possessed a tenacity of life not to be found in the old, the intemperate, or otherwise

* Clinical Lectures by R. Graves, M.D. This gentleman prefers combining the tartar emetic with opium. Further experience and reflection, will, it is hoped, enable the Doctor to form a more accurate estimate of the relative value of this excellent remedy, and enable him to assist those who, with a tempered zeal, may prevent it falling again into unmerited disuse.

diseased, none of whom are reported to have recovered under this "heroic" treatment.

It may be asked, what are those "milder means" to which I refer as deserving trial before using tartar emetic?—I answer—those are, or ought to be, known to every experienced physician. One, however, I will mention, as likely, ere long, to hold a prominent position in the treatment of low typhus fever, viz., the modifying and sedative effects of mild opiate enemata, combined with the saline treatment, as recommended by Dr. Bright.*

Dr. Graves gives, in addition, several cases from junior members of the Profession, many of whom had previously attended the doctor's clinical lectures; all in confirmation of the good effects of tartar emetic and opium in the latter stages of typhus fever. I by no means question the veracity of the narrators of those cases; but I very much doubt their judgment.

It is impossible to dismiss from our recollection the rise and fall of the various theories, promulgated from time to time in the treatment of fever, and those too by men of great learning and experience; it seems to be reserved for our own time to receive instruction from those who have lately entered upon the practice of the Profession.

The following words of Louis, to which I accord, seem deserving of general notice:

"I have satisfied myself, by comparing my lately collected cases, with those collected formerly, of the advantage of not undertaking observation, at least when undertaken with a view to publication, until we have passed very early youth; I mean until we have attained an age when we can estimate things at their real value, and when experience has put us on our guard against every description of illusion and theory, and taught us that the first, the essential deside-

* Guy's Hospital Reports: vol. i. p. 1.

ratum, is truth. I was as deeply devoted to study formerly as I am now, but I was not proof against the attractions of a theory cleverly put together; I cared less for accuracy, and sacrificed less time in satisfying myself of the correctness of supposed facts. These mental tendencies, clashing as they do, with the pursuit of sound observation, depended both upon youth and deficiency of experience. Few persons are free from them; and I am of opinion, that for this reason we ought, generally speaking, to place less reliance on cases collected by young men, and *above all not entrust the task of accumulating facts to them exclusively.*"*

CONGESTIVE PULMONARY APOPLEXY.†

This form of pulmonary apoplexy usually falls upon individuals who have passed the meridian of life; those whose constitutions have been more or less impaired by over exertion; by intemperance, or by the inhalation of damp, noxious, or unwholesome atmospheres.

Dr. Cullen is willing to admit these noxious powers among the causes of apoplexy; but Sauvages thinks that they produce carus and asphyxia, not the true apoplexy. He speaks of carus a narcoticis, asphyxia à mephitide, à carbone, à fumis, à masto, &c. Portal agrees with Sauvages on this subject.‡

CASE I.—A. B——, a gentleman, æt. 43 years, having fair hair and skin; a complexion rather florid, and other indications of his possessing the sanguineous temperament; was, from an early age, accustomed to rather violent exercise, both on foot and on horseback. Suddenly changing his mode of life, he gave up his walking exercise altogether, and the sad-

* Op. cit. Advertisement, p. 26.

† The congestion here alluded to differs from the sthenic form in being of a more passive nature. The cases will, I hope, illustrate those differences which I find I am unable to express in words.

‡ All poisonous gases being of a specific nature, are foreign from my present design.

He exchanged for an open carriage. His habits of living, always full, not intemperate, were not lowered at this time, and for large, airy, dry apartments, he exchanged to a house having small rooms, in a damp situation, beside a large river.

The first indication of this change of life disagreeing with him, was the appearance of furunculi breaking out upon his hands and body. About this time he frequently took cold, which always ended in catarrh.

After about four years spent in this manner, he felt his legs less strong, with aching pains about his knees and ankles; he also felt very slight stinging pains about his chest and shoulders, with general lassitude and disinclination to enter into any active occupation; at this period, too, he was more exposed to damp air than formerly, having to travel much by night, which he always did in an open carriage.

With no further indication of disease or indisposition than I have mentioned, he one night awoke shortly after falling asleep, finding his mouth full of blood; this was followed by five or six discharges of the same kind in quick succession: the entire amount of blood discharged was probably about three ounces. His pulse at this time was 70, moderate and regular; had no heat of skin; hurried respiration, nor the slightest indication of indisposition beyond what has been mentioned.

His chest was perfectly clear on percussion; his respiration natural, except a mucous rattle in the large bronchi, owing to portions of blood which were discharged in a coagulated manner during the night.

About 14 ounces of blood was taken from his arm without producing any sensible effect upon his pulse, or in any other way; his bowels were open and a blister laid upon his chest; the Acet. Plumbi, with P. Ipec. C. and mineral acids, were also given. Animal food and wine were laid aside; he was confined to bed for the following week; his head and shoulders were elevated, and his apartment ordered to be kept

cool. In this way he progressed most favourably. On the second and third days there was a slight return of fresh bleeding; but although pieces of coagula were thrown up for about a fortnight, they appeared to be portions of coagulated blood which lodged in branches of the bronchi; this was evident from their bearing the impress of the air-tubes which contained them.

Small bleedings from the arm were resorted to every eight or ten days, followed by a small blister, for upwards of two months, when he gradually resumed his ordinary avocations. The bleedings, however, and the blisters, were resorted to from time to time, but at longer periods of intermission, for six months afterwards.

Little more than twelve months from the first seizure a second discharge of blood, in all respects resembling the former one, took place; he awoke, as he did then, with his mouth filled with blood, which also soon coagulated.

The recurrence of the complaint was now ascribed to fatigue and mental anxiety, but owing to a variety of circumstances, was not so easily arrested as before. No fresh discharges of blood took place at the end of three weeks, and only three previously; and on no occasion did the quantity spit up amount to more than two ounces. Fearing the existence of some organic disease, of which the hæmoptysis was but a symptom, his chest was closely examined by almost every medical man of eminence in Dublin, but no disease could be discovered.

In addition to the plan of treatment adopted on the first occasion, wine and beer were altogether prohibited; he was ordered to remove his dwelling to a dry, elevated locality; avoid fatigue or great bodily exertion; and should a sense of pain, formication, or constriction arise in any part of his chest, a moderate bleeding should be taken from his arm; a blister laid upon the affected part, and the other means of relief formerly resorted to, derivatives, &c., resumed and repeated as might seem to be necessary.

An occasional blister was laid upon his chest during the following year ; no wine nor malt liquor were used by him for five years, and then but sparingly. The foregoing rules were strictly adhered to ; and now, *thirteen* years from the date of the first attack of hæmoptysis, he is in the enjoyment of perfect health, and possesses greater vigour of mind than at any former period of his life.

CASE II.—A. K. æt. 45 years, a strong, muscular man, with dark hair, full and florid complexion, not subject to any ailment, first felt, in the summer of 1830, slight aching pains, accompanied with weakness in his knees and ankles. His breathing became hurried and oppressed under exertion, and his arms and chest were sometimes affected with pains, so slight he did not mention them, even to his own family. When questioned as to the cause of those symptoms his reply was, “his constitution was over-exerted, strained, and weakened in the early part of his life.”

In this state he progressed for upwards of two years, attending with assiduity the ordinary business of his calling, that of a grazier, entirely neglectful of the foregoing symptoms, which he ascribed to somewhat premature indications of approaching old age ; but he lived a life of indolence and gluttony, compared with his former habits. His apartments were small and badly ventilated, and situated in a bog.

In August, 1833, he consulted me on account of a spitting of blood, which for the preceding month recurred to him as often as six times : each discharge did not exceed an ounce ; it usually came on during his sleep.

He felt no alarm for his situation, believing it to be a salutary discharge, by which his overloaded constitution might obtain relief.

He had all the appearance of perfect health ; his pulse was 66, skin cool ; and all the secretions and excretions performed with apparent regularity. No indication of disease could be discovered in his chest, and it was with difficulty I persuaded him to submit to treatment.

One large bleeding was taken from his arm with a recommendation to repeat small bleedings, as proposed by Dr. Cheyne, every week or fortnight; each bleeding to be followed by a small blister over some part of his chest; his bowels to be kept open, and his diet was regulated.

At the earnest entreaty of his family a tolerably strict compliance to the foregoing rules was obtained for nearly a year, during which time he had but one small discharge of blood from his lungs. He now lapsed into his former habits of indolence and full living, which ended in a violent rupture of the lower lobe of his right lung, which proved fatal in a few hours.

The gentleman who made the *post mortem* examination in this case, kept no notes of it; but assured me there was no apparent disease of his lungs, or any of the thoracic viscera beyond the lesion of the inferior lobe of his lung, which was one mass of dark-coloured blood and torn lung.

Thus hæmoptysis, independent of organic disease of every kind, may be readily traced to its just source; and a suitable and often successful line of treatment established; but endless are the relations in which the affection may be found, with respect to other functional disorders. The following case by Parry will best explain my meaning.*

“A gentleman spit blood copiously almost every day for twenty years; during which he abstained from animal food and every form of alcohol. Having attempted to return, by slow degrees, to the use of the former, he had, in one year, four attacks of inflammatory fever. These were succeeded by vehement palpitation of the heart, which frequently returned during several years. They ceased on the super-vention of cough, with very copious and constant expectoration of thick mucus, unaccompanied with blood. By degrees, and after some years, the cough and expectoration disappeared; and he had then dyspepsia and occasional at-

tacks of palpitation ; both of which seemed to give way to remedies, but were immediately followed by hæmoptœe.—From this period, during all his remaining life, which was extended to more than eighty years, the three states of mucous expectoration, hæmoptœe, and palpitation, alternated with each other ; but no two of them existed together.”

CATALEPTIC PULMONARY APOPLEXY.

Among the species of apoplexy of Dr. Cullen, we find the *apoplexia cataleptica*. Some physicians doubt of the existence of this affection, others admit it to be an idiopathic, but uncommon disease. Dr. Gregory, in his Lectures, says, “it is a disease which very seldom occurs ; but I once saw a fatal case of it, in which there could be no suspicion of deceit.” Catalepsy has been described by Galen, and some others of the ancients, and by several modern physicians, particularly by Sauvages, who places it as a genus under the order “comata,” and he enumerates several species of it.

Sauvages says, “the disease occurs in paroxysms, in which the body and limbs retain their fixed posture, whether the patient be sitting or standing.” In a perfect catalepsy, he observes : “if the hand be raised and extended, it will not fall, and if the muscles be in any particular posture or state of action, at the accession of the disease, they will continue in that state ; so that if the muscles of the face, for instance, be disposed as in laughter, or in weeping, such impression will remain, the whole body resembling an image of wax, which receives and retains all impressions. The duration of the paroxysm varies from a few minutes to several hours.”*

* Forestus, Liti. and Obs. 41, briefly, but forcibly, describes this affection in the following terms :—“Quam catalepsia quis corripiter, confutum instar marmoreo statuæ gelatur, nec mutat constrictus presentem corporis habitum, sed subito tanquam afflatus sidere, aut (quod est in fabulis) Meduseos vultus conspexerit attonitus rigidusque consistit.”

These observations have reference to cerebral apoplexy. I am not aware that it (catalepsy) has been hitherto regarded by any preceding or cotemporary writer amongst the causes of pulmonary apoplexy.

Dr. Copland in his Medical Dictionary,* treats of extasy and catalepsy in the same category, and he is evidently correct in doing so; the former being but a modification, or a milder form of the latter. He has these remarkable words: "Many of the cases which have lately made so much noise in this metropolis (London) under the idea of inspiration with 'unknown tongues,' evidently belong to this affection; at least such of them as have not been feigned. The effects produced by the practisers of animal magnetism, upon nervous persons, sometimes appears allied to this affection. Many of the Italian improvisatori are possessed of this faculty only whilst they are in a state of extatic trance, similar to this disease. And few of them enjoy good health, or consider their faculty otherwise than a morbid one."† The more profound the extasy is, so much the less excited and loquacious becomes the subject of it.

CASE I.—Miss O——, æt. 26 years; born of healthy parents; possessing uninterrupted good health since she arrived at her twentieth year, at which time the catamenia first appeared with her. For about three years previously, she was subject to rather severe attacks of hysteria; and although her appearance and make indicated health and strength, her friends considered her at this time weak; she was also highly susceptible of nervous impressions.

* Page 290. Catalepsy and cataleptic extasy.

† All writers agree as to the dangerous tendency of those affections. Dr. Gooch met a case that was followed by melancholia: Dr. Burrow's case was complicated with mania; a similar case by Frank. Pinel records a case of catalepsy which terminated in apoplexy. Rostan states a case where inflammation of the lungs was associated with it. "In many instances," says Dr. Copland, "these affections terminate as they commence, in most severe hysteria; with which a very large proportion of them are more or less intimately allied." Lienland and M. Heers make mention of fibrous concretions formed in the longitudinal sinus, with disease of the lung and liver.

Can these things be so, and will our rulers still permit the serious traffic in human health and life, which has been long, and is still carried on, under the specious delusion, and too often, it is to be feared, the designing knavery of the followers of Mesmer?

About six months previous to my first visit to her, in the year 1827, I was informed her spirits became depressed, and she was observed to seek retirement and sit for hours without speaking, or seeming to attend to surrounding objects. These symptoms were ascribed to the sudden death of a gentleman to whom she was about to be married.

Her friends anxious to conceal her real situation, and hoping for an amendment when time had blunted the memory of her blighted hopes, deferred seeking for medical advice for her until there was added to the foregoing a violent attack of hæmoptysis, which had nearly deprived her of life.

I found her, a short time after the discharge of nearly a quart of very dark blood, partly coagulated, and holding a few bubbles of air only in the entire mass, weak, pallid, without sense or motion; she sat erect, however, in her chair, unsupported. Her features were fixed in a straight-forward position, as if intent on an object, yet her eyelids were nearly closed, having a tremulous motion, and when opened, her eyes were fixed like her features; the pupils were rather much dilated, but contracted sluggishly on the application of a taper. Her hands hung by her sides, not rigid, nor fixed to that position, but when raised and suddenly loosed, fell to their original position. Her body, however, was rigidly fixed in its position, as was her neck and legs. Her pulse was regular, but feeble, it beat 67 in the minute; her respiration was inaudible, unless the ear was applied mediately or immediately to her chest, and then it was hardly to be heard; her chest sounded well in every part.

I was told she usually recovered from this state in about two hours, which statement was verified on this occasion. The first symptom of recovery was an unusual quivering motion of her eyelids. She groaned, opened her eyes as if from sleep, and spoke feebly. Her pulse now rose in frequency

and in strength; she took some food, and expressed herself totally unconscious of any thing uncommon having occurred beyond the spitting of blood, for the relief of which she was told I was summoned.

The treatment adopted consisted in occasional small bleedings from her chest, followed by blisters, each about the size of a dollar; heat and gentle stimulation to her legs and feet, aloetic purges; and suitable tonic and antispasmodic medicines; with lead, mineral acids, &c.

There was no return of the hæmoptysis for five days, although she had, during that period three cataleptic seizures, each resembling that I have described, with the difference of her arms being now more rigid and immoveable; and each attack was followed by an intense headach, which lasted for several hours. Her pulse, which at first fell about 15 beats in the minute, under the cataleptic seizure, now varied but from six to eight pulsations. Those attacks, too, became shorter and less intense during the succeeding ten days, and there was but one discharge of blood from her lungs.

During the following ten months the hæmoptysis seemed to be vicarious of the catamenia, the latter being absent altogether, and the former returning only about the regular periods for the uterine discharge. Her general health gradually improved, as the cataleptic seizures lessened in frequency and duration. At the end of one year she was able to visit a chalybeate spring; and soon after I was informed the catamenia returned at regular periods, and the catalepsy, hæmoptysis, &c., disappeared.

This lady is now the mother of a numerous offspring; has enjoyed perfect good health since her marriage, having had but one slight return of hæmoptysis during that time. She assures me those cataleptic seizures gave her no uneasiness at the time, she always felt as if she had been asleep; was only conscious of what passed about her a *short time* before opening her eyes, and about this time she also felt

distressed as if from an "*embarrassment*" in her chest, which soon went off.*

The following inferences seem to be deducible from the foregoing facts and observations:

1st. Hæmoptysis, pulmonary apoplexy, or both combined, may occur independent of any organic disease in the lungs themselves or elsewhere; and although examples of recoveries from such be rare, still they are of sufficient frequency to establish a rational system of treatment suited to each particular variety.

* The following case of catalepsy, where the individual remained conscious of passing events, is worthy of note, and is recorded by Professor Thompson. (*Lancet*, vol. i. 1836-7, p. 803). "A young lady, an attendant on the Princess —, after having been confined to her bed for a great length of time with a violent nervous disorder, was at last, to all appearance, deprived of life; her lips were quite pale, her face resembled the countenance of a dead person, and, her body grew cold. She was removed from the room in which she died, was laid in a coffin, and the day of her funeral was fixed on. The day arrived, and according to the custom of the country, funeral songs and hymns were sung before the door. Just as the people were about to nail on the lid of the coffin, a kind of perspiration was observed to appear on the surface of her body. It grew greater every moment, and at last a convulsive motion was observed in the hands and feet of the corpse. A few minutes after, during which time fresh signs of returning life appeared, she at once opened her eyes and uttered a most piercing shriek. Physicians were sent for, and in the course of a few days she was considerably restored, and is probably alive at this day." She thus describes her situation:

"It seemed to her as if, in a dream, she was really dead; yet she was perfectly conscious of all that happened around her, in this dreadful state. She distinctly heard her friends speaking, and lamenting her death at the side of her coffin. She felt them pull on the death-clothes, and lay her in them. This feeling produced a mental anxiety that was indescribable. She tried to cry, but her soul was without power, and could not act on her body. She had the contradictory feeling, as if she were in her own body, and yet not in it, at one and the same time. It was equally impossible for her to stretch out her arm, or to open her eyes to cry, although she continually endeavoured to do so. The thought that she was to be buried alive was the first one that gave activity to her soul, and caused it to operate on her corporeal frame."

2nd. Hæmoptysis rarely attends the asthenic form of pulmonary apoplexy, whereas that symptom is with far greater constancy present in the sthenic variety of that complaint.

3rd. Whereas the sthenic pulmonary apoplexy seems to arise from turgescence of the larger trunks and branches of the pulmonary sanguiferous system, the capillaries are the vessels mainly concerned in the asthenic variety.

4th. The sense of heat, formication, &c., generally present in the sthenic pulmonary apoplexy, is with equal uniformity absent in the asthenic kind.

5th. The more sthenic this species of apoplexy may be, the less does it seem to be under the influence of the nervous system; and *vice versa*, the asthenic variety of that complaint, the very lowest kind perhaps excepted, seems much modified by those mysterious influences.

6th. Reduced vital energy, arising from damp, or otherwise unwholesome gases, intemperance, or other irregularities in living, &c., are most apparent in that variety of the complaint which I have denominated "simple congestion," and which seems to involve both the large venous trunks and the capillaries.*

7th. That "cataleptic pulmonary apoplexy" being excited, and probably maintained under the influence of the nervous system, is but imperfectly understood. That the force of habit in disorders of this kind, coupled with the absolute danger to the brain, stomach, or lungs, from a congested state of their vessels,† teach the practical lesson, that

* Here are probably examples of that form of pulmonary apoplexy first described by Dr. Watson, in his valuable lectures on hæmorrhage, namely, a rapid and extensive effusion of blood, either fluid or coagulated, into the trachea, from a communication being established between it and an open vessel or vessels. This is admitted to give rise to pulmonary apoplexy as effectually as when the effusion originated in the vesicular structure of the lung.

† Those organs are liable to congestion in the order in which I have named them.

such a state of the system is dangerous in both these ways, and whether under the denomination of catalepsy, hybernation,* or mesmeric trance, should be avoided, and when present, cured *with all possible speed*.

N. B.—The subject of Rare Cases will be continued in an early Number of the *Dublin Journal*.

* In a very interesting paper on Hybernation, Dr. M. Hall remarks, that there is a strong analogy between this singular state and that of ordinary sleep, the former being only a much exaggerated state of the latter. In both the necessity of breathing is lessened, as established by Messrs. Allen and Pepys. In profound catalepsy it is not always easy to ascertain if the individual breathes. The temperature under both these states sinks, and the recovery from both is strikingly analogous, namely, immediate, and as if from sleep.

Dr. Hall, by a nicely contrived experiment, was enabled to examine the circulation in the wing of a bat in its state of hybernation; he found, that although the animal did not perceptibly breathe the circulation continued uninterruptedly, the number of pulsations in a minute was about 28. All the blood was venous, and he adds, "the curious fact is, that the left side of the heart, and also the arterial system, are now veno-contractile." This phenomenon is one of the most remarkable in physiology, it accounts for the life of the animal being, in a great measure at least, independent of respiration, and is, in short, the key to the right explanations of the susceptibility of some animals taking on the hybernating state.

The blood thrown up in the foregoing cases of cataleptic pulmonary apoplexy was apparently venous.