

An essay on phlegmatia dolens : including an account of the symptoms, causes and cure of peritonitis puerperalis & conjunctiva, &c; &c.; / by John Hull.

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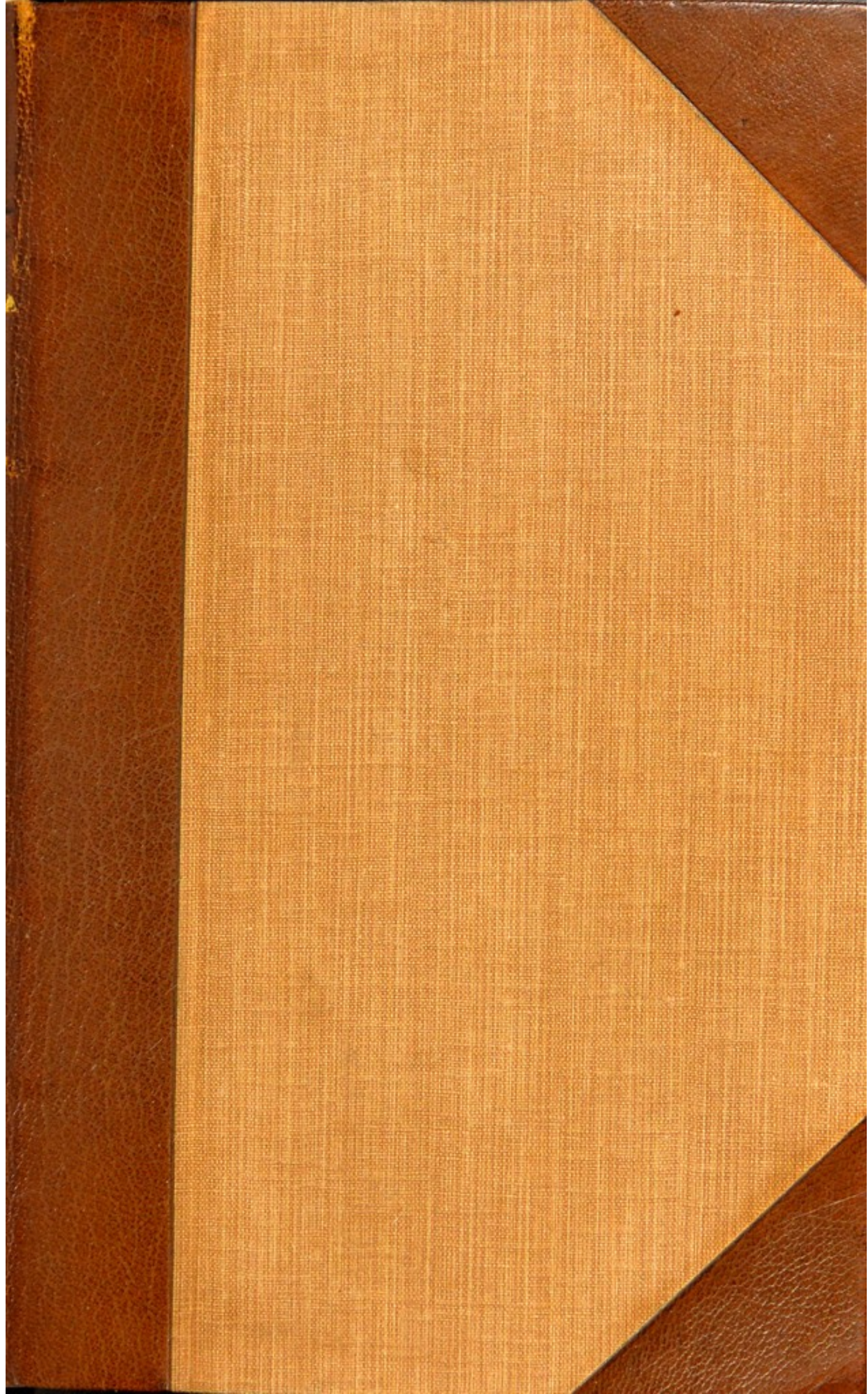
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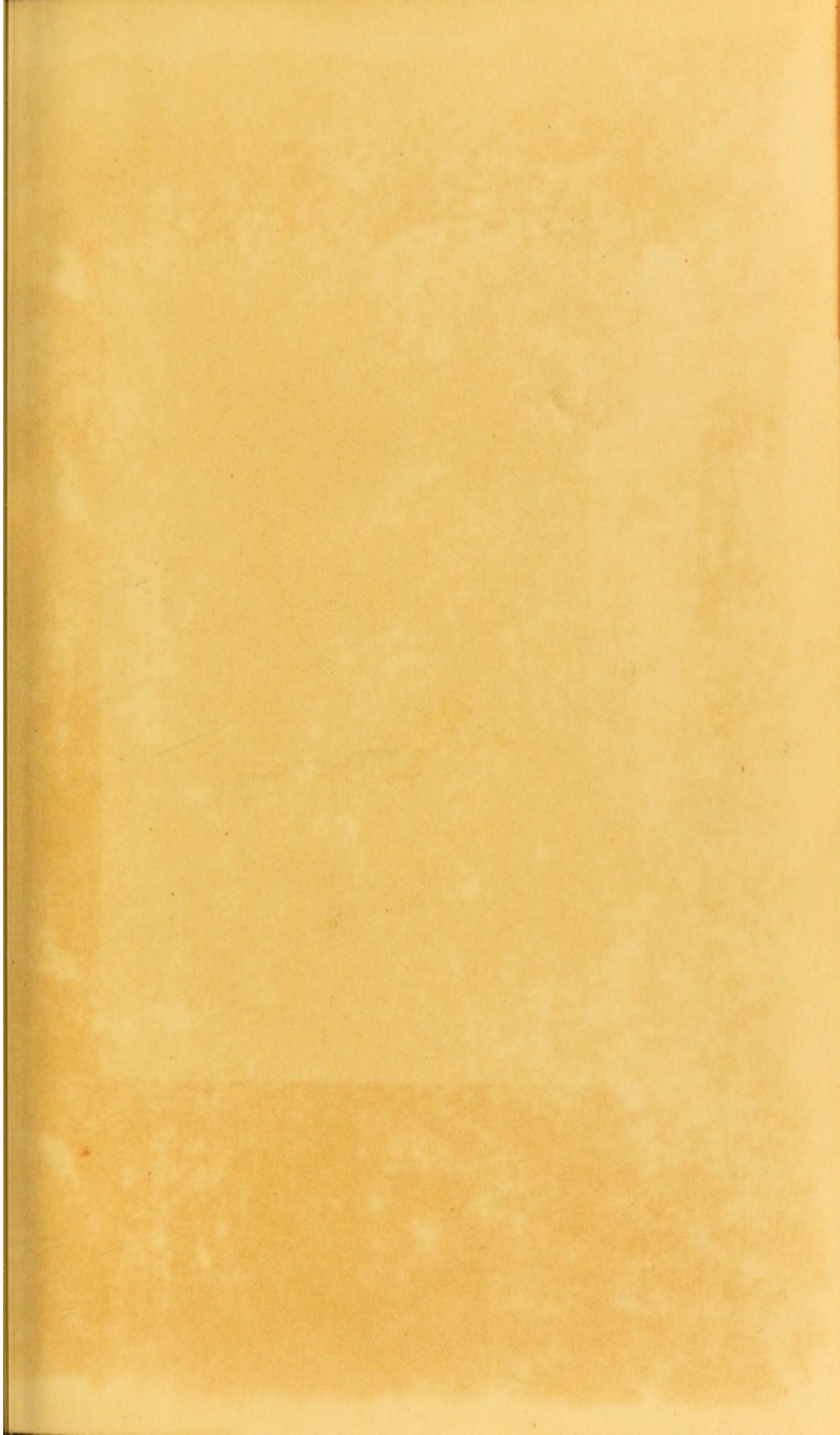
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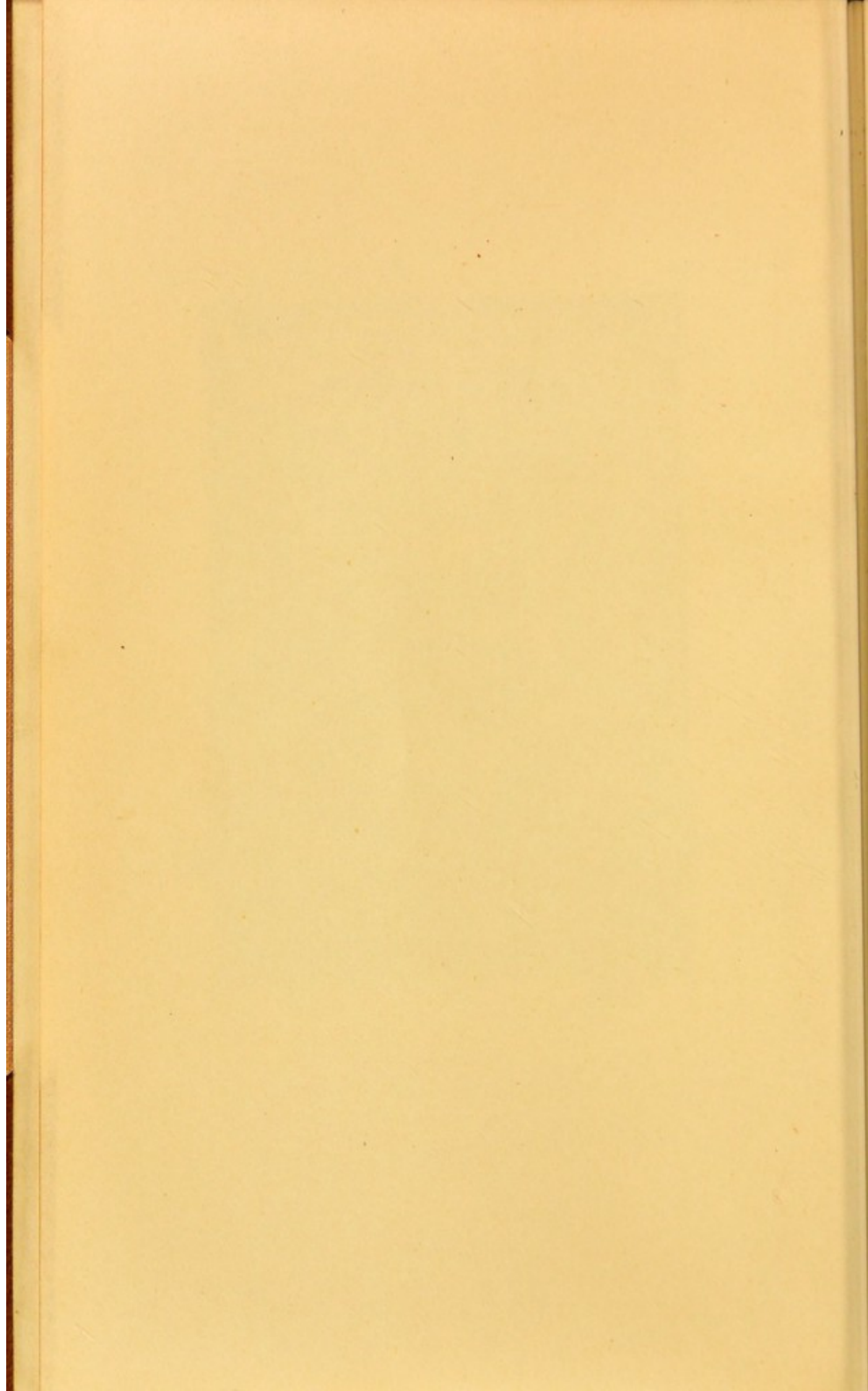


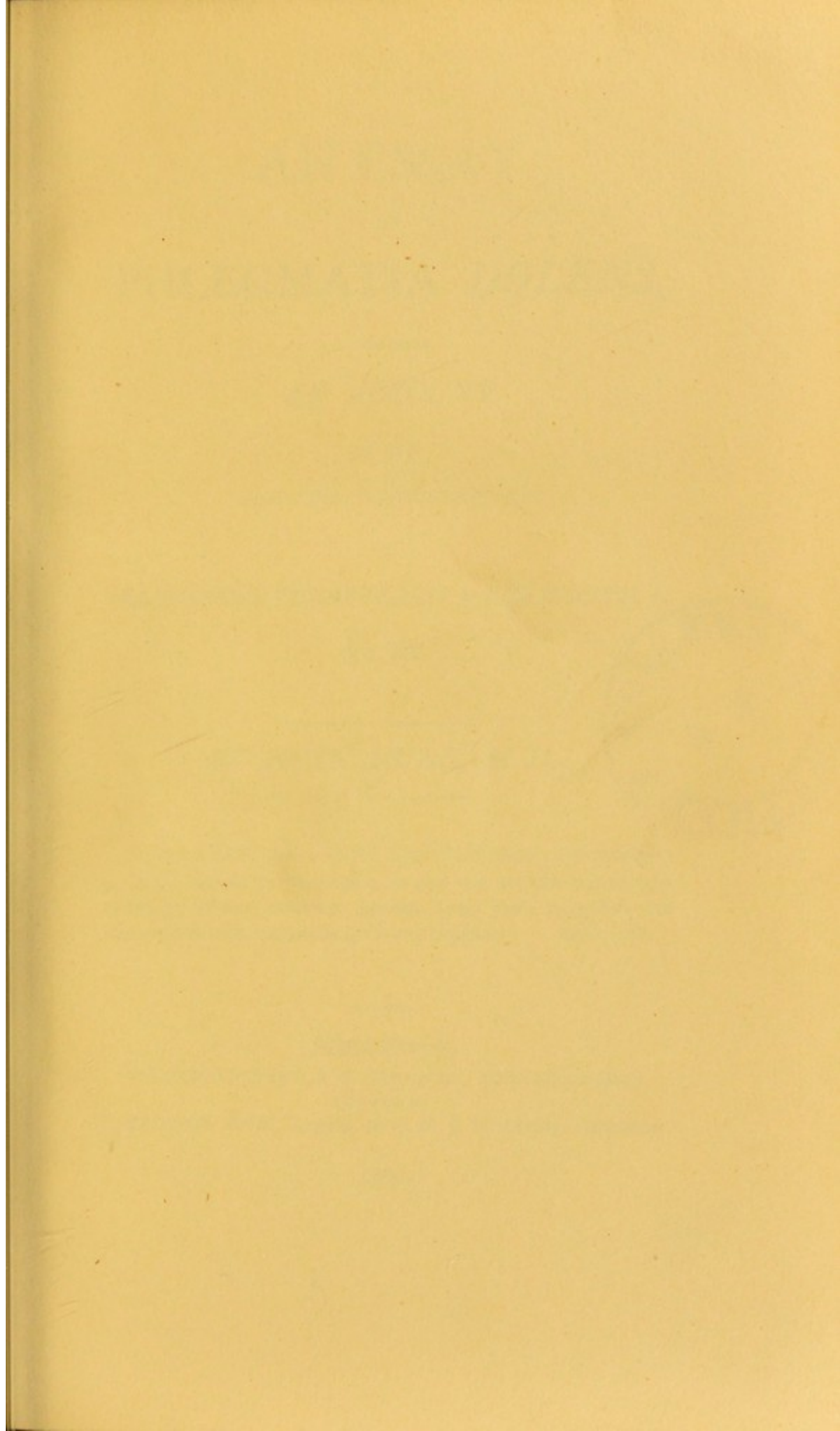
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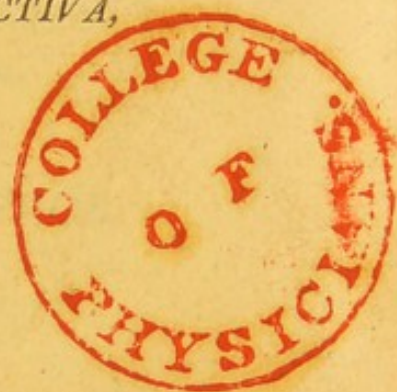






AN ESSAY
ON
PHLEGMATIA DOLENS,
INCLUDING
AN ACCOUNT
OF THE
SYMPTOMS, CAUSES AND CURE
OF
PERITONITIS PUERPERALIS & CONJUNCTIVA,
&c &c.

BY JOHN HULL, M.D.



At VERITATEM tamen, quam ubique secutus sum, quæ est regina
omnis et scientiæ et eloquentiæ, et quæ non ab opinionibus atque
auctoritate virorum celebrium pendet, longe pluris faciendam esse
omnium hominum auctoritate Quis non concedat? SCHELLER.

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R. Bickerstaff, Strand, London, and I. W. & W. Clarke, Manchester.

1800.

W. G. MULLISON, Glasgow.

THE PATENT OFFICE, LONDON.

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AN ESSAY

ON

PHLEGMATIA DOLENS.

PHLEGMATIA DOLENS is a disease almost exclusively observed in lying-in women. It consists in a tense, elastic, hot, painful swelling, which generally extends rapidly over the whole of one of the lower extremities; the skin retaining its natural colour, or even becoming whiter, and presenting more or less of a shining appearance. It has, in a few instances, terminated fatally; has frequently been attended with very alarming febrile symptoms; and has always been productive of lameness and considerable inconvenience. From its severity, and from its attacking the female sex at a period, when, on account of extreme and unavoidable sufferings, recently experienced, they have the strongest claims upon the sympathy and best exertions of their friends, this complaint is peculiarly interesting to the medical practitioner.

I have judged it necessary to lay down the above short account of this disease, before I proceed farther in the consideration of it, lest some of my readers should be puzzled by the new name, bestowed upon it; and shall next remark, that the following order will be observed in this Essay.

1. The *literary history* of the disease will be given, together with a *review of the different theories*, that have been formed concerning it.
2. The *medical history* will be given, and the *causes and cure* will be considered.
3. The *analogy* of this disease with *Puerperal Fever* (*Peritonitis puerperalis* Ill. Frank.) and *Rheumatism* will be pointed out.
4. The *characters and synonyms* of the genus *Phlegmatia* with its species will be presented, and the proper place assigned to it in the nosological system of the late Dr. Cullen.

CHAPTER FIRST.

ON THE LITERARY HISTORY OF PHLEGMATIA DOLENS.

THIS part of my Essay I have found it convenient to divide into three sections : in the first of which I shall give the best account of the disease, that I have been able to collect from the earliest writings down to the publication of Puzos's posthumous work, in the year 1759 : in the second I shall review the principal foreign writers, from Puzos till the present time : and in the third I shall examine the writings of British practitioners during the same period.

SECTION FIRST.

From Hippocrates till the year 1759.

Many persons have imagined, that the ancient Greek and Roman physicians were excellent observers and faithful recorders of the symptoms of diseases, and that many valuable histories are to be found in their writings. Notwithstanding their encomiums, I agree with Dr. CULLEN† in believing, that a superstitious

† Synopsis Nosol. Method. Vol. II. Prolegomen. p. 2, & seq.

veneration for the works of antiquity and a parade of learning have procured too much respect for the writings of the ancient physicians; and that the knowledge of diseases to be derived from them, in the state at least in which they have been handed down to us, is in many instances insufficient to establish the *diagnosis* so completely, as to leave no uncertainty respecting the diseases they intended to describe.

With respect to several diseases, arising from specific contagions, whether attended with pyrexia, as *Rubeola*, *Variola*, &c., or not necessarily attended with pyrexia, as *Siphylis*, &c., I am of opinion, that their existence is of comparatively modern date; and I think it extremely probable, that these contagions were first generated about the periods, when the disorders, occasioned by them, first attracted the particular attention of those writers, whose works we are in possession of. If this opinion be well founded, histories of these very remarkable diseases are not to be expected in the writings of the ancient physicians. And certain it is, that their works do not contain sufficient evidence of their being acquainted with the diseases above-mentioned.

But there are other diseases, of which either no notice is taken by the ancient writers on medicine, or of which the characters are so

vaguely and indistinctly drawn, that we cannot, with any degree of certainty, infer their acquaintance with them; although, as their predisposing and exciting causes must have existed from the earliest ages, we cannot but believe, that these diseases must have occurred in their days: *Phlegmatia dolens*, for example, being independent on any specific contagion and arising from causes, coeval with parturition, may with great reason be imagined to have occurred at a period antecedent to the æra of Hippocrates. And yet, as far as my researches go, this malady has either been passed over unnoticed in his writings, and in those of his more immediate successors, or the traces of it are so imperfect, that I cannot avoid entertaining considerable doubts, whether this be the disease, of which they have been attempting to convey an idea.

I would not, however, be understood to say, that a description of the disease, which is the subject of this Essay, can not be found by a more diligent examination in the ancient medical writings. I have sought for an account of it principally amongst the arthritic, hydropic, and puerperal complaints; because, when viewed with respect to the pain, swelling and febrile symptoms, this disease appears analogous to *Ischias*, *Gonagra*, & *Podagra*; viewed with

respect to the intumescence and paleness of the limb, it may be referred to *Anasarca* or *Leucophlegmatia*; and because, from its occurring almost only during the puerperal state, from its often succeeding to, or being accompanied by a suppression of the lochia or milk, and from its affecting only one limb in many instances (especially at the first attack) it may be considered as a distinct puerperal disease; more particularly as *Anasarca gravidarum* Sauv. almost always disappears spontaneously during the lying-in, and, instead of being preceded by acute pain like *Phlegmatia dolens*, is either unattended with pain, or the pain does not take place, till the limb is extremely distended, and frequently not till an evident inflammation supervenes. And, regarding this inquiry as directed to a matter of curiosity rather than of real utility, I have not bestowed a great deal of time upon it. Whatever I have been able to discover, that appears to have the nearest reference to this disease, I shall now bring forward.

On turning over the writings of Hippocrates the two following passages have occurred to me: "Si, ex partu, uteri in dextram obversi fuerint, puerperii purgamenta non eunt, dolor inum ventrem, lumbos & ilia detinet, crus dextrum gravatur & torpor occupat."—"Si uteri in sinistram

partem, aut coxam, declinarint, *dolor acutus & vehemens lumbos ac ilia crusque detinet, & claudicat.*—De Mul. Morb. Lib. 2. Cap. 28. pag. 816. Edit. Charter.—If this be intended for a description of the disease in question, it must be admitted to be an obscure one; for there is no mention made of the tension and swelling of the limb, which are two of the leading characteristics. Perhaps some persons may consider the expression “*crus dextrum gravatur,*” which in the original Greek is *δεξιον σκελος βαρυνεσθαι*, as implying that the right thigh becomes swelled. However this may be determined, I am not able to adduce a more satisfactory allusion to this disorder, either from the works of Hippocrates, or any succeeding writer, previously to the time of *à Castro*, although I have examined a very great number of them.

In the year 1603 RODRIGUES *à CASTRO* published at Hamburgh his work *De universa muliebrium morborum Medicina*. He treats of the swelled and livid legs of pregnant women in the 17th chapter of the 3d book, and makes the following observation with respect to swellings of the lower extremities in the puerperal state, “*vidimus crurum tumores post partum contingere, si lochia minus copiose procedant*”: And in the 18th chapter of the 4th book, which

has this title, *De pedum, ventris, ac totius corporis inflatione a partu*, he says, “*Inflatio pedum, ventris, vel totius corporis in puerperis provenit, aut ex improbo vitæ instituto, quo gestationis tempore usæ fuerunt; aut ex immodico potu post partum; aut ex copioso sanguine, quem fœtus assumere non valuit, nec fœmina in partu purgare, idcirco superabundans recrudesceat & in tumorem elevat hasce partes, qui affectus cessare ut plurimum solet, copiosiore purgatione per uterum aut ventrem*”: And he proposes the following method of cure;—“*Si ex copioso sanguine, cibum parcius assumat, ac copiosius puerperium evocetur, sicut superioribus capitibus sæpius ad nauseam repetitum est.*” We have here a swelling of the limbs in lying-in women pointed out, as arising from the scantiness of the lochial discharge, and a cure proposed, adapted to this view of the complaint; whence I am induced to believe, that he was acquainted with the disease under consideration; but must confess, that his account of it is not sufficiently clear, as he has not entered into a circumstantial relation of the symptoms, nor even mentioned the presence of acute pain, which is a striking characteristic of the complaint.

In 1676 the celebrated WISEMAN published his *Chirurgical Treatises*; from which we

may, I think, fairly infer his acquaintance with this disease. In Book I. Chapter 5. he treats of *Abscesses and Corrosive Ulcers arising from Distempers of the Uterus in Child-bed*, and amongst other observations relates the following case: "An Apothecary's wife, living in my neighbourhood in the Old Bailey, after a hard child-bed labour was seized with a fever, and great pain in her right thigh, from the groin and hip downward to the knee, swelling the member round, without inflammation or discolouring the skin, &c." The whole member was afterwards affected, and matter formed in different places. See Wiseman, loc. cit.

But whatever opinions may be entertained concerning the extracts already adduced, it must be universally admitted, that MAURICEAU was well acquainted with the symptoms of this disease, from the annexed account of it; which I have transcribed from the 5th edition of his *Traité des Mal. des Femmes, &c.*, published at Paris in 1712.

"J'ai vû plusieurs femmes après être accouchées assez heureusement, avoir les jambes & les cuisses toutes œdemateuses & extraordinairement grosses; quelquefois depuis l'aîne jusques à l'extrémité du pied, par fois d'un seul côté & d'autres fois de tous les deux. Cet

accident survient souvent ensuite d' une douleur sciatique, causée par un reflux, qui se fait sur ces parties, des humeurs qui devroient être évacuées par les vuidanges, dont le *gros nerf* de la cuisse s' abreuve quelquefois tellement, qu' il en peut rester à la femme une claudication dans la suite, comme il est arrivé à une de mes Tantes, qui, quoyqu' elle fût très bien faite & fort droite auparavant, est restée tout-à-fait boiteuse d' une jambe depuis trente huit ans, par un semblable accident, ensuite d' une de ses couches." Livre 3. chap. 20. pag. 446.

The *Cure* is given in the following words by this celebrated Accoucheur; " Si ces enflures sont extraordinairement grandes & douloureuses, comme sont celles qui *participent de l' inflammation*, & qui *procedent de la suppression des vuidanges*, & qu' elles soient accompagnées de fièvre avec difficulté de respirer, & de grande tension & douleur du ventre, elles sont d' autant plus dangereuses, que ces accidens sont grands, & qu' ils se rencontrent plusieurs ou tous ensemble; mais lorsqu' elles ne sont que mediocres, & qu' elles sont sans fièvre, elles se dissipent assez souvent facilement, en ouvrant les voyes de l' urine, par un regime de vivre propre à cela & par la purgation dans le temps"—Ibid. p. 447. In his *Observations sur la Grossesse & L' Ac-*

couchement des Femmes, &c., this author has related 19 cases of anasarcaous Swelling of the lower extremities and labia pudendi in pregnant women; but I have not met with a single observation in this work, where the tumefaction is stated to have taken place after delivery, as in *Phlegmatia dolens*.

During the period, which intervened betwixt the publication of Mauriceau's work and the death of Puzos, the disease appears to have been known to various writers. But, as they have neither made any material additions to the medical history of the complaint, nor contributed to the elucidation of the proximate cause, nor suggested any thing valuable relative to the method of cure, I shall only take notice of the publications of *Mesnard* and *Sir Richard Manningham*. Of the former I am induced to give an account, because it has furnished me with the first intimation of the coagulation of the lymph in the disordered limb, and of the latter, because he is a british author.

JACQUES MESNARD'S *Guide des Accoucheurs* was printed at Paris in 1743, and in it we meet with the subjoined question and answer:

“*Dem.* Qu'est-ce qui peut occasionner les œdèmes, qui surviennent aux extrémités inférieures des femmes nouvellement accouchées?”

Rép. C' est la suppression de leurs lochies ; de sorte que par la réplétion des vaisseaux sanguins la lymphe ne peut point circuler : ce qui fait qu' elle s' arrête dans ces parties & s' y coagule."—Page 360.

MANNINGHAM in his *Aphorismata Medica*, published in 1756, appears to me to allude to this affection in the following passage : " Ubi mulier a partu haud commode purgata est, venter et interdum crura tument : dolor atque rigor lumbos atque imum ventrem occupant."—P. 145. This account is not, however, sufficiently circumstantial to remove all ambiguity concerning his knowledge of the complaint.

By the authors, already enumerated, this Intumescence of the lower extremities in lying-in women is attributed to a *diminution or suppression of the lochia*. Later observations, however, have shewn, that it has not uncommonly taken place, both when the lochial discharge had entirely ceased after proceeding in the most natural way, and during the regular and plentiful flow of the lochia ; in which cases the disease must necessarily have been occasioned by other causes. In many instances, wherein the attack of *Phlegmatia dolens* has been succeeded, or accompanied by a diminution or suppression of the lochial discharge, it is extremely probable, that the latter

has been the *effect* rather than the *cause*. And, if in other instances this circumstance have contributed to the production of the disease under consideration, it can only be regarded as a *principium* or remote cause, inducing a plethoric state of the sanguiferous system, and thus favouring an increased determination of blood to the limb with the consequent congestion and extravasation of serum and coagulating lymph.

SECTION SECOND.

From Puzos to the present time, as collected from foreign publications.

The celebrated Selle in his book *De curandis hominum morbis*, of which a latin translation was published at Berlin by C. Sprengelius in 1798, treating of *Metastases Lactis*, makes this observation:—"Quod superest, Hippocrates jam-jam eos affectus commemoravit. Recentiorum vero primus Levretus eas curatius illustravit, quem Swietenus sequutus est. Optime præterea meritus est Puzosius, mihiq[ue] tribuenda est febris puerperarum vera finitio." Pag. 484. This opinion, respecting the prior claim of Levret amongst the moderns to the Theory of the production of *Phlegmatia dolens* and other diseases from a deposit of milk upon the part, may

at first sight appear to be supported by the reference under *Ischias ab Sparganosi* to a paper by Levret in the *Journ. de Med.* for July 1758, given in the 4to edition of the *Nosologia Methodica* of Sauvages, published in 1768 after his death; and by another reference under *Phlegmatia lactea* to a paper by Levret on *Infiltrations laiteuses*, in the same Journal for July 1759. I apprehend, however, with great reason, that there is an error in the first reference; but, not having access to the 2 volumes of the *Journ. de Med.* just mentioned, I cannot speak positively upon the subject. In the 8vo edition of the *Nosologia Methodica*, published during the life of Sauvages, in 1763, there is a reference under *Ischias ab Sparganosi* to Puzos, but none to Levret in the *Journ. de Med.* for 1758; but under *Phlegmatia lactea*, there is a reference to Levret's paper in that Journal for July 1759; I suppose, therefore, that, from some inattention on the part of Cramer, who prepared the 4to edition for the press, or from a typographical error, the year 1758 has been printed instead of 1759. Admitting, however, that Levret did publish a paper on this subject in the year 1758, it will not establish his priority of claim to the Theory; for Puzos died on the 7th of June 1753, although his works, which were prepared

for the press by M. M. Deslandes, were not printed till the year 1759; and from his great celebrity as an Accoucheur at Paris, it may with great reason be supposed, that Levret, who practised in the same city, must have been previously acquainted with the sentiments of Puzos upon this class of puerperal complaints. Moreover, in confirmation of what I have suggested, it may be urged, that Levret, in a subsequent work (*L' Art des Accouchemens*, Paris 1761) refers twice in page 161 to Puzos's *Mémoires sur les dépôts laiteux*, and speaks of them in terms of approbation; and in the *Supplément* to his *Art des Acc.* Levret gives all the memoirs, which he had read in the different public *Seances* of the Royal Academy of Surgery: Amongst these is an account of the paper in question, *Sur les infiltrations laiteuses des extrémités inférieures*, as taken from the *Mercure de France* for December 1759, pag. 152. See *Suppl. Artic.* 8. pag. 338. And Haller, in his *Bibl. Chirurg.* Tom. 2. p. 260, enumerating the contents of Puzos's posthumous volume, says that he has written, "De apostemate s. metastasi lactea, novo morbo, ex quo frequenter œdema femoris & cruris nascitur."

Puzos, in his first *Mémoire sur les Dépôts laiteux, appelées communément Lait Repandu*, printed

at the end of his *Traité des Accouchemens*, has given a very valuable history of the *Phlegmatia dolens*, and has entered fully into the consideration of the nature, cause, and treatment of it.

Milk, he tells us, is formed in women during pregnancy, as well as after delivery, and is directed principally to the womb in the former case, as it is to the breasts in the latter, to serve for the support of the child. When a *fœtus in utero*, or an *infant at the breast*, cannot consume the whole of the milk, that is formed for it, he thinks the superabundant portion escapes from the body of the mother by different ways, namely, from the *vagina*, in the urine, fæces and sweat; and says, that the blood still remains charged with milk notwithstanding these different evacuations; because blood, taken away under these circumstances, is covered with a kind of milky crust, and because this white colour of the blood is observed only in women, who are pregnant, who have been recently delivered, or who continue to give suck.

Observations, he says, have taught us, that the milk is liable to become coagulated in the body of a female, or to take improper *routes* and insinuate itself into vessels not destined by nature for its reception; and that the milk, by becoming coagulated, or by taking these strange

routes, and, remaining in the parts, causes a variety of disorders, comprehended under the name of *dépôts laiteux*, or *lait repandu*. It is not necessary, according to his account, that there be a sensible tumour or abscess, in order to constitute a *dépôt laiteux*: It is sufficient, that the milky juices be detained in the capillary vessels, or that the milk be infiltrated into the cellular texture, or effused into some cavity of the body. Though the milk may fix in any of the *viscera*, yet he says the *abdomen*, and especially the *laminæ* of the *peritonæum* are the most ordinary seats of these milky deposits; adding, that the milk is pretty often effused into the thigh, on account of its vicinity to the womb; and that this humour is detained more commonly in the membranes and in the cellular texture than in the *viscera*, which are more exposed to deposits of another kind.

His opinion, respecting the *virulence of vitiated milk*, will appear in a striking point of view from the remark, annexed to the following Case: "Une Dame, accouchée depuis douze jours, malgré un fond de tristesse & des douleurs foibles dans le ventre, paroissoit en si bonne santé, qu' elle voulut non-seulement se lever ce jour là, mais encore faire sa partie & souper en compagnie: après souper on la remit dans

son lit à dix heures du soir. A minuit elle sentit de l'engourdissement dans une jambe, & le lendemain on fut obligé de lui couper la cuisse. Une gangrène sèche, telle que celle-ci, eût donné le tems de scarifier & se fût peut-être bornée au premier lieu du dépôt, si elle eût eu pour cause le sang, ou la lymphe dégénéré. Mais *le lait dégénéré*, comme on le verra par la suite de ce Mémoire, *ne connoît souvent ni remedes, ni bornes.*" p. 347.

Speaking of the exciting causes of these diseases, he says people believe, that they are always occasioned by the bad management of nurses, or the imprudence of patients, and adds, that there have been cases, in which these causes had evidently some influence; but that, for the most part, we ought to accuse only the bad habit of the patient. For sometimes the milk is of a bad quality; at other times the disposition of the parts, which ought to give vent to it, is such, that they oppose its free course. And he informs us, that those women, who do not suckle their infants, are more especially subject to these *depôts de lait*.

To treat his subject with better order, he divides the diseases, produced by these *depôts de lait*, into chronic and acute.

Though the *chronic depôts* are ordinarily void of danger, they are, he observes, sometimes very

severe. To this division he refers the *Dépôt laiteux sur le cerveau*, *Dépôt sur les mammelles*, the *Dépôt sur la cuisse*, and the *Dépôt dans l'hypogastre*. He has related one case of *Dépôt laiteux*, that terminated fatally on the 5th day of the disease, of which I shall give an account hereafter. (See Case I.) And he assigns the following reason for retaining this complaint in the chronic class: In this case "Le Dépôt laiteux sur la cuisse n'eut pas le tems, comme l'on voit, de faire une maladie chronique. Mais comme il est rare, que le cours de ces sortes de dépôts soit si borné, je n'ai pas cru devoir tirer ce cas particulier de la classe des maladies chroniques." p. 355.

The *acute dépôts* are those, which supervene a few days after delivery, and which are shortly terminated, either by certain death, or a speedy cure. These maladies often appear at first under the disguise of after-pains, or milk fever, which he considers as natural. He has known some women carried off by these *dépôts* in 24 hours, others in 3 or 4 days; and he observes, that they rarely run on beyond the 5th or 6th day, unless their dangerous state has been changed by nature or art.

I shall confine myself here to an analysis of those parts of the memoirs, wherein the author

has treated of *Dépôts de lait* in the lower extremities and hypogastric region.

We find the following circumstances, relative to the *History* &c. of these maladies, noticed by Puzos.

These diseases take place during pregnancy, as well as after delivery. In the latter case, those women, who do not give suck, are more subject to *dépôts* than those who do: But those, who do suckle their infants, are not exempt from them; indeed these complaints sometimes occur on the first days of the lying-in, and before the women, if one may so say, are become qualified to nurse. They occur during the continuance of the true lochial discharge, as well as after its cessation.

When they take place in the inferior extremities, they attack only one at a time; the disease is frequently cured on one side, before the other is attacked. These *dépôts* are rarely dangerous, but they are of long continuance and with difficulty cured. They seldom occur before the 12th or 14th day after delivery, and sometimes not till a much later period: In some instances they do not happen before the end of six weeks. It is in the groin and upper part of the thigh, that the *dépôt* first begins to shew marks of its presence by the pain, which is there felt,

The pain ordinarily follows the course of the large vessels in descending along the thigh, and is even more acute in this direction. We perceive the extent of the disease by a kind of painful cord, formed by the infiltration of the cellular texture, accompanying these vessels. Swelling is almost always added to the pain, and, as the *dépôt* increases, a difficulty in moving the thigh is experienced. The pain passes from the thigh down to the ham, then descends along the calf of the leg and terminates at the foot. With respect to the extent of the swelling, it becomes sometimes so considerable, that the bulk of the diseased limb is twice as great as that of the sound one. It is so much the more important to attend to the above symptoms, because, towards the end of pregnancy, deposits of other humours are frequently made in the lower extremities; but these are seldom attended with pain, and are generally *edematose*, attacking first the foot, then ascending along the leg till they arrive at the thigh, the *labia pudendi* and the kidneys: Besides these attack both the lower extremities at a time.

When the *dépôt* takes place in the lower region of the abdomen, it is almost always situated between the groin and the anterior and superior spinous process of the os ilium on one

side. In some instances the humour is deposited under the skin and fat; in others between the muscles and peritonæum; and the most considerable *dépôts* take place in the cellular texture of the peritonæum, in the ligamenta lata, or in the ovaria. At their first commencement they furnish no marks, that are obvious to the sight or touch; but there are troublesome pains extending over the belly and terminating at a fixed point; these are distinguishable from after-pains by their neither rendering the uterus harder at the time, nor exciting any increase of the lochial discharge. There is a loss of appetite, want of sleep, and fever either continued, or intermittent with several paroxysms, preceded by slight shiverings, in the course of 24 hours. It rarely happens, that these *dépôts* become perceptible to the touch before the 10th day. Dangerous as they are from their situation, they become still more so, when they have attained a considerable size, and have acquired a hardness, which renders them incapable of resolution, owing to their not being properly understood at their commencement. The abscesses in the groin and belly after delivery, mentioned by Mauriceau and La Motte, were undoubtedly *dépôts lacteux*, which might have been resolved by proper treatment in the earlier stages. The termination of these

dépôts in schirrus, if not mortal, is always dangerous. The suppuration of them, especially in the groin and hypogastrium is likewise always dangerous; but instances are not wanting, wherein they have terminated favourably.

The indication of *Cure*, according to our author, is to *procure the evacuation of the matter deposited*. For this purpose he directs *blood-letting* from the arm, which is to be repeated more or less frequently according to the exigence of the case. He directs, that the bowels be kept open by purgatives and laxatives, that the patient be kept warm and perspiration promoted. When these remedies prove insufficient, as sometimes happens, he recommends the use of topical applications several times a day, viz. fomentations and cataplasms, formed from emollient herbs; embrocations of soap and fresh butter or palm-oil; or oil of almonds with volatile spirit of sal ammoniac. He directs the limb to be wrapped up in a warm napkin, which is to be often renewed. He also recommends a lye made from the ashes of vine branches as a *douche*, that is, to be forcibly dashed against the limb by falling from a considerable height. He disapproves highly of the use of inefficacious, trifling remedies. And, should the milky humour pass to the other extremity, he directs us to employ

bleeding again, if the strength of the patient permit it, and recommends that the above named remedies be again had recourse to. In one case, where the urine was much diminished in quantity, and the lower limbs were so much distended, that the skin seemed ready to burst, he was induced to direct two incisions to be made in the lower parts of each; upon which a considerable quantity of water was discharged; but the swelling was not much reduced. He insists upon the necessity of general blood-letting in the following words:—" Quoique je sois bien convaincu de la nécessité de la saignée dans ces dépôts subits, auxquels la fièvre se joint, & qui peuvent être regardés comme formant dans le commencement une maladie aigüe & inflammatoire, je ne prétends pas cependant que ce moyen de guérison, que je propose, soit infaillible. J' ai eu le malheur de perdre plus d' une malade, malgré toutes les saignées, que j' avois pû faire; non que les saignées eussent été contraires; mais elles avoient été insuffisantes pour ces cas là, parceque le mal étoit plus puissant que le remède & qu' il n' y en avoit pas d' autre," &c.—pag. 355.

He observes, that his master *M. Clément*, of whom he speaks in terms of the highest respect, did not understand the treatment of *dépôts laitux*,

and after offering an excuse for him by saying, that the most famous accoucheurs, his cotemporaries as well as his predecessors, viz. *Peu, Mauriceau, La Motte, Deventer &c.* were not more enlightened, he adduces the following case, in confirmation of what he has advanced respecting M. Clément.

CASE I.

“ The daughter in law of M. Clément was safely delivered for the 5th time. After being kept low and confined to her bed during a fortnight, she was permitted to sit up. She began to complain of a pain in the thigh and was immediately put to bed, a fever took place and was soon followed by a swelling of the part. As the patient was very fat, and was naturally much disposed to sweat, she was covered with bed-cloths, because sweating was considered as a mean of curing her. But, instead of sweating, her fever was materially increased, her skin became dry, and the swelling, accompanied by acute pain, extended to her leg. I perceived, that blood-letting was never more clearly indicated; but must confess, that my respect for the decisions of my master prevented my proposing this remedy. Besides, I was certain that it would not be complied with, because the

lochia still continued to flow, and the prejudices of M. Clément made him absolutely condemn bleeding in this case. We had the pain to see our patient die on the 20th day of her confinement and the 5th of the disease." See page 355.

I shall adduce another case, to give an example of the mode of treatment, which he recommends :

CASE II.

" A lady of rank was seized, on the second day after her delivery, with a violent fever, accompanied by headach and acute pains in the loins and belly ; the *lochia* were stopped and the patient was in imminent danger. M. Peyrat, who attended the patient, because I was engaged elsewhere, directed several bleedings in the foot, and a very low regimen. These means, with some other remedies, soon removed the dangerous symptoms, and the patient gradually entered into a state of convalescence. She was allowed to eat, but her food was not taken with the same pleasure as convalescents, whose cure is established, usually take it. One day, when the patient was just going to get up, she perceived all at once a pain in the thigh, which was soon after succeeded by a swelling and fever. A consul-

tation was held, at which I was present. The Physicians, as well as M. Peyrat and myself, were unanimously of opinion, that recourse ought to be had to blood-letting. She was accordingly bled several times in the arm; purgatives, febrifuges and apozems, made from soothing and slightly aperient plants, were employed. A soothing powder and the external remedies, mentioned above, were also used with great advantage. But scarcely had we vanquished the disease in one side, when it appeared in the other. The same remedies were a second time employed, and in five or six weeks the *dépôt* was radically cured." P. 352.

As an instance of his treatment of the disease, when it terminates in suppuration, I am induced to bring forward the following case.

CASE III.

"A lady, who lived in the *Fauxbourg S. Marceau*, after a common labour went on very well till the 8th or 10th day. She then felt some troublesome pains in the abdomen, the groin and the thigh: as no swelling was perceived, the patient was blooded twice, but at a considerable distance of time from each other; recourse was then had to oil of almonds, glysters and local applications of different kinds. Five or six

weeks passed without obtaining any diminution of the symptoms: On the contrary, fever supervened, the thigh and leg could not be used and the pain in the groin increased. I was called in consultation with the physician of the patient. On examining her, I observed a hardness above the fold of the groin, which was not circumscribed, nor was it attended with elevation, or redness of skin; but it had all the marks of a *dépôt laiteux*. We agreed upon attempting to resolve it, notwithstanding the time that had been lost. The patient was therefore bled several times; purgatives and apozems were prescribed; and cataplasms were employed. But all these means were insufficient for preventing the supuration; and M. Boudon opened this *dépôt*, the focus of which was in the hypogastrium. It contained so large a quantity of matter, that we were surprized this had not made its way into the cavity of the abdomen instead of pointing externally. This lady was perfectly cured, and has since had several children."—See p. 364.

Before I take my leave of this author, I shall advert to what he has advanced respecting the occurrence of *dépôts de lait* in pregnant women. He believes, that he was the first person who remarked and distinguished them, and observes that the parts most commonly affected in these subjects

are the hypogastrium and lower extremities, adding, that these are the parts, which suffer most from the weight and pressure of the child, and in which the fluids are the most obstructed in their passage ; consequently that they are the parts most susceptible of those impressions, that are occasioned by the accidents above mentioned. He gives three cases of this affection as occurring in pregnant women, and says, that they are all which he has had an opportunity of seeing during more than 30 years practice ; whence he thinks it is not surprising, that the writers on midwifery do not give a single instance of a deposit of milk previously to parturition. He ascribes the rare occurrence of these cases in pregnant women to the daily consumption of the milk of the mother for the support of the life and the nourishment of the foetus.

As I have never met with, or even read any other cases occurring during pregnancy, I shall here introduce the histories of all the three.

CASE IV.

“ More than 15 years ago, I was desired to visit the wife of a surgeon.—She was 7 months gone with child, and obliged to keep her bed on account of an acute pain in the right thigh, accompanied by a swelling, which did not ex-

tend farther. The complaint had been taken for a rheumatic pain, and cataplasms of various kinds had been employed. The patient had been bled once, and she was going to take a purge when I first saw her. I suspected it to be a *dépôt laiteux* at first sight. And searching for the seat of the disease in the groin and along the course of the vessels of the thigh, I perceived a painful cord, extending from the bend of the *inguen* to the middle and inside of the thigh. I then declared that it was a milky *dépôt*. The patient was bled three times in succession, a more strict regimen was prescribed, and a laxative was given, composed of decoctions of succory &c., with the addition of some manna or a portion of some purgative salt. At the same time, flannels, soaked in emollient and resolute decoctions, were kept applied to the part affected. The pains ceased; the swelling continued somewhat longer, as is usual; but it disappeared before her delivery, which took place at the full time, and was not attended with any bad accidents." P. 382.

CASE V.

"I was called to a lady in her first pregnancy, who in the 4th month was suddenly attacked with pains in one thigh; and these were in a

short time succeeded by a swelling of the whole limb. Inquiring more particularly into the complaint, I found the same marks of a *dépôt laiteux*, as in the person, who was the subject of the preceding observation. The patient and her friends, not believing in the possibility of a *dépôt* of this kind during pregnancy, would not readily submit to the evacuations, that I proposed. However, as soon as the physician appeared convinced of the nature of the disease from my report of it, we were permitted to act in the manner we thought best adapted to the complaint. The patient was bled several times : She took laxative and diuretic apozems, and occasionally a cathartic. Topical applications of all kinds were employed. After a considerable time the above remedies produced a cessation of the pain and a diminution of the swelling of the thigh and leg. The disease then passed to the other side ; it first attacked the thigh, and by little and little extended over the whole of this extremity ; fever then supervened, so that this second disease, succeeding so soon to another, which had exhausted the patient extremely, prevented our employing the means, that had before answered, so vigorously. We did employ them however ; but the administration of them was regulated according to the strength of the patient. The

disease diminished without absolutely going off; a slow fever afterwards made its appearance, and by enfeebling the patient from day to day, rendered her pains so acute, that she could not support herself upon her legs. She was delivered at the term of seven months and a half, after 3 months of sufferings. The child only just lived to be baptized. The complaints continued notwithstanding her delivery: The *lochia* were in moderate quantity; but of bad quality. At length this lady fell a sacrifice to these accumulated evils, and died about the 9th day after her delivery. There was reason to believe that the change, produced in the milk by some cause or other, was communicated to the other humours, and that the whole mass of blood, becoming contaminated by this bad leven, occasioned the destruction of the whole body." P. 383.

CASE VI.

"A lady, when pregnant of her first child, complained at the end of the 4th or 5th month of a rather acute pain in the right hypochondrium, tending towards the kidney. The fever, accompanying the pain, appeared rather to be the effect of it than the cause. M. de Caumont, her surgeon, after examining her with a good deal of attention, had remarked in the part,

where the pain was situated, a tumour, which vanished and reappeared in certain situations, hence he judged that its seat was in the abdomen. He desired, that I might be called; and I remarked, as he had before done, a tumour that was tolerably moveable and pretty nearly of the nature of those, which are formed in the *laminæ* of the peritonæum after delivery. Its situation, the moderate pain accompanying it, and the slight fever caused by it, gave us hopes that the tumour might have been occasioned by retained milk. Being unacquainted with any more powerful resolute than blood-letting in recent *engorgemens*, we employed it freely: We enjoined the patient a pretty severe regimen for a pregnant woman: She was also purged several times; but not so as to endanger a premature delivery. By these means we overcame the pain of the tumour and dissipated the hardness. This lady, cured of the dépôt, carried her infant the usual time, and was safely delivered." See Puzos, pag. 382—484.

The importance of these Mémoires, and the dearness and scarceness of the work, in which they are inserted, will, I trust, prove a sufficient apology to every reader for the length of my analysis. Those, who do not possess, or have not access to the original, will have great reason

to be gratified, and those, who are fortunate enough to be in possession of it, will read the memoirs to more advantage after this analysis, as I have not only given an abstract of such parts of them as related to the disease of which I am treating, but have arranged the observations in a more *lucid order*. And, since the succeeding foreign writers, *Levret* excepted, have added but little either to the history, causes, or cure of the disease as described by this excellent author, I shall hence be enabled to make the analysis of their works shorter; for, in reviewing the others, I shall rarely do more than point out in general terms their agreement or disagreement in doctrine with Puzos, and notice such additions to the History &c. of these complaints as have been made by each.

It has been already observed, that the *Supplément* of *Levret* contains a Memoir read to the Royal Academy of Surgeons at Paris on *Phlegmatia dolens* under the title of *Les Infiltrations Laitieuses des Extrémités inférieures*:* And I have now to remark, that

* The 9th article of this *Supplément* is particularly valuable: It is entitled *Dissertation sur la cause la plus ordinaire, & cependant la moins connue, des Pertes de sang, qui arrivent inopinément à quelques femmes dans les derniers tems de leur grossesse, & sur le seul & unique moyen d'y remédier efficacement.*"

Mr. Rigby in his excellent *Essay on the uterine hæmor-*

in his *Art des Accouchemens*, Part. III. Chap. 3. Sect. 7. he has treated of this disease under the title

rhage, which precedes the delivery of the full-grown fœtus, speaking of what had been written on this subject by preceding authors, says:—“Nor have any hints been suggested to us, which might lead us, at the beginning of the complaint, even to a probable conjecture, whether the hæmorrhage be of that kind, which requires the turning of the child or not.”—Page 6. Edit. 3d. And an intimation to the same purport occurs in page 8th. This writer, however, in p. 25th of his Essay quotes this very Dissertation of Levret, to prove “that the placenta may be situated on the os uteri”: And I shall now shew, that Mr. Rigby has borrowed his distinction of Floodings into accidental and unavoidable and the true practice, founded upon it, from the same Dissertation. After speaking of the uterine hemorrhages, produced by occasional causes, when the placenta is not attached to the os uteri, Levret says:—“A la vérité personne n’ ignore qu’ il est ordinairement possible de prévenir ces pertes, & qu’ on y remédie même très-souvent sans en venir à l’ accouchement. Mais dans le cas particulier, qui va faire le sujet de cette Dissertation, la femme ne peut absolument se soustraire à la perte de sang avant l’ accouchement; c’ est lorsque le Placenta a pris racine dans la partie la plus basse du corps de la matrice & dans la plus haute du col propre de cet organe, au lieu de s’ être implanté dans le fond, ou aux parties supérieures des parois du corps de ce viscère. Il est donc très important de connoître précisément la cause d’ un accident, qui doit arriver de toute nécessité, afin de se trouver en état, dès le premier instant de son apparition, de prendre les mesures les plus justes pour parer le sort funeste,

of *Engorgemens laiteux dans le Bassin & aux Extrémités inférieures.* From the writings of this

dont la Mere & l' Enfant sont alors également menacées par la perte de leur sang"—Pag. 342 & 343.—" Je m'engage donc à prouver : que le Placenta s'implante quelquefois sur la circonférence de l' orifice interne de la matrice."—
 2^o Qu' en ce cas la perte de sang est *inévitabile* dans les derniers tems de la grossesse. 3^o Qu' il n' y a pas de voye plus sûre pour remédier à cet accident urgent, que de faire l' accouchement forcé."—Page 343.

In p. 350 he says :—" Dans toutes les Pertes de sang, qui surviennent par le détachement d' une partie du placenta implanté au fond, ou aux parois du corps de la matrice, l' hémorrhagie diminue ordinairement à proportion que la matrice se contracte de plus en plus, parceque d' une part la contraction du corps de cet organe diminue le diametre de l' ouverture des vaisseaux utérins, qui communiquoient auparavant avec la portion détachée du placenta, & que d' autre part elle ferme, pour ainsi dire, les orifices des vaisseaux de cette même partie de l' arriere-faix, ce qui donne au sang le tems de s' y coaguler, & contribue par une suite nécessaire à faire cesser l' hémorrhagie, ou au moins à la modérer ; mais lorsqu' au contraire le placenta a pris racine dans le col de la matrice, plus cet organe se contracte & plus l' hémorrhagie augmente, tant de la part de la matrice que de celle du placenta, par la raison qu' à mesure que l' orifice utérin est forcé de se dilater en conséquence de la contraction du corps de ce viscere, il arrive que d' un côté le placenta se détache de plus en plus vers son centre ; & d' un autre côté que les orifices des vaisseaux de l' os tincæ, augmentant aussi de plus en plus de diametre, laissent échapper avec moins

author I have collected the following particulars:
 —“ This affection does not make its appearance

de gêne & plus de liberté le sang qu' ils contiennent.”—In p. 353 is the annexed passage :—“ Autant la méthode de M. Puzos est excellente & préférable dans le premier cas autant elle pourroit être désavantageuse & préjudiciable dans celui-ci. En effet, on ne sçauroit souvent apporter trop de célérité à faire dans ce dernier cas l' accouchement forcé, puisque dans cette occurrence, on n' a pas à craindre l' inertie du fond ou de la partie supérieure des parois de la matrice.” Il est donc de la dernière évidence, que si on ne se décide alors de bonne heure à terminer l' accouchement en perçant les membranes sur le bord du placenta, ou le placenta lui même, afin de retourner au plutôt l' enfant, sur tout si le péril est urgent, on risque beaucoup de la laisser mourir sans recevoir le baptême, & on met au hazard la vie de la mere”—The truth of these remarks is demonstrated by *cases*. He afterwards points out the signs, that characterize the particular case of hemorrhage, which is the object of his Memoir, in these words :—“ Le premier de ces signes est que l' orifice de la matrice est bouché par un corps d' une solidité charnue que l' on juge au toucher être composé de plus ou moins de petits lobes & de sillons anfractueux qui les séparent les uns des autres, & qu' il est très-aisé de distinguer avec l' extrémité des doigts, dès qu' on en a détaché les caillots, qui s' y trouvent toujours collés en plus ou moins grande quantité. Un second signe est que, pendant qu' on fait cette recherche, la perte de sang augmente nécessairement. Mais celui qui me paroît plus decisif, c' est qu' on sent très-distinctement l' ondulation des eaux de l' amnios & même les membres de l' enfant, comme à travers une vessie mou-

much sooner than 15 days after delivery, except in those cases, where the milk has not mounted to the breast. § 926. There are many examples of persons being attacked with it at a much more distant period, and nurses, who had lost their children about 12 or 15 days before, have suffered from it even a year after their delivery. § 923. The seat of these *Engorgemens* is in the cellular texture, connecting the peritonæum with the pelvis, or interposed between the psoas & iliac muscles; or in the duplicature of the broad ligaments; and sometimes in several places at the same time. § 927. It seldom happens, that both sides of the pelvis are affected at the same time; but, whilst an attempt is made to disperse the

illée & très mince, lorsqu' on fait cet examen suivant la méthode, que j' ai indiquée plus haut. Je ne dois pas omettre que la perte de sang augmente par la douleur & qu' elle en suit les gradations, ensorte que plus les douleurs sont vives & répétées & plus la perte est considérable.

After making this excellent distinction of floodings, after pointing out the signs, by which they may be determined, and the modes of treatment adapted to them, he concludes his Dissertation in the following words, to which every one, engaged in the practice of midwifery, can bear ample testimony;—J' ai donc lieu de me flatter d' avoir développé un point important pour le progrès de la chirurgie, & conséquemment pour le bien public, qui en est le but principal.—P. 364.

engorgement on one side, it frequently happens that it passes to the opposite side of the pelvis. § 934. And it is still more common to find it terminate in an *infiltration* of the cellular texture, which occupies the interstices of the muscles of the extremity of the same side, and afterwards of the cellular texture, situated under the skin of the thigh, the leg and the foot. § 934. The patient complains of dull pains in one or both groins, of weight in the pelvis, and of weakness in one or both thighs, according as it affects one, or both sides. § 928. 929. When it affects one side, a tumour, more or less considerable, is found on examination in the iliac cavity, where it appears to be in general very adherent. If the patient lie upon her back, she feels more pain when the thighs are extended than when they are in a state of flexion ; the cord of femoral vessels is also painful in a great part of its course, and often even small olive-shaped tumours are found here and there surrounding it. § 930—932. The hypogastric region and all the lower extremity then become very edematose ; but, instead of presenting a purely watery transparency, they are of a milky whiteness.—The impression of the fingers does not remain at first, nor till the tumefaction has continued a long time. § 935. This *Engorgement* announces itself at first by an extremely painful tension

in the thigh along the femoral vessels, but commonly unaccompanied by heat, redness, or apparent swelling. The next day, or the day after the next, the leg is found to be attacked with the same tension; but, during this interval, the thigh tumefies and then becomes rather less painful, especially if it be not touched. The foot afterwards suffers in the same manner as the leg, and the leg undergoes the same changes as the thigh had previously done. The sensibility of the thigh continues to decrease in proportion as its bulk increases, and the same order is observed regularly in the affections of the leg and foot. When the swelling is arrived at its greatest height, which usually happens in the space of eight or ten days, the skin of the extremity becomes edematose; the limb continues to be feeble; but the pain is very supportable, especially when the limb is not moved. § 935—939. When we are fortunate enough to obtain a resolution of the *Engorgement*, it is the thigh, which first begins to relax and diminish in volume, then the leg, and lastly the foot. But if, from the very commencement of the diminution of the swelling, a sweat do not take place, and the urine and fæces do not become more abundant and milky, we must expect to find, that the humour is only changing its place, and

will be deposited upon some other part. Its most usual *route* in such cases is to pass from the thigh to the buttock of the same side, it then reaches the inside of the pelvis, then the buttock and thigh of the opposite side, and from thence passes to the leg and foot; so that these different parts experience successively the same symptoms, as had been remarked in the extremity first attacked. § 940.—943. The same return in every respect sometimes takes place, when we have not been able to render the milky matter capable of passing through the filtres, which convey excrementitious humours out of the body. In these cases the patient experiences agitation, cough, head-ach; the pulse becomes fuller; and, as soon as the metastasis begins to take place, and the infiltration appears again, the fever and other symptoms are dissipated. It happens also very often, that this humour, after this alternative of infiltration and metastasis, is equally divided, is collected at the same time in both the lower extremities, and sometimes affects the whole habit. In this last case there is no fever, nor any of the symptoms which accompany it. Moreover the malady terminates in general very fortunately in both cases, although, according to every appearance, there was great reason to dread the event.” § 943—947.

Levret recommended laxatives to prevent this disorder; and, when the disorder had actually taken place, he employed blood-letting from the arm, unless the head of the patient were affected or threatened, in which case he preferred taking blood from the foot. —As a purgative he gave manna and neutral salts in an infusion of the leaves and branches of *Parietaria*, and sometimes half an ounce of Cremor Tartari. His external application to the limb was a cataplasm of bread and milk with a small quantity of salt of tartar, yolks of eggs and oil of lilies; and, when the pain abated, he added some saffron. He gave the patient, as her ordinary drink, a pint or two of distilled pellitory water a day, to which were added twelve grains of salt of tartar, and one or two ounces of syrup of the five aperient roots, &c. § 948—953.

The next author in point of chronological order is ASTRUC. His *Traité des Maladies des Femmes* was published at Paris in 1761, and in the 16th chapter of the 3d book, he enters into the consideration of *deposits of milk*. According to this author, these complaints often happen to lying-in women, sometimes even in labour, and sometimes a long while after. They appear ordinarily in the legs, thighs, arms, shoulders, and neck; and sometimes, but seldom, in the interior parts. They are generally capable of resolution,

which is sometimes perfect, and sometimes imperfect, one or more knots being left, which are often very soft, in some instances indurated and in others scirrhus. They sometimes suppurate and form abscesses. § 1.

His theory of the production of these complaints is as follows :—" If the milk pass into the blood in great abundance, or if that, which passes, be very thick, the lymph, that is charged with it, becomes too thick to pass through the conglobate glands, is stopped in their cells, and swells them and consequently the body of the glands, and this is the cause of the milky obstruction. For it may be easily comprehended, that the lymph, which is continually entering into the conglobate glands, cannot force a passage there, but must stagnate in their veins, dilate them and produce an edematose swelling. § 2.

There is nothing on the history, diagnosis, prognosis and method of cure of this malady in Astruc's work, which I think it necessary to bring forward. He gives no cases ; nor does it appear that he has written from his own observation.

The 1st edition of the *Nosologia Methodica* of the Ill. SAUVAGES was first published, as has been already intimated, in 3 vols. 8vo. at Am-

sterdam in 1763. The 2d was published at the same place in two vols. 4to. in 1768. In this system the *dépôts de lait* of preceding authors are referred to different genera and species. As the Nosologia of Sauvages bears a high price and is with difficulty procured in England, many of my readers will, I hope, be gratified by seeing the whole of what he has said, relative to the disease of which I am treating, inserted in this place. This affection, when it occupies the lower limbs, is named by him *Phlegmatia lactea*—*PHLEGMATIA* is the 8th genus of the 10th class and 2d order (*CACHEXIÆ—INTUMESCENTIÆ*) and has the annexed character, “*Intumescencia partium inferiorum œdematosa.*” The species *lactea* is given thus in tom. 2. pag. 475. 4to.

3. *Phlegmatia lactea* D. Levret; *Infiltration laiteuse.* Journ. de Medec. Juill. 1759 des Mém. de l’ Acad. R. de Chir.

Differt a *vulgari* 1^o quod puerperas, raro vero nutrices aggrediatur; 2^o quod lactis uterini aut mammaris repressionem sequatur; 3^o quod ab *Hysteralgia lactea* incipiat; 4^o quod infarctus circa inguina sit initio dolorificus; 5^o quod crura & dein tibiæ, demum pedes successive tensione, dolore afficiuntur, non vero ordine retrogrado, ut in *vulgari*, seu *serosa*; 6^o quod, dum partes intumescunt, dolor recedat; 7^o quod tumor sit opacus, non pellucidus.”

When the dépôt affects the hip & inguinal region as well as the limb, Sauvages gives it the title of *Ischias ab Sparganosi*. ISCHIAS is the 31st genus of the 7th class and 5th order, (DOLORES—EXTERNI) in his system, and is thus characterized: "Pelvis & coxendicis dolor claudicationem sæpius inducens." The description, references, and diagnosis of the species, above mentioned, are thus given in tom. 2. p. 142, 143. 4to.

5. *Ischias ab Sparganosi*. Dépôt laiteux à la cuisse. Puzos Mém. sur les dépôts laiteux, pag. 350, Levret Journ. de Med. Juill. 1758, pag. 80. L.

Sparganosis ex *Dioscoride* est lactis redundantia & inde ejus deviatio in alias partes.

Hic morbus circa 14^m a partu diem, apud mulieres lacte redundantes quæque lac sugendum non præbent alumnis, indicia sui præbet a dolore inguinis unius lateris juxta tractum vasorum cruralium protensus, cum funiculi horum vasorum intumescencia, accedit progrediendi difficultas, dolor ex femore ad poplitem, inde ad suram atque ad pedem serpit: œdematosus vero tumor crescit quandoque ita ut volumen extremitatis inferioris sit duplo majus quam in statu sano.

Œdema *serosum* distinguitur a *lacteo* quod *serosum* seu vulgare incipiat a pedibus, sensim

sursum ascendat sine dolore, ambosque pedes invadat; *lacteum* alterutri cruri insidet, dein descendit & dolore stipatur initio, gravidasque vel puerperas tantum afficit.

Hic dolor curatur 1° phlebotomia una, alterave; 2° catharsi; 3° calore assiduo partis & corporis; 4° topicis resolventibus diu applicatis, ut decocto herbarum emollientium & solventium addito vino albo, aqua vitæ, sale ammoniaco; embrocationes ex sapone & butyro, oleum amygdalarum amararum cum spiritu vini, balsamum Fioraventi, frictiones siccæ repetitæ &c. adhibentur, & si sanato crure alterum afficiatur, ut sæpius accidit, iterantur eadem auxilia.”

On comparing what is stated by Sauvages concerning Phlegmatia *lactea* & Ischias *ab Sparganosi* they appear to be exactly the same disease and therefore are improperly referred to distinct genera. And, on paying attention to the description given of Hysteralgia *lactea*, this will also be found to constitute the same disease, consequently ought to have been referred to one species with the two preceding by Sauvages.

When the uterine region is affected by a *dépôt de lait* either alone, or in conjunction with the lower extremities, this Nosologist refers the complaints to two distinct species of HYSTER-

ALGIA, which is the 27th genus of class 7th.
Order 4. (DOLORES—ABDOMINALES INTERNI).
The Characters, Synonyms &c. of Hysteralgia
and the two species in question are thus stated :

XXVII. HYSTERALGIA ; *Hystralgia* Hasselquist
Iter in Palæstinam ; *dolor uteri* Auctorum ;
Mal de mère, Fortraiture, Colique utérine.

Dolor uteri sine nisu parturitionis.

13. *Hysteralgia lactea. Infiltrations laiteuses* Van-
dermonde. Journ. de Med. Juill. ann. 1759
auctore D. Levret. L.

Puerperæ huic sunt obnoxiaë a lacte sup-
presso, suffocato, ab aere frigido suscepto : raro
nutrices hunc morbum incurrunt.

Initio dolor gravativus in pelvi & in inguini-
bus, debilitas in femoribus, ligamenta rotunda
uteri dolent. In progressu infarctus femoris,
cuti concolor, vix dolens, parum prominens ;
crescit tumor femoris, cum accedit tumor similis
in tibia, sed hujus tumore accedente dolor re-
mittitur ; dein pedes intumescunt, ast qua ra-
tione tument minus dolent quam ante tumorem.

Fit status morbi intra octo decemve dies, &
cum declinatio accedit, intumescencia crurum
prima recedit, dein tibiæ & successive pedes de-
tumescent, ut in *Oedematia* resolutione.

Differt œdematia lactea ab œdematia lymphatica; 1° Quod lymphatica pellucida sit, lactea vero opaca: 2° Quod lymphaticæ ab imis partibus ad superiores procedant, e contra lacteæ a crure ad tibiam, inde ad pedes se extendant: 3° Lactea œdematia originem habet juxta uterum, unde ad infimas partes se diffundit.

Curatio. Incipienti morbo sudorifica & levia cathartica ad resolvendum lac, in massa sanguinis retentum & nondum alicubi decumbens, sunt aptissima remedia: verum facto lactis decubitu seu partium quarundam infarctu sapo cæteris medicaminibus præstat. Cataplasma e plantis emollientibus cum mica panis & sapone œdemati lacteo resolvendo convenit; sapo in clysmate solutus etiam prodest, necnon forma semicupii in aqua solutus." Tom. 2. p. 126. Ed. in 4to.

15. *Hysteralgia ab Sparganosi, Dépôt laiteux dans l'hypogastre.* Puzos Traité des Accouchemens. Pag. 356. L.

Congestio lactis in hypogastrio cognoscitur, 1° ex eo quod aliquot diebus a partu accidat: 2° quod præludant tormina insolita, vaga, importuna in toto abdomine, sed ad locum fixum terminata: 3° locus ille est in alterutro inguine scilicet in textu cellulari peritonæi, ligamentis latis vel in ovario: 4° hæc tormina nec uterum

indurant, nec lochiorum fluxum excitant, ut tormina naturalia puerperis communia: 5^o anorexia, agrypnia, febris vel synocha, vel intermittens quæ horrores pluries in die repetit: 6^o circa 10^m aut 14^m a partu diem tumor tactu deprehendi potest: 7^o si hi tumores negligantur aut male tractentur, abscessus his in locis funestissimi superveniunt.

Dicitur Hysteralgia licet uterus non afficiatur, quia ob torminum cum uterinis similitudinem facile cum Hysteralgia vera confunditur, nec est genus morbi, ad quod initio propius accedat, cum autem ab initio nosse operæ pretium est.

Curatur repetitis phlebotomiis, dein jusculis ex cichorio, taraxaco, chærophyllo, nasturtio aquatico, & sale Glauberiano, unde urinæ uber proventus; clysmata etiam interponantur, dein cathartici terminentur juscula; identidem vero boli ex pulvere viperino, cinnabari, millepedibus & antimonio diaphoretico præscribantur." Tom. 2. P. 126. Ed. in 4to.

VAN SWIETEN favoured the world, in the year 1764, with the 4th volume of his famous *Commentaria in H. Boerhaave Aphorismos de cognoscendis & curandis morbis*; in which (Pag. 610 & seq.) he enters into the consideration of *Metastases lacteæ*, and attributes this affection of the lower limbs in lying-in women to a deposit of

milk on the pelvis and thighs. He observes that he has several times seen the disease, and that he has generally been able to disperse the swelling in 10 or 12 days, by fomentations of milk and soap boiled together. His account of the symptoms of the disease is evidently taken from Levret, it will therefore be unnecessary to dwell upon the examination of his work, and the only observation further, which I think it proper to adduce, relates to the description of puerperal patients, most liable to be attacked by these complaints: “ Simul etiam patet puerperas lactantes minus periclitari ab hac causa, quam illas, quæ natis ubera negant. Suctio ipsa lac in mammas evocat; retropulsio autem metastasis talis periculum facit.” Pag. 612.

The celebrated LIEUTAUD adopted the same theory of this disease as his countrymen, *Puzos, Levret &c.* and recommended the same vigorous treatment as will appear from the following extract: “ Hinc præcavere vel impugnare queunt diuturnus evacuantium multigenorum usus & congrua victus ratio: ideo præmissis venæ sectionibus, opportune præcipiuntur laxantia, diuretica & sudorifica; ut materia morbosa ad varia corporis emunctoria devehatur; egregiam opem conferunt serum lactis, nitrum, sal de duobus, magnesia, aquæ minerales, &c.” *Synopsis Uni-*

versæ Praxeos Medicæ. P. 465. 4to. Amsteldami, 1765.

JOS. RAULIN in his *Traité sur les maladies des femmes en couches*, published at Paris in 12. 1771, also attributes this affection of the lower extremities to a *dépôt laiteux aux aines & aux cuisses*.

J. B. M. SAGAR, who, in his *Systema Morborum Symptomaticum*, published at Vienna in 1776, has adopted nearly the same genera and species of diseases as Sauvages, refers the one under consideration to *Phlegmatia lactea* & *Hysteralgia lactea*. The characters and cure are given in the following words :

“ Class. III. CACHEXIÆ. Ord. 2. INTUMESCENTIÆ.

X. PHLEGMATIA, intumescencia œdematosa artuum inferiorum mollis, cuti concolor, indolens, foveam digiti impressi servans, non elastica.

lactea. 3. P. Lac depositum in telam cellulosam subcutaneam hanc facit phlegmatiam, cognoscendam ex retropressionione lactis, hysteralgia, descensu tumoris a femoribus ad imos pedes, opacitate & recessione doloris post eruptionem tumoris.

THERAPEIA. *Leuret* ordinat phleboto-

miam, emplastrum de mica panis in lacte cum aliquot granis salis alkalini fixi, croco, vitello ovi, & oleo liliorum; propinat dein purgans ex salibus, et aquam parietariæ in potum præscribit: an mentha crispa juxta *Lieutaud* lac coagulatum resolvit? in mea uxore non fecit." Pag. 153. 154.

"Class. IV. Ord. IV. DOLORES ABDOMINIS
INTERNI.

XXV. HYSTERALGIA, dolor in regione uteri sine parturitionis nisu et phlegmasia notabili.

lactea. 8. H. Lac repressum ex frigore suscepto, ira, obruens matricem parit hysteralgiam cum dolore gravativo pelvis, inguinum et femorum; unde œdema femoris lacteum, opacum, quod descendit in tibiam et ultimatum in extremos pedes. D. L." Pag. 264, & 265.

From the *Præcepta Medicinæ Practicæ* published at Leyden in 1783 by N. G. OOSTERDYK it appears, that this author considers many of the diseases, both external and internal, incident to lying-in women, as deriving their origin from milk deposited in different parts of the system. See Cap. 85. § 8. p. 279.

By C. G. SELLE, *Rudimenta Pyretologiæ Me-*

thodica. Ed. altera, *Berolini* 1786, this disease is referred to the 6th Class, MORBI LACTEI; of which the following is the character: "Rarissime ante partum, plerumque in puerperio occurrunt. Lactis e mammis subitanea retrogressio, vel ejusdem secretionis impeditio. Alvi dejectio alba. Urina albescens. Sudores acidi. Saliva lactea, acida. Cruor sanguinis e vena detracti pellicula albescenti obtectus, vel sero lacteo innatans." P. 367.

"GENUS QUINTUM.

METASTASIS LACTIS VEL LYMPHÆ AD PARTES CORPORIS EXTERNAS.

Hoc in casu materia vel Rheumatismum mittitur, vel in suppurationem abit, pro cujus et partium adfectarum differentia species determinandæ sunt. cf. SELLE *Beyträge*. T. 2. p. 69." pag. 368.

This subject is not further pursued in the *Rudimenta*, &c.; but the author has given a more ample account of these diseases under the head of *Metastases Lactis* in another work; the seventh edition of which has been translated into Latin and published at Berlin in 1798 by Curtius Sprengelius under the title of *Christiani Theophili Sellii Liber de curandis hominum morbis*. In this volume the author sums up his reasons for believing these different affections to be pro-

duced by a deposit of milk upon the part in the following words: "Cum itaque humores congesti lacti corrupto simillimi sint, cum eæ colluvies cohæreant cum humoribus mammas occupantibus, cum metastasium more contingant, sæpiusque nascantur absque ulla prægressa inflammatione, cum citra puerperium inflammationes non soleant iis excipi colluviebus; ratio nobis constare videtur, e lacte abscedente eos tumores originem ducere. Neque multum interesse videtur, adfuerit lac, antequam secerneretur in sanguine, lactis vera forma. Considerandi enim lymphatici tantummodo humores veniunt, quos ut in mammis secernantur natura jussit."—Pag. 483.

Respecting the ways, by which this milky colluvies is carried out of the body, and the different parts, in which it is deposited so as to produce various diseases, he makes the following observation: "Efficitur antem colluvies ea: 1. sudoribus, unde miliare exanthema efflorescit; 2. per alvum aut urinam; 3. per os, cujus rei & *Nuckius* & *Puzosius* exempla servarunt; 4. per umbilicum: abscessisse ibi lactis aliquid in peritonæum jamjam videtur; 5. per uterum, unde lochia manant albida; 6. in cerebrum, unde furere aut desipere saltem incipit ægra; 7. in thoracem, unde angina pectoris; 8. in abdomen,

unde puerperarum febris ; 9. in pelvim. Quod si inter psoam muscolum & iliacum abscedit, trans foramen ischiadicum in femora abire solet. 10. in musculos abdominales ab inguine usque ad os ilium ; 11. in artus." Ibid. pag. 485.

In the Celebr. CALLISEN'S *Principia Systematis Chirurgiæ Hodiernæ*, published at Copenhagen in 1788—1790, this affection of the lower extremities is named *Oedema puerperarum*, and is so admirably, and, at the same time, so concisely treated of, that I with pleasure lay before the reader the whole of his account of it, as given in Part second, pages 18—20. § 34—39.

" 34. *Oedema puerperarum*, aliis lacteum est tumor elasticus, albescens, renitens, calidus, dolens, foveam impressi digiti haud retinens, puerperis haud infrequenter, gravidis rarissime infestus.

35. *Sedem* huic oedematî præbent extremitates inferiores, una vel utraque ; dextram sinistra sæpius invadit morbus ; rarissime extremitates superiores petit.

36. *Surgit* plerumque duodecimo vel decimo quarto post partum die tensio & dolor inguinis, sequitur tumor, qui sensim ad labia vulvæ & latus femoris internum, deinde per totum femur extenditur : secundo vel tertio die crus similia patitur ; denique dolor, tensio ac sequens tumor

in pedem transeunt, sub febris satis gravi.— Eodem ordine morbus plerumque intra duas et octo hebdomades decrescere solet; interdum per longius tempus excurrit. Ab oedemate hydro-pico frigido facile distinguitur hic morbus eo, quod a partibus superioribus deorsum pergat, tumor caleat, doleat, nec foveam impressam retineat.

37. Morbum inducentes *causæ* sæpe quidem esse videntur impedita a qualicumque causa lactis de sanguine secretio (I. 670), aut morbosa ejus resorptio (I. 674), seu lochiorum impeditus fluxus; *haud raro tamen nec lac, nec lochia, nec indoles laborum partus in causa esse videntur, sed sola lymphæ haud attenuatæ retentio ac resorptio impedita, a labe systematis resorbentis & glandularum lymphaticarum; quare per loca cutis scarificata nullum liquidum effluere solet.*

38. Morbus post lactationem declinatam vel impossibilem, aut lacte prava diæta, refrigerio, animi pathemate, percusso, aut lochiis suppressis superveniens, *avertitur* interdum excretionis deficientis revocatione indicata (I. 290) exposita.

39. Morbus *therapiam* aliam requirit sub incremento, aliam sub statu, aliam denique sub decremento.

a) *In initio morbi* conducunt sanguinis missiones

modicæ, laxantia salina, diaphoretica, antimonialia lenia, opiata, diæta refrigerans, frictiones, inunctiones, fumigationes volatiles aromaticæ, balnea vaporosa.

b) *His si resistat* morbus sub diæta largiori usus externus mercurii eximium præstat effectum.

c) In *decremento* morbi tonica externa, balnea frigida, fascia expulsiva adhibeantur.

Interdum œdema puerperarum in abscessum lacteum (I. 669), vel lymphaticum (I. 666), transit, ad methodum expositam tractandum; interdum pustulis cutaneis copiosissimis prorumpentibus judicatur."

P. HEVIN treats fully of the symptoms, causes, seat, termination, prognosis and cure of *Dépôts laiteux* in his *Cours de Pathologie & de Thérapeutique Chirurgicales*. Ed. 3. Paris, 1793. As there are some original observations in this work, I shall adduce a few extracts relative to the causes &c of these affections, when they occur in the lower extremities.

"C' est assez ordinairement le froid, dont une femme nouvellement accouchée peut être saisie soit en buvant froid, soit en marchant pieds nus sur le plancher, ou en restant quelque temps dans un lieu humide & frais, qui est la cause immédiate des dépôts laiteux; parceque

le lait, qui s' échappe alors par toute l' habitude du corps, se trouve repercuté. Ce n' est cependant pas la cause unique de ces dépôts ; car le trouble, que ressent toute l' économie animale par la violence des douleurs dans un accouchement fort laborieux, le mauvais régime, les dispositions vicieuses du sujet, l' effet des passions violentes, les dérangemens des sécrétions, l' imprudence, qu' ont quelques femmes de se faire trop couvrir, les sueurs forcées ou trop abondantes qui dessechent & épaississent la masse des humeurs, peuvent aussi produire des dépôts laiteux. Il n' est pas douteux que le froid n' occasionne ces infiltrations de lait, en supprimant du moins en partie les vuidanges." Tom. 1. pag. 260.

" La gangrene termine aussi quelquefois ces dépôts, & elle peut y arriver d' autant plus aisément que la matiere des lochies tend fort à l' alcalescence. D' ailleurs l' humeur laiteuse, quoique la plus douce de toutes les humeurs, tant qu' elle est soumise à la circulation, se pervertit bientôt par son séjour, par la chaleur & par le mouvement intestin, qu' elle éprouve, & se convertit en une sanie âcre & ichoreuse, qui ronge & détruit les vaisseaux." Ibid. p. 263.

" La suppuration de ces dépôts est toujours à craindre, surtout quand ils sont placés à l' hy-

pogastre ou dans l' aîne, ainsi on ne doit y appliquer de suppuratifs, que lorsque la matiere laiteuse n' est plus susceptible de résolution.— Lorsque la suppuration est faite, il faut ouvrir promptement les dépôts; parceque la mauvaise qualité des matieres, qu' ils fournissent, doit beaucoup faire craindre la métastase. D' ailleurs, plus l' humeur laiteuse pervertie sejournera dans la partie, plus elle formera de sinuosités par la destruction du tissu cellulaire & plus il y aura à redouter que la longueur des suppurations ne jette la malade dans le marasme." Ibid. p. 264.

J. J. PLENCK treats of this affection under the name of *Tumor lacteus extremitatum*: He says, "*Causa proxima est lactis abundantia, in mammas vel non deposita, vel e mammis subito repulsa.*" *Compendium Institutionum Chirurgicarum*. Ed. 3tia. Viennæ 1797. pag. 378.— And, after describing the symptoms of this disease when it attacks the lower extremities, he adds "*Si autem lac in extremitatem superiorem deponitur, tunc primo cavum subaxillare, dein cubitus, ultimo manus vehementer dolet, ac semper tumor locum, quem dolor deseruit, occupat.*" Ibid. pag. 397. Fomentations of soap dissolved in milk and purgatives are the remedies, which he recommends.

From the *Maladies des Femmes en couches par*

N. CHAMBON, à Paris, An VII. de la République, it appears that many puerperal diseases are still attributed by the French to *dépôts de lait*. He has treated very extensively of these complaints; but as I have not met with any original observations in the work under consideration, relative to *Phlegmatia dolens*, I shall, without making any extracts from it, or from any other foreign book, immediately proceed to examine the grounds, upon which this very prevalent theory is established.

The two principal arguments adduced in favour of the hypothesis, that certain diseases, as puerperal fever for example, the *Peritonitis puerperalis* of Frank (*De cur. hom. morbis* Epitome) and *Phlegmatia dolens* are occasioned by a deposition of milk, are these: 1. That in these complaints little or no milk is formed in the breasts of the patients before the attack; or, if formed in tolerable quantity, that it becomes much diminished, or totally disappears, about the time of the attack. 2. That the fluid, deposited in the abdominal cavity in the former disease, and in the cellular membrane of the lower extremity in the latter disease, resembles coagulated or degenerated milk.

Against the first argument it may with propriety be urged, that these complaints, when

they take place either before or after delivery, previously to the appearance of milk in the breasts, cannot possibly be occasioned by a *dépôt de lait*. It is contrary to the laws of sound physiology to suppose milk to be formed in any other way than by secretion in the glandular parts of the breasts. Milk exists *materially*, but not *formally* in the mass of circulating fluids. No humour, possessing the same properties as human milk, has ever been found in the blood, or in any part of the human body, which had not been first secreted by the breasts; it cannot therefore be produced by a mere percolation from the mass of blood. And, in those cases, wherein the milk, after being copiously secreted, diminishes or totally disappears, we are not, I apprehend, at liberty to infer, that these complaints are produced by a *dépôt laiteux*: For in some instances the quantity of milk does not diminish till after the accession of these complaints and is evidently an effect, though assumed by many as a cause, just as suppressions of the lochial and menstrual discharges, when occasioned by the accession of particular complaints, are, from want of attention, improperly considered as the cause rather than as the effect of these diseases: And in other instances, where the egress of milk from the breasts is impeded, or totally prevented,

either in consequence of diminished secretion or increased absorption, previously to the attack of puerperal fever or the swelling of the lower extremities, we cannot fairly conclude, that the milk excites these complaints by being translated to their particular seats. It is more consonant to observation and fact to suppose, that the diminished, or abolished discharge of milk from the breasts, by inducing a plethoric state of the system and thereby increasing the tension and tone of the blood-vessels, may favour the formation of peritoneal or subcutaneous inflammations, accompanied or terminated by extravasations of humours somewhat resembling milk in appearance, but not in their other properties.

In opposition to the 2d argument it may be contended with the greatest reason, that the effused fluid is not milk. Admitting that the extravasated humour is whitish and coagulated in these complaints, it does not follow that it is milk. An accurate chemist will not venture to pronounce upon the identity of two bodies, because they happen to agree in one or two qualities; if two substances be placed before him, that agree in colour and solubility in an acid, for example, he will not affirm that they are the same, till he has examined their specific gravities, the compounds formed by them &c &c. If

chemists had acted otherwise, we might at this day confound chalk with magnesia. So, if the matter, effused in puerperal fever and Phlegmatia *dolens*, be found to be whitish and separated into a *coagulated* and serous parts, we are not immediately to conclude, that it is milk : For, though the milk of the cow, with which we are the best acquainted, be coagulable, it does not follow that the milk of all animals is capable of coagulation. The late Dr. Young, Professor of Midwifery at Edinburgh, has very properly divided *milks* into two classes, viz. 1st. those of animals which chew the cud, as the cow, ewe, goat :— 2dly. those of animals, which do not chew the cud, as the mare, ass, woman. And respecting the *milks* of animals, which are not ruminant, he says, “ These are essentially different from those of the other class. They don’t turn so acescent. It is impossible to thicken them by any quantity of rennet, whether they be obtained from the human species, ass, or mare &c. No acids can coagulate woman’s milk, not even at the boiling point ; therefore we need not be under any apprehension on this head from giving women acids during their suckling ; neither do we need to fear, that the external application of acids to the breasts will coagulate the milk in them.” MS. Lect.

I have found by repeated experiments, that

human milk is not coagulable by rennet, prepared from the stomach of a calf, or an adult human being; and Dr. Joseph Clarke has found, "that healthy human milk suffers no coagulation from acids, ardent spirits, runnet, infusion of the stomach of a fœtus, nor from any known coagulating substances." Monthly Review for Aug. 1791. p. 421. See Trans. of the Royal Irish Academy for 1788.

That ass's milk does not coagulate was known to GALEN, as will appear from the following extract, in which he has indulged his wit at the expence of those, who refuse to take human milk: "Et sane utilissimum lac est quum ex ipsis mammillis quis hauserit, veluti *Euryphon* & *Herodotus* & *Prodicus* censent; qui tantam in eo ad corpora reficienda fiduciam habuerunt, ut etiam qui Phthoe contabuerant, ex ipsa mulieris papilla lac sugere juberent. Verum quum hoc plurimis non placeat, melius est calens adhuc ex mammillis id in ægri ventriculum quam ocysime transferre. Ac optimum quidem, utpote cognatum, muliebre lac est. Sed quoniam id exhiberi sibi ceu pueris plerique recusant: utique ceu asinis, asinum ipsis dari conveniet. Id enim reliquis omnibus ad propositum effectum est utilius, quippe quum tenuissimum sit, & minime coagulatur, & quoquoersus

ocyssime in corpus digeritur." Galeni Meth. Medendi Lib. 7.

Since human milk is not coagulable, this fact affords us an incontrovertible proof, that the complaints under consideration are not occasioned by *dépôts de lait*, as the majority of the writers, whom I have quoted in this section, has exclusively supposed to be the case: Some of them, indeed, perceiving the difficulties attending this theory, have supposed the congestion or effusion to be lymph, at least upon some occasions, as *Astruc*, *Selle*, and *Caillisen*. But the examination of these opinions will be reserved for the next Section, in which all the authors, that are enumerated, have determined in favour of the fluid, effused or accumulated in *Phlegmatia dolens*, being lymph and not milk, except *Cullen*, who has not given any opinion upon the subject.

SECTION THIRD.

From Puzos to the present time, as collected from the writings of British Practitioners.

DR. CULLEN, in the 1st edition of his *Synopsis Nosologiæ Methodicæ*, published at Edinburgh in 1765, proceeded no further than to give generic characters of diseases, with the synonyms of preceding nosologists and practical

authors. In this edition Phlegmatia Sauv. is referred to Anasarca, pag. 286; Ischias Sauv. is referred to Rheumatismus, pag. 265; and Hysteralgia Sauv. is wholly omitted.—The illustrious author extended his plan in the 2d edition, printed in 1772, so far as to give some specific characters, and to enumerate and arrange in better order many of the species, formed by Sauvages. Accordingly we find Phlegmatia lactea Sauv. referred to Anasarca; but no notice is taken of Ischias *ab Sparganosi*, Hysteralgia lactea, or Hysteralgia *ab Sparganosi* Sauv.—The 3d edition of this work, much improved and enlarged, appeared in 1780, in which the number of specific characters is greatly increased, and more of the Sauvagesian species are enumerated. In the 2d volume of this work (p. 275), Phlegmatia lactea Sauv. is referred to Anasarca serosa; and at p. 121, we find Ischias *ab Sparganosi* Sauv. merely enumerated amongst the *Species Symptomaticæ* of Rheumatismus: Of Hysteralgia lactea & H. *ab Sparganosi* Sauv. no notice has been taken either in the 3d, or any of the subsequent editions of this work, which has done so much credit to our British Nosologist. Nor has he entered into the consideration of the history, causes, or cure of this affection of the lower extremities, in his *First Lines of the Practice of Physic*.

In the year 1784 Mr. WHITE published an *Inquiry into the Nature and Cause of that Swelling in one or both of the lower extremities, which sometimes happens to lying-in women*; and, by advancing a new Theory of the disease, called the attention of british practitioners more particularly to it.

Before this very respectable author ventured to lay his work before the public, he had collected what he could concerning the complaint from foreign writers, and corresponded with several eminent Anatomists and Accoucheurs upon the subject. From the late Mr. Cruikshank he received the annexed note, relative to it, taken from the late Dr. Hunter's Lectures—"They have imputed the swelled limb, which happens after lying-in, to a *dépôt de lait*, but it is not;—from something wrong in the constitution the patient is seized first with pain in the groin, the pulse becomes smart, and the part becomes tender; this pain and tenderness get gradually lower down and *the muscles are stiffened into hard bumps*, and an œdema frequently succeeds the inflammatory swelling.—It is generally called a cold, but it is not. In some it is over in a short time, in others it will last some months.—It generally does well." Page 7.

From Dr. Denman Mr White learnt that,

though he described this disorder in his lectures under the title of *Oedema lacteum*, he did not imagine it to be a deposit of milk; and that, "without attending particularly to the investigation of the cause, he has considered it as *an affection of the whole glandular and lymphatic system of the extremity*." Page 7. And, where Mr. White contends that this complaint is not owing to a deposit, or a redundancy of milk, he adds, "but this needs no refutation, as I believe, from the numerous correspondents, who have favoured me with their opinions on this subject, that there is not a man of eminence either in England or Scotland, who imputes it to that cause."—Page 57.

In Mr. White's account of the medical history of the disease, we find the following circumstances noted, in addition to, or contradiction of the observations of *Puzos, Levret, &c.*—It attacks women, who are in full strength, and those who are reduced by flooding—It attacks women who were delivered on the knee, and others, who were delivered on the side; but of those who were delivered on the side, it appears that the greater number were affected *on that side on which they lay at the time of delivery*. It attacks women of all ranks, the most healthful, as well as those who have laboured under chronic

diseases, the strong and the weak, the lean and the corpulent, the sedentary and the active, the young and the middle aged; after the first or any other labour, and whether the labour be natural or preternatural. It happens at all seasons of the year indiscriminately, and in the country as well as in large towns. It never attacks either of the arms, or other parts of the body. He has not known it to happen after a miscarriage, nor to any woman oftener than once. Nor has he ever known it to suppurate, or prove fatal, or to produce any material inconvenience after a few months were elapsed.

The author of the Inquiry under consideration has related 14 cases circumstantially, in which he either attended the patients himself, or conversed with them after their recovery; and he has mentioned generally the result of 14 other cases, communicated to him by Mr. *Smith* of Stoke Newington, and Mr. *Pool* of Altringham. Some of these cases will be referred to hereafter.

After assigning his reasons for considering this disorder, as distinct from *Sciatica*, *Rheumatism*, *Anasarca*, *Phlegmon*, *Erysipelas*, *Iliac Abscess* & *Abscess under the fascia lata*, this author says it cannot be owing to any defect of the lochia, nor to a deposit of milk, nor to a metastasis of matter, nor to any degree of acri-

mony, and gives his reasons for rejecting each of these as causes.

He then concludes 1. that the *proximate cause* of this disease is an *obstruction, detention, and accumulation of lymph in the limb*: 2. that the lymphatics are obstructed as high at least as where they enter the pelvis under Poupart's ligament: 3. that the lymph is in a sound state, as it is thick and gelatinous: 4. that the obstruction is occasioned by some accident happening during labour, or some state peculiar to childbed: 5. that it is a local disorder and has a local cause.

After giving a short account of the structure and course of the lymphatic vessels, and pointing out the situation of the lymphatic glands, he proceeds to say "Different conjectures may be formed with regard to the *remote cause* of the disorder. It may be said to be owing to an *inflammation brought on the trunk or trunks of the lymphatics* by the pressure of the child's head on them during the process of labour, or on the glands through which these trunks must pass, and which lie on the edge of the pelvis." P. 48. And adds, "The objection to this theory is, that the disorder most frequently does not appear till several weeks after delivery, whereas one would have expected it always to have appeared in a

few days, which seldom happens." P. 49. And, after mentioning another conjecture, which I do not think it necessary to adduce, he asks this question: "Is it not therefore more probable, that this disease is owing to the child's head pressing the lymphatic vessel or vessels, which arise from one of the lower extremities against the brim of the pelvis during a labour pain, so as to stop the progress of the lymph?" P. 49. And then says, "The number of valves will effectually prevent it from regurgitating, and, if the head continue any time precisely in that situation, while the lymph is driven on through the valves by the peristaltic contraction of the coats of its vessels, by the great exertion of the muscles, and the strong vibrations of the inguinal artery, which are greatly increased by the labour pains, the lymphatic vessel, though its coats should be allowed to be stronger than those of the blood-vessels, must at last burst and shed its contents." P. 50. "When the orifice made in the lymphatic is healed, and the diameter of the tube is contracted, or perhaps totally closed by the cicatrix, the lymph is retained in the lymphatic vessels and glands of the limb and labium pudendi, and distends them to such a degree, and so suddenly, as to occasion great pain and swelling, which always begin in that part next to

which the obstruction is formed ; and when the obstruction is in part or wholly removed, or the lymph has found a fresh passage, the part next to it is consequently first relieved." P. 51.

In page 53 he says, " No wonder that the pain should come on so suddenly, and the swelling in so short a time arrive at such a magnitude, if we consider the great quantity of lymph, that is circulated through the lymphatics ; and as lymph in a sound state is found to be thick and gelatinous, and is in this case unaltered, it is not surprising that the limb should be more tense and hard than in Anasarca, where it is found to be watery ; nor that a fever should be created by the sudden distention and consequent irritation of the parts ; nor is it to be wondered at, that the conglobate or lymphatic glands should be particularly painful, as they are known to be well supplied with nerves ; and accordingly we find, that the pains are most felt and of longest duration in the groin, ham, and back of the leg, where these glands are always situated ; and it is worthy of observation, that one patient, Beatridge Abbot, Case XI, had great pain in the inside of the leg, where there is sometimes, and but rarely, a conglobate gland situated. Further, it is not surprising, that the whole system, particularly the lymphatic and glandular, should be disordered

by the stagnating of so much lymph, as is contained in one of the lower extremities, for so considerable a time ; nor that the swelling should always be increased by exercise, particularly walking, till the lymphatics have recovered their usual diameter, and their tone, as all muscular motion must increase the quantity of the lymph." Pages 53—55.

He thinks, " if the above hypothesis be true, the *predisponent* cause may in all probability be a weakness of the coats of the lymphatics in such subjects only, as have these vessels formed into one principal trunk under Poupart's ligament." Page 55. And he attempts to obviate the objection to his theory of the bursting of a lymphatic vessel, drawn from two cases related or mentioned by himself, (in one of which the swelling appeared in 24 hours, and in the other in 48 hours after delivery,) namely, *that this would be too short a time for it to heal in*, by observing, that the time of healing must depend upon circumstances, such as the constitution of the patient, and the nature of the orifice. See page 57.

Respecting the *Method of Cure*, he says, that, which seems to have succeeded the best in this disorder, happily coincides with the theory he has given of it : And he observes that, " the mode

of conducting the patient through it must vary according to the different stages of the disease."

"The first, which may be called the *inflammatory*, must be treated in the antiphlogistic method; but as this inflammation is not the original disease, but a symptom only, occasioned by the distension of the lymphatic vessels and glands, it is not necessary or prudent to waste the patient's strength by large evacuations."—The intestinal canal must be kept open, the fever must be moderated by antimonials, neutral salts, fresh fruit, acidulated liquors and the admission of cool air; the pain must be alleviated by opiates taken internally, by anodyne fomentations, and by the warm and vapour bath. Blisters applied to the upper part of the thigh, he says, have generally been found of much advantage; and, if the lochial discharge be either acrid or putrid, he advises us to throw emollient, or antiseptic injections up the vagina frequently. See pages 59—61.

When the disease has arrived at its 2d stage, which, he says, may be known by an abatement of the violence of the pain and a diminution of the swelling and tension of the groin, labium pudendi and upper part of the thigh, whilst some degree of fever and quickness of the pulse still remain, the patient may be allowed wine, and

a fuller diet. Occasional doses of *Calomel* are useful; and *Myrrh* may be given with advantage, before the patient is in a condition to bear the bark, at first in a saline draught, and afterwards in the form recommended by Dr. Griffith. The limb may be chafed with warm oil.* The patient may bathe in warm water heated to 82° of Fahrenheit's Thermometer and after some time in water heated only to 76°.

When the pain and fever have entirely left the patient, and only the swelling of the limb and perhaps a general relaxation remain, the disorder has arrived at its 3d and last stage.—The bark, cold-bathing and exercise on horse-back are then recommended by Mr. White, together with the application of camphorated spirit of wine, or distilled vinegar, to the limb, and afterwards a calico roller, or a laced stocking.

IN 1792 Mr. TRYE of Gloucester published *An Essay on the Swelling of the Lower Extremities incident to Lying-in Women*. Before he entered upon the publication of this Essay, he had himself attended carefully to at least six cases of the disease, and he had received four histories or cases from one of his friends: But his reading on the subject appears to have been rather confined, as he quotes only Mr. White's Inquiry, the works of Levret, Van Swieten and Mauriceau.

Respecting the *History* of the disorder, this cautious and candid writer informs us, that he has observed some circumstances either not seen, or not noticed, by Mr. White, and proceeds to say:—"The first complaint made by the patient in every case, which I have been acquainted with, was that of stiffness or soreness in one of the lateral regions of the lower belly, and pain in moving or turning about the body. The pulse has invariably been quick. The side affected has not always been that, on which the patient lay whilst she was delivered. Upon examination a fulness and hardness in the affected Iliac region may be perceived, and, for the most part, a circumscribed tumour. A weakness of the leg and thigh of the same side, and, in most cases, an œdematous swelling of them came on, but not always; the affection of the extremity has not been complained of for two or three days after the coming on of the pain in the flank. The swelling of the limb takes place, whether the patient sits up, or lies in bed; nor does it go down upon a change of the position of the body. To the best of my recollection, it has in every instance been soft enough to pit upon pressure. The skin has presented no remarkable appearance." Pages 6, 7. He says, that in one instance (See Case IX) the integuments of the leg

and thigh were punctured in several places with a lancet; and that "pellucid lymph as thin as water, and which did not coagulate, flowed freely from the little wounds," &c. This took place on the 4th day after the swelling commenced; and on the eighth day after, he again made several punctures in the leg, and in the posterior and inner part of the thigh, which discharged lymph plentifully. He also says—"A greater or less degree of puerperal fever has in every case preceded the glandular inflammation, or swelling in the belly; and the complaint has rarely come on before the end of the second, or the beginning of the 3d week after delivery, nor later than the fifth or sixth, and, as I have already stated, has been always accompanied with a quick pulse." Page 9. He believes, that, in general, a resolution of the tumour takes place, but says:—"Sometimes, though I believe rarely, the iliac swelling goes on to suppuration, in which case the matter may make its way out of doors in either of the ways described above, as the route of the pus from abscesses in the external iliac * glands. Whether

* These glands are situated within Poupart's ligament in the direction of, and contiguous to the round ligament of the uterus.—"If one or more of the external iliac glands be inflamed and enlarged, a tumor in the flank

the abscess pointing at the bottom of the belly, or in the groin, be opened or suffered to break, the patient ultimately gets well. This was the case with three patients, each of whom had an abscess after lying-in, which pointed either at the bottom of the belly or in the groin."—Page 10.

Concerning the *Cause* Mr. Trye says in the Préface, page vii.—“ Though I cannot discover any ground for supposing the trunks of the lymphatics to be ruptured in labour, *yet I can easily conceive*, as I have mentioned in the appendix, *that the obstruction to the return of the lymph may commence in the primary inflammation of a trunk or trunks, and probably this may be the case more fre-*

will be formed, very perceptible to the touch of the surgeon in thin subjects.”—“ If an adhesion of the gland to the containing parts of the abdomen, take place, *the inflammation increasing*, and the inflammation terminate in suppuration, the *pus* may make its way through the ring of the external oblique, in the course of the round ligament, or under Poupart's ligament, and burst through the skin of the groin; or 2dly, it may penetrate directly through the containing parts lying over the gland; and then an aperture will be made in the iliac region: or, lastly, it may take some other route by means of the cellular substance, and present itself in any part of the hypogastric region, in the upper part of the thigh, in the buttock, &c.” Pages 4, 5.

quently than I have hitherto discovered or suspected it to be."

In opposition to Mr. White's Theory, he contends, 1st, that no experiment has shewn, that the lymphatics are ruptured in the living body by any other accidents than those, which destroy and tear to pieces the vessels in general of a given part. "Working anatomists," says he, "well know, that the absorbents even after death (and by the privation of life the strength of their coats is very much diminished) will bear without bursting a weight of quicksilver, equal in effect to a far greater force than I believe any calculator will suppose to be exerted in the propelling of the lymph from the leg towards the thoracic duct." "2dly. The head of the child in its descent can act upon the iliac vessels, at most, *but as the pad of a tourniquet does upon those of the upper or lower extremity;*"—"yet a rupture of a lymphatic trunk has never been known, nor even suspected, to follow the application of a tourniquet on the arm or thigh."—"3dly. If I compress a lymphatic trunk, I readily force on its contents, if the remaining part of the road to the thoracic duct be unobstructed, and then its sides will be squeezed together; and, by reason of the thinness of its coats, it will in the compressed portion occupy the smallest space imaginable, so that it will

hardly be ruptured in the place, in which the pressure is made; and if, from the distention of the vessel by the obstructed returning lymph, the vessel must be ruptured below the pressure, no reason can be assigned, why the breach should always be made in one precise spot of the inferior portion of the trunk rather than in any other; for example, why it should happen within Poupart's ligament rather than somewhere in the leg and thigh." 4thly. "The lymph is not gelatinous, when circulating in the vessels of the extremities, as Mr. White imagines it to be. It only becomes so when extravasated or exposed to the air, when in circulation it is probably the thinnest of the known animal fluids. We have no experiment to prove, that it ever jellies, unless when it has been long at rest, or exposed to the air. Now were a rupture of an external iliac trunk to take place, either the lymph must for a long time continue to flow through the wound, or, by the speedy coagulation of what was first extravasated, the farther escape of it must be prevented. Admitting the first proposition, the lymph would be diffused through the cellular substance of the abdomen, and produce an universal œdematous swelling of the parietes, and in that case the ill effects of pressure would be perceived immediately after par-

turition; but, if the latter proposition be true, then the lymph could not escape so as to make pressure on any particular viscus, as is supposed by Mr. White in his remarks on Case VI. p. 50." " 5thly. I have a preparation of lymphatics, which, being compressed by a tumour, could not transmit the lymph; the consequence was, not that they burst, but that, yielding to the impelled lymph, *they became varicose* and suffered their diameters to be enlarged to the size of a crow's quill; and, as they grew larger, their coats seemed to have thickened. From analogy I infer, that the same thing will happen, when the lymphatics are obstructed by the pressure of the uterus and its contents." " 6thly. I have seen the swelling of the leg and thigh entirely removed in 48 hours: now it is highly improbable, nay almost impossible, that the vessel, which had been burst and by the subsequent cicatrix had suffered a contraction of the size of its canal, or even a closing up of it, should on a sudden be so dilated as to allow of the usual free transmission of the before obstructed lymph:"—" and with respect to the lymph's finding its way by a new *route*, we know that minute vessels are not so quickly dilated as to supply at once the place of large trunks."—" 7thly. It does not appear that the *pigs became dropsical in consequence of Doctor*

Monro's making a wound in the thoracic duct."—
 See *Inquiry*, p. 58. "Lastly, *This kind of swelling of the leg, thigh and buttocks, is not peculiar to women who have suffered parturition.* I have seen it come on nearly in the manner, which Mr. White describes, in a person who had suffered greatly from a retention of urine and inflammation of the bladder. No circumscribed tumour could be felt in the iliac regions, therefore it is probable that there was a swelling of the internal iliac glands, excited by some acrid matter absorbed from the bladder. The disease was cured by frictions of mercurial ointment on the extremities. In this case it was certain that no pressure could have been applied sufficient to rupture the lymphatic trunks; and the mode of cure increases the probability that the swelling of the extremities was occasioned by a glandular affection." Pages 38—46. He adds, in page 72, that he cannot help feeling a satisfaction in the disbelief of Mr. White's doctrine, "because with its supporters there can be little expectation of assisting the sufferer by the powers of art. What medicines can effect the stretching of the *cicatrix* of a canal inaccessible to mechanical aid? Or how is art to dilate the minuter vessels equally inaccessible, so as to fashion them into new passages for the enlarged columns of accumulated

fluid? Or, what is to dissolve the lymph, jellied in the vessels, and fit it for quickly pervading some of the narrowest canals in the body?"

Mr. Trye says, p. 70, "I have considered the *proximate cause* of the swelling to be seated in the *lymphatic glands*. I will not contend that it must be so universally, because there is a probability, that the *original seat of obstruction and inflammation* may, in some instances, be in the *principal trunks of the absorbents within the pelvis*, independent of, and abstracted from the *iliac glands*; in which case the inflammation may be continued along the absorbent vessels downwards, that is towards the *labia pudendi, leg, &c.*, as well as upwards, or towards the *thoracic duct*." In page 47, he says, "The admitting of the cause, to which I have assigned the effects I have described, enables us to account for the variation in the times, at which the complaint commences after child-birth, and to explain why it should in some instances come on in 48 hours after delivery; in others not till after 7 or 8 days, or at any intervening or subsequent period: for example, should the disorder begin at an early period, we may impute it to the bruise and consequent swelling of an iliac gland; if late, to the *absorption of acrid matter, or inflammation in a*

lymphatic being continued to and producing a similar condition in a lymphatic gland." Page 48. In page 54 he says, "If the distension of the parts with lymph be ascribed to an obstruction formed by an altered lymphatic gland, through which the trunk or trunks might take their way, then the gland being restored to its natural condition, and the pressure on the trunk being consequently removed, the lymph would find its way as usual, and the swelling of course would subside."

Admitting his opinion to be true, he says: "the *remote cause* may still be sought for in pressure, in the presence of absorbed acrimonious matter, or in inflammation continued from some absorbent to the trunk or trunks. *The phænomena consequent to the inflammation of the trunks will be the same, whether it begin immediately in the trunks themselves, or primarily in the glands through which they pass; so that no material alteration is made in the theory which I have advanced. My own experience however does not prove that this opinion of the inflammation beginning in the trunks themselves is founded in fact; but I have proposed it, because I would not presume that what I have not met with does not happen, when the supposed circumstance is any wise agreeable to physiological experiments and reasonings, or to what we have learned from analogy.*" Page 71.

In page 48 we find the following passage :—
 “ But whether or not the theory of the disease be good, I have every conviction, which the degree of experience possessed by me can afford, that the practice I have recommended in the management of it is useful.”

His plan of *Cure* is—“ to remove the inflammation of the lymphatic trunks and glands by applying leeches and blisters immediately over them, and by the revulsive power of emetics and laxatives, when the patient’s condition admits of their use; and to obviate the present and future ill effects of distension by puncturing the œdematous extremity”—“ and in more obstinate cases, the introducing of mercury so as to make it pass through or near to the glands and lymphatic trunks (paying a due regard to its probable effects upon the health and constitution of the patient)” is recommended. See pages 78 and 79.

In some cases the repeated application of leeches and blisters was directed by Mr. Trye; and he ordered the limb, both before and after the employment of punctures, to be covered with cabbage-leaves.—Emollient ointments, fomentations and poultices are recommended by him, when the tumour is suppurating; and the free previous administration of *Cortex Peruvianus* “ as

preventing in a great measure the disagreeable effects, consequent to the opening, whether by nature or art, of large abscesses." Page 30.

I now pass to the consideration of an Essay on *an Affection of the Lymphatic Vessels hitherto misunderstood*, published by Dr. FERRIAR, in the year 1798, in the 3d volume of his *Medical Histories and Reflections*.

When an author tells us, as the Dr. has done in his preface, (page vii,) that, *writing for men engaged in practice he supposes the general facts to be previously known, and that it is his intention to supply some deficiency in the history, or some elucidation of the treatment of particular diseases*, we necessarily expect some original information, relative to every disease, that he takes into consideration. How far the Dr's Essay is calculated to satisfy, or disappoint these expectations, will now be inquired into.

From Dr. Ferriar's own confession (page 126) it appears, that he had not seen a single case of this disease in a lying-in woman, nor indeed in any woman, before his Essay upon it was prepared for the press: And he has quoted no writings upon the subject, except Mr. White's Inquiry, Dr. Latham's Letter on Gout &c, and a single case, related in the first volume of the Medical Musæum: He had, indeed, been fa-

voured with the communication of a dubious case, by Mr. Simmons, and he had seen a swelling of one of the lower extremities in a gentleman, which was tense, painful and accompanied by an enlargement of the absorbents. However, before his Essay was printed, he had an opportunity of seeing a case of *Phlegmatia dolens*, as it affects a lying-in woman; but he neither witnessed its commencement, nor its termination.

Respecting the case, last mentioned, he says, "I have had the satisfaction of finding *the mode of practice I have proposed*, succeed completely." Page 125.—The mode of practice, *recommended* by the Dr., consists in the repeated application of leeches, a succession of blisters, the use of gentle cathartics and cream of tartar. In page 111 he says, "*The theory, which I have proposed*, is liable to no difficulties."—The theory, *adopted* by the Dr., is, that *there is a general inflammatory state of the absorbents of the limb,† by which they*

† I have stated above (page 70), that Dr. Denman considers *Phlegmatia dolens* as an affection of the whole lymphatic system of the limb; and I find, that Dr. Latham also attributes it to an affection of the lymphatics: He says, "We have all of us seen, after some difficult cases of parturition, that one or both of the lower extremities have become œdematous and excessively painful during a very considerable length of time,

are rendered incapable of performing their functions.††

Every reader, who has accompanied me thus far, will have reason to smile at the *originality* of what this writer has *proposed*, concerning the theory and cure of the disease under consideration. He will perceive, that it is not necessary to open a mine, or scrutinize the musty pages of old and neglected authors, to make a discovery of the sources, from whence the Dr. has *borrowed* his Theory and Cure. He will see, that nothing more is requisite for this purpose

until the lymphatic vessels of the pelvis, which have suffered by the difficulty of the labour, shall have recovered from the injury thus sustained, or until others in their vicinity shall, by gradual enlargement, be fully competent to discharge their office for them." Letter on Gout and Rheumatism.

†† Dr. Ferriar informs us, that the arteries are in a sound state; and he says, "The difference between this state of accumulation," (from inflammation of the lymphatics) "and that of common dropsy seems to be this, that when the lymphatics are generally inflamed absorption ceases entirely, for the time, but that in cases of œdema or anasarca absorption goes on, though imperfectly, while there is any vigour in the habit."—He here totally overlooks the difference of consistence in the matter, effused in *Phlegmatia dolens* and *Anasarca*. The

than to turn over a few pages in an Essay, published by Mr. Trye only six years before the Dr's account of *an affection of the lymphatic vessels hitherto misunderstood*, made its appearance: For I apprehend it will not be an easy task for the Dr. to convince any person, that neither he, nor his friend and coadjutor Mr. Simmons, had seen Mr. Trye's Work, or learnt this author's sentiments from the Reviews, or the conversation of some of their medical friends.

Though I cannot admit Dr. Ferriar's ignorance of Mr. Trye's recently published opinions concerning the theory and cure of this disease,

state of the arteries will fall more properly under my consideration hereafter, and I shall only just notice further in this note, that we are not authorized by facts to say, that, when a single lymphatic is really inflamed, its power of absorbing is entirely suspended; consequently we cannot say, that, when the lymphatics are generally inflamed, absorption ceases entirely: Absorption, in this case, may be diminished, but I believe it still goes on, and hence I think the practical rule well founded, which directs us when the lymphatics of the penis and the inguinal glands are inflamed from the application of venereal virus, to rub *Ung. Hydrargyri* upon the penis and scrotum in preference to any other part, with the view of discussing the inflammation of this portion of the lymphatic system—a mode of cure, which ought not to be adopted, if the Dr's pathological observation be true.

I can easily conceive him to be unacquainted with the foreign works, enumerated in the second section of this chapter, and, however this may be, the Dr's conduct is by no means commendable. If he had read them, he ought not to have intimated, that his view of the disease, if correct, would "serve to direct our practice in circumstances, *where little has been attempted.*"—Page 96. For he would then have known, that the practice, recommended by PUZOS,* LEVRET,† SAUVAGES,‡ LIEUTAUD,|| &c. is of a much more active kind than that, *proposed* by himself; and, as has already been shewn, Mr. Trye's method of cure is exactly the same. If he had not read them, he ought neither to have declared, that this disease is *an affection of the lymphatic vessels hitherto misunderstood, nor that little had been attempted in the cure of it*: because he must be conscious, that he was asserting more than he was justified in doing. And it was peculiarly incumbent upon him, after the declaration, made in his preface and quoted above, to make himself master of almost every thing, that had been written on the subject, lest

* See above, page 25.—† See page 44.—‡ See page 48.
|| See pages 52, 58, &c.

what he had written for men, engaged in practice, should be censured by students.

I shall now proceed to examine the first case, adduced by the Dr., and, to do him all possible justice, I shall transcribe it *verbatim*.

CASE VII.

“A gentleman of an irritable habit, subject to severe bilious attacks, to hæmorrhoidal discharges, and sometimes to a considerable degree of *rheumatism*, was affected with pain, stiffness, and swelling, in the left leg and thigh. The pain and swelling began in the foot, and extended up to the groin. When I saw him, the swelling was uniform, tense, and shining, without discolouration of the skin. Upon applying my hand, I felt great hardness and enlargement in the glands of the groin, and in those of the ham; the patient complained most of pain in the ham. The vessels could be felt much enlarged and hardened, for a little way above the ham, but the extreme tension of the skin prevented me from tracing them to any considerable distance.”

“A bilious fit had preceded this attack, and the stomach was still weak, full of flatulency and easily excited to vomiting. The patient had also been exposed to the action of cold and moisture.

"About two years before, this patient had undergone a variety of complaints, arising from an accumulation of bile, and had discharged a considerable quantity of hæmorrhoidal blood. After this, the left arm had become swelled and painful, but not to a degree equal to the disorder which I have described. The disease in the arm was at that time removed by the application of a blister below the elbow joint. After the disappearance of the swelling, an acute pain in the right side supervened, accompanied with tension of the abdomen, and obstinate costiveness. These symptoms continued with great severity, during three days, and were carried off by the brisk action of senna and rochelle salt," Pages 96—98.

The Dr. from considering the affection of the leg and thigh in this case conceived, as he informs us, "that there were sufficient marks to indicate a general inflammatory state of the absorbents of the limb," and he adds, that "those symptoms, from which we conclude a single lymphatic to be inflamed, were distinguishable in all the superficial lymphatics, and in the conglobate glands of the part." Page 98; intimating, as I should suppose, though it is not expressly stated, that the conglobate glands were swelled, painful, hot, and red, and that the superficial

lymphatics were observed to form red or purple streaks or lines. He also tells us, that the next day there was an evident decrease of the swelling, and he "could distinctly trace the superficial lymphatics, entwisted like bundles of cord, through the whole course of the limb." Page 98.

The above case includes the history of two or three diseases, which occurred to the same patient, and perhaps no case, that was intended to serve as the basis of a new theory, was ever more loosely related. Whilst I advert to the omission of almost every circumstance† in this case, which could possibly direct us in forming an opinion of the essence of these different complaints, I cannot avoid pointing out the Dr's readiness in drawing conclusions from insufficient premises, not only with regard to the disease before him, but also with regard to another disease, which he had not then seen.

When the arm of this gentleman was affected; from the pain and swelling, which took place;

† The Dr., in his Preface to the 1st Volume of his Medical Histories and Reflections, censures the unnecessary prolixity of modern case-writers: But his own mode of reporting cases appears infinitely more faulty. A reader can easily reject what is superfluous in the history of a particular disease, but he cannot supply what is deficient.

from the acute pain, which supervened in the right side, accompanied with tension of the abdomen; from the patient's being subject to rheumatism; and from the relief of the affection of the arm by blistering, and of the pain in the side by a brisk purgative, little doubt will remain, perhaps, that these affections were of an inflammatory nature; and, as no mention is made of a disease of the lymphatics, it is probable that many readers may suppose they were merely rheumatic, though the Dr. suspects the complaint in the side proceeded from an inflammation of the absorbents in the cavity.†

When the left leg and thigh were affected, admitting the whole of the Dr's statement to be correct, there appears to have been an extensive inflammation of the lymphatic system of the limb. But, from the vague manner, in which the history of this disease is reported, we cannot, I apprehend, determine whether the affection of the lymphatics was the primary, or only a secondary, complaint. He ought to have stated how long the patient had been indisposed, and especially how long the swelling of the limb had subsisted, previously to his being called in. He

† See Med. Hist. and Reflect. Vol. 3. p. 104.

ought to have informed us, whether the bilious fit was preceded, attended, or succeeded by symptoms of pyrexia. He ought to have pointed out, whether the inflammation and enlargement of the lymphatic vessels and glands preceded, or succeeded the tumefaction of the limb. But all these and other circumstances of considerable moment are omitted, which I should wish to be acquainted with; so that, though the Dr., *from what he observed*, may have some reason to conclude, that the inflammation of the lymphatic system of the limb was the primary complaint, I can only form a conjecture, *from what he has related*, concerning the essence of the disease.

The Dr. acknowledges in page 105, that "the absorbents are known to assume an inflammatory disposition in consequence of diseases in vascular parts." And, indeed, it is well known, that the lymphatics are rarely, if ever, inflamed, except in consequence of external injury, absorbed acrimony, or their connection with contiguous inflamed parts. And, where the Dr. is considering the points of difference between his own account and that given by Mr. White, he asserts, "*that the enlargement of the absorbent vessels did not occur to Mr. White, as indeed it is not distinguishable, till the swelling abates considerably, and in some cases can hardly be felt at all.*" P.

110. But, if the affection of the lymphatics be *general* and be *the cause of the swelling* of the limb, it most assuredly ought to be very evident, and ought also to precede the swelling in every case of this disease.

If then I may be allowed to form a conjecture concerning the nature of the disease of the lower extremity, under which the Dr's patient laboured from his imperfect statement of it; I should deliver it as my opinion, that either œdema, or an inflammatory affection of the muscles, cellular membrane and perhaps the inferior surface of the skin was the primary complaint, and that the inflammation of the lymphatics was occasioned by their absorbing some saline, or other acrimonious fluid, deposited in the cellular membrane, or that it was communicated to them from their being imbedded in inflamed parts, and supplied with blood-vessels from the same source. I cannot vouch for the truth of this conjecture, but it is very strongly supported by the two observations, made by the Dr. and related above.

I will now adduce the case, which Dr. Ferriar says was accurately drawn up by Mr. Simmons at his request, and which he has inserted in Mr. Simmons's own words, "*that the public may be in possession of every thing yet known on this subject!*" Page 116.

CASE VIII.

The subject of this case was a poor woman, aged 28. "The *right ankle-joint* was completely carious from a scrophulous affection and her general health much impaired."—"About ten days from the time of her delivery, she complained of a swelling in the calf of her *left leg*, and of uneasiness in the inguinal glands on the same side, which she informed me had subsisted for several days. The leg presented no discolouration, but was hard to the touch, of a shining appearance and painful when pressed; the glands in the groin were enlarged and painful on pressure. Her general health was on the whole amended since my first attendance, although the caries continued its ravages, unchecked by the particular circumstances of the case, or of the means used. As the affection was merely local, an anodyne fomentation was advised to be used twice a day, and the saponaceous liniment with laudanum was applied after each fomentation.—By these means, *and these only*, excepting the *Electuarium laxans* and opiate pills, which she had taken for several months, the disease subsided in less than a fortnight, the swelling never having extended beyond the calf of her leg." "The carious limb was removed, as soon as she

was fit to be admitted into the hospital."* Pages 116—118.

This history will probably be rejected by most of my readers, as not constituting a genuine case of *Phlegmatia dolens*: By some, perhaps, it will be considered as a scrophulous affection.—But, if we admit it as a true case of the swelling of the lower extremities, incident to lying-in women, it can hardly be brought forward in support of either the theory, or cure adopted by Dr. Ferriar. For 1st, it was soon cured without either topical bleeding,† or blistering, and 2dly,

* Mr. Simmons never once adverts to the state of the lochia, the secretion of milk, the presence or absence of pyrexia, or the state of the limb during pregnancy.

† In the Preface to his first volume of Medical Histories &c. Dr. Ferriar has the annexed passage: "On a single instance of success, however faithfully delivered, no point of practice can rest." Page 4. It is therefore very extraordinary, that the Dr., when he had treated only *one case* of the swelling of the lower extremities, and that in a gentleman, should make the following declaration: "I combat this" (Mr. White's) "opinion more earnestly, because it tends to prevent the practitioner from employing the only remedy, *which I have found to shorten the disease*, that of topical bleeding; a remedy, trifling, if Mr. White's theory were just, but indispensable if *mine* be well-founded." Page 112. Well might it be the *only remedy*, which the Dr. had found to shorten the disease, when he had never tried any other!

it does not appear, that either the lymphatic vessels, or glands of the leg were inflamed or enlarged. The patient, indeed, had experienced an uneasiness in the *inguinal* glands on the same side for several days, but whether this took place previously, or subsequently to the swelling of the leg, is not stated in Mr. Simmons's account of the case. Admitting, however, that the affection of these glands occurred previously, we cannot by any means consider it as the cause of the swelling in the calf of the leg: If the swelling had begun in the foot and extended up the leg to the calf, or if it had been observed in the groin, we might then have had some reason for imputing it to the affection of the inguinal glands; but I do not see how it is possible for a swelling of the glands of the groin to produce a swelling of the calf of the leg only, as stated in this case.

Dr. Ferriar has transcribed a fatal case from the 1st volume of the Medical Musæum, page 335, which is related by J. G. Zinn, in the *Comm. Soc. Reg. Sc. Gotting. Tom. 2.* This I shall also insert, and shall consider how far it is favourable to the theory he has adopted.

CASE IX.

“ A woman, thirty years of age, after a difficult labour, having the lochia greatly dis-

turbed by some careless conduct, *became much afflicted.* Her right leg was seized with an œdematous swelling, which extended from the groin to the heel, and enlarged the right labium pudendi. At the same time she was also seized with loss of appetite. Every probable means, afforded by the art of healing, was tried to remove the swelling, and yet it continued increasing; neither diaphoretics, purgatives, nor diuretics gave any relief; and fomentations and frictions excited more violent pain. An incision was made through the skin of the thigh, that the water might be drained off by an issue, but only a few small drops were discharged by it. The serum received on a piece of linen had the appearance of jelly, its more liquid parts being resorbed. In the space of two months the patient expired. On dissecting the body, we found some of the inguinal glands scirrhus, greatly enlarged, and surrounding the crural vein, by which its diameter became very much diminished."

As the system was much afflicted at the commencement of the complaint; as the swelling extended from the groin to the heel and was attended with pain; and as only a few drops of serum were discharged on making an incision through the skin of the thigh, this case *seems to*

have been at first a genuine case of *Phlegmatia dolens*. It furnishes us with the only instance, I have met with, of the dissection of a limb, that had been affected with this complaint. For unfortunately the opportunity appears to have been lost of examining the lower extremities in those cases, that have terminated fatally in the earlier, or inflammatory stage of the complaint. No mention being made of any inflammation, or enlargement of the lymphatic vessels in this case, it is to be presumed, that no such affection of them existed. Some of the inguinal glands were *scirrhus*, greatly enlarged, and surrounded the crural vein, so as to diminish its diameter very much; hence the swelling was stated by ZINN to have been occasioned by the pressure of the diseased glands upon the principal vein of the limb: If this notion of the production of the intumescence be admitted, the disease can hardly be supposed to have been a genuine case of *Phlegmatia dolens*: For from the nature of the exciting cause it may be presumed to have approached more nearly to the *œdema*, that is produced by the pressure of the uterus on the iliac veins during pregnancy. But it is not stated, whether the inguinal glands were affected at the commencement of the disease, or not till near its fatal termination, consequently it cannot be

determined, whether this *scirrhus* enlargement of them was the cause of the swelling of the limb in the first instance. It does not seem improbable, however, that an inflammation of the cellular texture and muscles first took place in the limb; that the inguinal glands became irritated either in consequence of being imbedded in the cellular texture, or of the absorption of some acrid matter, deposited during the existence of the subcutaneous inflammation; and that the swelling became permanent, or even increased, owing partly to the gelatinous nature of the fluid first effused, and partly to the compression of the principal vein; which, by diminishing its diameter, might occasion even a greater quantity of fluids to be poured out by the exhalants in a given time than the absorbents could take up.

The case, which occurred to Dr. Ferriar, after the former part of his Essay was prepared for the press, and occupies the last pages of it, will now be examined. The Dr. has prefaced it by saying, that *it is an accurate report of the state of the symptoms and progress of the disease, as he observed them himself.*

CASE X.

“*Jane Waters*, of Garden-street, Salford, aged 25, was delivered by an Accoucheur of her

second child, Decr. 26th, 1797, after being 4 days in labour. During delivery she lay on her left side. Next day, Dec. 27th, she was affected with pain and swelling of the left knee, which descended to the leg and foot of the same side. On the 28th Dec., the swelling began to rise from the left knee and to affect the thigh; it extended up to the left groin and labium pudendi. I saw her, for the first time, on the 3d of January, 1798. I found the swelling tense, uniform, not discoloured; that there was a great sensation of rigidity in the limb, and that it was extremely painful on being touched or moved. *She felt exquisite pain in the ham, where I could perceive the lymphatics a little enlarged. The glands in the groin were not affected.* She had been constive for several days. *I ordered eight leeches to be applied to the left knee and ham, and that she should take two drachms of Rochelle salt, in solution every 3 hours, till the bowels should be properly opened.*" Page 127.

On the 5th of Jan. the Rochelle salt was repeated. On the 8th the Rochelle salt was again repeated, "*and six leeches were ordered to be applied to the thigh.*" On the 9th, "*the pain and swelling of the thigh were much relieved.*" Jan. 16th, "*She had walked about, and attempted to clean out her room imprudently, in consequence of which*

the left knee swelled again and became very painful. *The thigh, leg, and foot were not at all affected.* I directed a large blister to be applied round the knee."—"Jan 28th, *the affection of the limb is completely removed. She has no complaint, except debility and a cough, which she had contracted previously to her lying-in. This case is the more satisfactory, because writers on midwifery acknowledge, that this disease generally continues for several months, under their mode of treatment.*" Page 128.

On reading this case, I was much struck with the Dr's inattention to what, according to his theory, constitutes the essence of the disease. He has informed us, that, at his first visit, viz. on the 3d of January and the 8th day of the complaint, *he could perceive the lymphatics a little enlarged in the ham.* And yet, though he has made a particular report of the state of the limb, and of the effects of the remedies that were prescribed, on the 4th, 5th, 8th, 9th, 16th, 18th, and 21st days of January, he has never again adverted to the state of the lymphatic vessels, or glands. Now, if a *general inflammation of the absorbents of the limb* were the primary affection, the Dr. should not have neglected to report the state of these vessels at any of his subsequent visits. And if, as the Dr. has stated, *the enlargement of the absorbent vessels be not indeed*

distinguishable till the swelling abates considerably and in some cases can hardly be felt at all, it will thence follow, that either the swelling of Jane Waters's limb was considerably abated, when he was first called in, or that he did not perceive the lymphatics enlarged in the ham.

When the swelling decreased in the lower extremity of the gentleman, whose case is first related by Dr. Ferriar, he says he *could distinctly trace the superficial lymphatics entwisted like bundles of cord, through the whole course of the limb*: But no such circumstance is mentioned to have taken place in the case of Jane Waters, although we are told *by him*, that the affection of the limb was completely removed on the 21st Jan.† Now, if the Dr. had actually noticed a similar

† Dr. Ferriar's patient, according to his own account, got well in 26 days, and hence he is led to boast of the superiority of *his* mode of treatment, because he says "writers on midwifery acknowledge, that this disease generally continues for several months under theirs:"—But it will be shewn hereafter, that the Dr's patient did not get well till after more than three months. Puzos relates the case of a lady in the Isle of S. Louis, whom he cured completely in 15 days: And other cases may be adduced from Mr. Trye &c, where the complaint was equally speedily removed, though it must be confessed that the disease generally continues much longer.

appearance of the lymphatics in the limb of Waters, he would, I presume, have been led to mention it, that he might shew still more clearly the analogy, subsisting betwixt the case of the gentleman and the swelling of the lower extremities incident to lying-in women, or even prove their identity.

As Dr. Ferriar's account of the case of Jane Waters is defective with respect to several very essential circumstances, viz. the state of the lochial discharge, the secretion of milk, the presence, or absence of febrile symptoms, &c. I was induced to call upon her on Saturday, the 9th of August 1800, for some information relative to these different points, not in the least suspecting the fidelity of the Dr's narrative: I believed, indeed, that a preconceived had theory led him to fancy he felt an enlargement of the lymphatics, which did not exist.*

The information, that I obtained from this poor woman, is in so many instances contradictory of the Dr's report, that I think it necessary to lay the case again before the reader, drawn up accurately, in every particular, from the

* There is not, in any other case that I have read, any mention made of an enlarged state of the lymphatic vesse's, in the swelling incident to lying-in women.

answers she gave to my questions. Premising that, if the Dr's statement be admitted to be correct, I can neither allow that inflammation, or enlargement of the lymphatics was the *primary* affection, for it was not observed till the 8th day of the disease, according to the Dr's account; nor that it was *general*, for he could only perceive the lymphatics a little enlarged in the ham; nor that it was *sufficient to account for the swelling of the thigh*, for in the upper part of the limb neither the lymphatic vessels, nor glands were found to be at all affected. Besides the Dr. has told us, that the limb of this poor woman was *extremely painful on being touched and moved*, when he was called in; and he had previously stated in page 102, that "*The pain, in lymphatic inflammation is referred to the enlarged glands and is not remarkably increased by motion; there is more stiffness than actual pain throughout the limb, the swelling is general and not discoloured.*" That the pain even in well marked inflammation of the lymphatics is not great I can prove from several instances, and especially from my own case, to be related hereafter.

CASE X.

JANE WATERS, of Ashley-yard, Fennel-street, Manchester, was delivered of her 2d child

in Garden-street, Salford, by Mr. Chorlton, about ten in the forenoon of Tuesday Dec. 26th, 1797. She was then nearly 27[†] years of age. She was not subject to cramp in the lower extremities, nor had she experienced any pain in her loins, during her pregnancy: But she was rather lame; her legs, especially her left, swelled and the veins of them were enlarged and blackish during the last month. She had a hard labour, which lasted four days. The after-pains were trifling. Her child died about 4 o'clock the next morning.

She was suddenly attacked about 4 in the afternoon of the succeeding day with extreme pain in her loins and hip on the left side, and soon afterwards with pain on the outside of her left thigh, a little below the middle. The forepart of her knee next became pained, and the pain ascended from thence to the groin and labium pudendi, and afterwards descended to the leg and foot.

She experienced no rigors, or other symptoms of pyrexia, before the pain seized her; but, in a short time after, she grew hotter than natural, was thirsty and had no appetite for food: She had no head-ach, nor was she delirious. Her

[†] She was 27 on the 27th of January 1798.

breasts appeared to contain suck, but were not drawn. When the pain commenced, her lochia diminished, became thin and offensive to the smell and soon stopped altogether. Her urine was of the natural quantity and was passed without difficulty.

The pain she suffered was of the most excruciating kind, worse even than labour, and was very severe in the forepart of her left knee and in her thigh. The groin was also very painful; but she felt comparatively little pain in her ham. When the pain had continued about two days, the whole of the limb began to swell.

Mr. Chorlton gave her an external application for her complaint, but, not deriving any relief from it, she became a patient of the Infirmary and was attended by Dr. Ferriar in about a week after she was delivered.

Soon afterwards the pain abated in some degree; but her limb remained very tender and painful, when touched or moved and was extremely swelled, her thigh being nearly as thick as her waist. The limb was never discoloured: There were no red or purple streaks upon it, nor did she ever perceive any appearance of cords, or lumps, like waxing kernels,† in any part of it.

† The term, by which enlarged conglobate glands are known to the common people of Lancashire.

Leeches were twice applied to the affected limb ; first about the middle of her thigh, and afterwards to the forepart of the knee. No leeches were applied to her ham. A blistering plaister was applied to her knee, and the pain was relieved both by the leeches and the blister. She took a great deal of medicine.

Whilst she remained in Manchester, which was about a month after her delivery, the swelling of her limb did not abate materially, nor did she attempt to clean out her room. Indeed she was never able to walk or stand, whilst she staid in Manchester.

She was removed from Manchester to her father's house at Newton Heath in a coach, supported by pillows, &c. and was there confined to her bed for eleven weeks. The pain in her loins continued very severe ; she got very little sleep and was much weakened and reduced. At length an abscess, as large as a child's head formed in her loins, where the pain first commenced. This was poulticed about a fortnight and allowed to burst. Though the opening was extremely small, the matter was discharged, the abscess soon healed, and she recovered very well and was soon afterwards able to walk.

When the abscess broke, she had been unable to walk or stand for 15 weeks. The swelling of her

limb did not lessen materially, till the abscess burst, it then subsided quickly and was nearly removed in a fortnight.

She had a cough at the time of her removal to Newton Heath, and continued for some time an out-patient of the Infirmary. She was afterwards visited by Mr. Holland, who gave her some medicine.

This account of Jane Waters's case, drawn up from her own communications, will, I apprehend, supersede the necessity of any criticism upon the *accuracy* of Dr. Ferriar's report of it.

To me it appears utterly impossible to account for the phenomena, observable in *Phlegmatia dolens*, from any affection whatever of the lymphatic system, independently on a considerable primary affection of the sanguiferous system of the limb.

Mr. White agrees with *Astruc*[†] in referring the intumescence of the limb to the detention and coagulation of the lymph within the lymphatic vessels: But differs from him, in considering the obstruction to the passage of the lymph, as occasioned by the rupture of a lymphatic trunk near the pelvis during labour, which

[†] See above page 48.

afterwards heals in such a manner, that its canal is obliterated, or much contracted in its diameter.

In opposition to this theory it may be urged, 1st, That there is no evidence of the bursting of a lymphatic vessel during labour, much less of its healing in such a manner as to render the canal impervious, or occasion a diminution of its diameter. 2dly, That there is not the least reason to suppose, that a lymphatic trunk ever bursts in consequence of the transient obstruction of the lymph, induced by a labour pain. If this temporary obstruction, which does not occasion any sensible enlargement of the limb, could produce the rupture of a lymphatic, we might expect from the long continuance of the obstruction, which takes place agreeably to Mr. White's hypothesis, that every lymphatic in the limb would burst, before the limb has arrived at half the size, which we know it attains in the disease under consideration. 3dly, If the swelling of the limb be occasioned by a congestion and coagulation of lymph in the absorbents, how is it possible, that it should ever subside? How is it possible, that the swelling should be so nearly even as it is found at first? And why can we not trace the gradual increase of the lymphatics in every instance from a slightly enlarged, or

varicose state to that extreme degree of distention, at which they must arrive in order to contain all the fluid, necessary for the production of this enormous swelling of the limb? 4thly, It does not appear, that, in any of the 14 cases related by Mr. White, or in any of the 14 communicated to him, an enlargement of the lymphatic vessels was at any period observed. And in only one of them does it appear, that the lymphatic glands were particularly affected.

Mr. Trye supposes the lymph to be accumulated in the cellular membrane in consequence of an inflammation and enlargement of the lymphatic glands, or vessels, impeding the absorption and transmission of the lymph to the thoracic duct. And this theory is adopted by Dr. Ferriar, especially with respect to the lymphatic vessels.

But Mr. Trye, who, as a practical anatomist and surgeon to the Gloucester Infirmary, must be well acquainted with the course of the lymphatics and the feel of them in an inflamed and enlarged state, acknowledges that his own experience does not prove, that the opinion of the inflammation's beginning in the lymphatics themselves is founded in fact. Page 71. The existence of such a state of the lymphatic vessels in *Phlegmatia dolens*, as far as I have been able

to collect either from my own reading, or observation, rests solely on the following passage in Dr. Ferriar's account of Jane Waters's case :—
*"She felt exquisite pain in the ham, where I could perceive the lymphatics a little enlarged."** In 8 cases, to which I have attended very particularly, I have never met with either enlargement, or inflammation of the lymphatics in any stage of the complaint: And I am therefore convinced, that this is a rare occurrence and by no means essential to the disease. A tenderness and enlargement of the lymphatic glands has in several instances been observed, but in general, if not always, the affection of the lymphatic glands, where it is observed, either does not exist in the beginning of the complaint, or is slight and by no means adequate to the production of the symptoms of the disease under consideration. I am therefore led to consider the enlargement of the glands and lymphatics, when it does occur, as a consequence, not as the cause of the complaint. Inflammation of the inguinal and femoral glands is extremely liable to terminate in suppuration. How happens it then, that these glands, which are supposed to be principally affected, do not

* The value of this observation may be easily appreciated from what is delivered above.

suppurate in *Phlegmatia dolens*? Mr. Trye imagines, that the external iliac glands sometimes suppurate in this complaint, but I am of opinion that, when matter forms above the inguen, neither the external iliac, nor any other conglobate glands are necessarily, if ever, the seat of the suppuration: 1st, because the suppuration is observed sometimes, where no conglobate glands are known to be situated; and 2dly, because the suppuration is frequently too extensive to admit of this supposition. And, when suppuration takes place in the limb, the matter sometimes extends over all the back part of the leg and at other times is situated below the usual seat of the conglobate glands.

In the greater number of cases of this disease, as far as my reading and observation go, there is no material enlargement of the conglobate glands of the limb. In some instances, where the swelling in different parts of the limb gives the sensation of a cluster of glands on a slight examination, I have found by examining more carefully, that this is not the case. Indeed these appearances are met with in many points of the lower extremities (especially on the back part), where conglobate glands are, perhaps, never found to be situated. Dr. Hunter, as I have already noticed in page 69, has mentioned

certain inequalities in the limb as arising from *the muscles being stiffened into hard bumps*, and these inequalities, I apprehend, are the appearances, to which I have just been alluding, and which, I have no doubt, have imposed upon superficial observers for conglobate glands, or enlarged lymphatics. From particular attention to these inequalities I am convinced, that they are owing to the cells of the cellular texture being occupied by matters of different degrees of fluidity and consistence. They are most evident, when the tension of the limb begins to abate, and the swelling begins to yield more and retain the impression of the finger longer.

If inflammation, or enlargement of the lymphatic system of the limb be the cause of the swelling, independently of any diseased action of the exhalants, it should always precede the swelling, and should be very evident: because we know that a very considerable enlargement, or inflammation of the lymphatic glands and vessels does frequently take place without producing any evident œdema, or painful swelling of the parts more distant from the thoracic duct; as in the neck, for example, in consequence of scrofula, or eruptions on the face and scalp; in the axilla from the inoculated small pox, &c; and in the groin in consequence of chancres on the penis.

I have seen the axillary glands so much inflamed from the inoculated small pox and other causes, that extensive abscesses and, in one instance, a gangrene of the cutis took place without any concomitant affection of the lower part of the arm, resembling *Phlegmatia dolens*, and with little, or no edematose affection even. The scrotum is a part, which, from its laxity, becomes easily and enormously distended by an accumulation of the interstitial fluid, and yet, when the lymphatic vessels are evidently affected and the inguinal glands are enormously enlarged and inflamed on both sides, in general no swelling, analogous to *Phlegmatia dolens*, nor even any material degree of *œdema* is observed. But it might be expected, that a tense, painful, elastic, colourless swelling of the arm in the former case and of the scrotum in the latter should take place inevitably and to a considerable extent, if the theory I am discussing were true: For I do not believe, that in any one instance of *Phlegmatia dolens* the lymphatic vessels, or glands of the limb have ever been nearly so much inflamed as those of the penis, scrotum and inguen very frequently are in consequence of venereal chancre, or the lymphatics of the arm and axillary glands in the inoculated small pox.—Several conglobate glands are even frequently cut out of

the axilla without any subsequent swelling either of a painful, or indolent nature being observed to take place in the arm.

Moreover, I have frequently had an opportunity of seeing the lymphatic vessels inflamed and enlarged in patients, affected with abscesses and ulcers in the upper and lower extremities. In these cases the patients complained of but little pain, when the limb was touched or moved, compared with what is experienced in *Phlegmatia dolens*, though the inflammation of the lymphatics was clearly marked by a number of red streaks, or lines passing along the limb: The swelling and tension of the limb were much less and the skin, instead of being very white, as in *Ph. dolens*, had a considerable degree of redness, spreading from the edges of the inflamed absorbents and becoming gradually less and less, till it terminated nearly in the natural colour of the skin: The swelling was also of a much less obstinate nature, always disappearing very soon after the inflammation of the lymphatics was discussed. I have been myself the subject of a considerable inflammation of the absorbents, and shall give an account of my own case, by way of illustrating the difference between an inflammation of the lymphatics of a limb and the disease under consideration.

CASE XI.

On Monday the 24th of September 1798, about 8 o'clock in the evening, I attended the opening of the body of Ann Lee, upon whom I had that morning performed the Cesarean Operation. I was rather indisposed at the time from having caught cold; and I knew, that I had a slight scratch in an inflamed state on the 2d finger of my left hand, at the first joint reckoning from the nail: But, being anxious to take the dimensions of the pelvis very accurately, this circumstance did not prevent me from handling the parts about the pelvis very freely, and consequently exposing my finger to any virus that might exist there. I felt some smarting in the inflamed part, whilst I was making the necessary examination, and, after washing my hands well with soap and water, I by way of precaution washed them in rum before I left the house.

The pain of my finger became so considerable soon after I went to bed, that I got very little sleep. About 8 the next morning the inflammation was very intense; but had not spread much beyond the joint in either direction; and the pain, which was chiefly of a burning kind, was extremely violent. I procured a saturnine lotion and applied some lint, moistened in it,

round my finger. This application was very frequently renewed during the day without affording me any relief. Towards night the inflammation became more intense and had extended further along my finger, I therefore applied an infusion of galls with laudanum in lieu of the saturnine lotion: And, as the pain was very excruciating, when I went to bed, I took a full dose of laudanum; from which I neither derived ease, nor sleep.

The next morning (Wednesday) I felt a giddiness and slight headach; my tongue was dry and furred; and my pulse more frequent than natural; but the heat of my body was not materially increased, nor had I perceived any rigors. From this time I began to observe a strict antiphlogistic regimen; I kept my hand supported both night and day in a sling, as high as I well could by bending my elbow at an acute angle, and I continued to apply the infusion of galls to my finger, which was now inflamed all over, and painful beyond description. At night, the pain and inflammation increasing, I grew dissatisfied with the application I was then using, and changed it for a common bread and milk poultice, hoping that this, by lessening the tension of the part, would favour effusion and promote suppuration. I took an opiate again, when

I went to bed. Soon afterwards such a violent burning and throbbing sensation took place, that I threw off the poultice in the middle of the night, and suffered my finger to remain without any application till morning. The pain was somewhat relieved after the poultice was removed, but was too violent to allow me to get any sleep.

On Thursday morning my finger was intensely red and much swelled, and my hand was stiff, swelled and somewhat inflamed, especially on the back part. My pulse not indicating any material general affection of the sanguiferous system, I thought it unnecessary to employ general bloodletting, and I did not chuse to apply leeches to my finger, or hand, lest the punctures should become gangrenous. As the pain was uncommonly distressing, I now began to use a lotion composed of *Tinctura Opii* and warm water, in the proportion of one part of the former to five of the latter. I soaked pieces of lint frequently in the lotion, warmed to the temperature, which I found the most soothing, and kept them constantly applied to my finger and hand. By this application my finger was rendered easier than by any other, which I had tried, and I therefore continued the use of it till the end of the week. The pain was however

still so great as to prevent me almost entirely from sleeping. Being very much engaged at that time in printing the 1st part of my British Flora, and in preparing the latter part for the press, I found it necessary to exert myself and I got over the days better than the nights; my earnest attention to this work in some measure tending to render me less sensible of the pain of my finger.

At the end of the week I felt a singular sense of distension at the part, where the 2d finger is connected with the palm of the hand, which I thought was occasioned by some matter forcing its way from the finger to the hand; and, on a careful examination, I perceived a slight collection of matter at the middle joint of the finger, which was more evident on the side next to the ring-finger. My hand was stiff, swelled, inflamed and rather painful, and the lymphatic vessels were many of them in a state of high inflammation along the inside of the whole of my fore arm; from the sides of these vessels a degree of redness, which became gradually less, was diffused over a part of the skin of the arm; but the pain of my arm, when touched or moved, was but slight, and the swelling was neither considerable nor very tense. I was extremely pleased to find this obscure fluctuation in my

finger, as I now hoped that there would be no further danger of gangrene and that my hand, if not my finger, would be preserved; and, taking a lancet, I made an incision with it into the part. Some matter of a good appearance was discharged, the distending pain, which I had before felt, where the finger is joined to the hand, subsided and ceased; the inflammation of the lymphatics disappeared in less than 3 days, and the swelling and stiffness of my arm soon went off: But the hand remained swelled for a few days longer. The axillary glands were not evidently affected.

From this time I felt comparatively little pain in that part of my finger, which was betwixt my hand and the incision; though it was evident that the matter reached nearly to the hand, being pressed out at every dressing: But the pain of my finger from the place of the incision to the point was still very great, especially at the joint first affected. Encouraged by the relief I had derived from the first incision, although I could perceive no fluctuation, I made a deep puncture with a lancet on the inside of my finger a little below the first joint. No matter appeared, nor indeed did I expect there would; I, hoped, however, that it would relieve the tension, and, if matter should form near the joint as I expected, that, this being a weaker part, it

would sooner point there. In this I was disappointed; but no further inconvenience followed the puncture than the smart immediately caused by it, which was nothing in comparison of what I was then suffering from the inflammation. The pain from this time gradually lessened.

After some time, I cannot say exactly how long, I observed a singular looseness and motion of the first joint of the finger; insomuch that, when I shook my hand, I was sensible of a *crepitus*, similar to what is observed when the ends of a recently fractured bone are rubbed against each other, and the same sensation and noise took place, when I moved one phalanx upon the other with my right hand, which I could easily do from side to side. I was now certain, that the cartilages of these two phalanges in the first joint were absorbed, and that I must either lose the end of my finger, or an ankylosis would take place.

I hoped, as there was no appearance of supuration, for the latter termination of the complaint. To promote it as much as possible and, at the same time, to render my finger as serviceable as it could be with a stiff joint, I bent the joint slightly, and made the fore and ring-fingers act as splints to it by tying a ribband

round all the 3 fingers. Under this treatment a complete ankylosis took place, and my finger is scarcely less useful than if I possessed the natural motion of the injured joint.

The end of the finger had a clubbed appearance for some time; but is now rather smaller than the corresponding finger of my right hand. It was nearly 3 months, before I was able to bring the point of the finger into contact with the palm of my hand.

If it were necessary I could adduce other cases to prove, that the tumefaction of a limb, produced in consequence of inflammation of the lymphatic vessels, is neither so painful at first, nor so tense and tender, nor so free from discolouration, nor so difficult of removal, as the swelling incident to the lower extremities of lying-in women.

The most usual *time*, at which this disease supervenes in women, who have been lately delivered, furnishes another argument against the theory I am combating: For, if this disease consist in an inflammation of the lymphatic system, instead of seldom happening within the first week after delivery, it should almost invariably take place within this period, because the lymphatics may be supposed at this time to have suffered more either from injury during

labour, or from the absorption of an acrimonious lochial discharge: And it is not, perhaps, clearly ascertained, that inflammation of the absorbent vessels ever does take place independently of the two causes just mentioned and the propagation of inflammatory affection to them from contiguous parts.

The *manner*, in which the intumescence takes place in *Phlegmatia dolens*, is generally the reverse of what happens in swellings, that are produced by inflammation and enlargement of the lymphatics. For in the former complaint the tumefaction commences where the pain is first felt, consequently in the greater number of instances it is first observed in the upper part of the limb, is often very soon diffused over the whole of it & is very large; whereas in an inflammation of the lymphatics the swelling is generally first perceived in the lowest part of the limb, or the part most distant from the thoracic duct, in whatever point the inflammation may have begun, and rises slowly and gradually upwards, and is not large.

The *appearance of the complaint in the other lower extremity* sooner, or later, after one has been attacked, which not unfrequently happens, appears to me to present another material objection to the theory under discussion.

The *nature of the effused fluid* appears to be

very different in *Phlegmatia dolens* and in the swelling, produced by an inflammation of the lymphatics, it being in general thicker and more firmly coagulated, and hence with more difficulty absorbed in the former than in the latter affection.

An inflammation of the lymphatics is likewise a disease of a more local nature, being frequently neither preceded, nor accompanied at first by febrile symptoms. *Phlegmatia dolens* has indeed been supposed by Mr. White and Dr. Ferriar to be a local complaint; but the cases, which I have brought forward and which I shall hereafter adduce, prove that this is far from being the case. It is, perhaps, in every instance accompanied by considerable marks of pyrexia, and is very frequently preceded by coldness and rigors, which are succeeded by a hot stage, and during this the pain, stiffness, heat and other inflammatory symptoms invade the loins, hypogastrium, inguen, or some part of the lower extremity, just as they attack the peritonæum, in Puerperal Fever, the joints and muscles in rheumatism &c. Dr. Ferriar has even gone so far as to state, that "no inflammatory affection of the arterial system exists." Page 121: But this position I must beg leave to deny, not only with respect to *Phlegmatia dolens*, but with re-

spect to inflammation of the lymphatics likewise. In the former we not only meet with a general inflammatory diathesis, but a topical affection of the arteries, clearly evinced by pain, heat, swelling and tenderness of the part and in some instances by extensive suppuration, or even gangrene. And, if the arteries be unaffected in the latter complaint, how does it happen, that the superincumbent skin, or the coats of the lymphatics become red, hot, tender and painful?—Are not the skin and the coats of the absorbents furnished with arteries? And are not these vessels principally affected in inflammation of the lymphatics, as well as in inflammations of the peritonæum, pleura, cellular membrane, muscles &c. &c.? Undoubtedly they are.

CHAPTER SECOND.

OF THE MEDICAL HISTORY, CAUSES & CURE OF PHLEG-
MATIA DOLENS.

AFTER attempting to disprove the different theories, that have been formed relative to Phlegmatia dolens, it may have been expected by some of my readers, perhaps, that I should have immediately proceeded to offer one, which will account for all the phænomena in a more satisfactory manner: But, before I begin to develop the essence, or proximate cause, I think it proper to present a general medical history of the disease, illustrated by a variety of cases, and also to consider the predisposing and exciting causes, that in arguing cautiously by induction from numerous observations and facts, previously stated to the reader, I may be better enabled to convince him of the superiority of the theory, which I have to bring forward.

SECTION FIRST.

Of the Medical History of Phlegmatia dolens.

§ 1. THE GENERAL HISTORY.

This disease principally affects women in the puerperal state; in a few instances it has been observed to attack pregnant women and in one

or two cases nurses, on losing their children, have been affected by it. Women of all descriptions are liable to be attacked by it during and soon after childbed: But those, whose limbs have been pained, or anasarcaous during pregnancy, and who do not suckle their offspring, are more especially subject to it.* It has rarely occurred oftener than once to the same female.† It supervenes to easy and natural, as

* The number of women, who give suck is much greater than of those who do not give suck, and yet out of the 14 patients, whose cases are related by Mr. White 8 did not give suck, and another, concerning whom it is not stated whether she gave suck or not, was attacked in 24 hours after her delivery, consequently before the secretion of milk could be fairly begun. Mr. Trye has not stated whether the patients, whose cases he has related, gave suck or not, except in case 10th, where he informs us, that on the 15th day after her delivery the milk of the patient, which had hitherto been secreted freely, left her suddenly and that this circumstance was followed by a violent pain in the loins &c. And in a Note he says, "The frequent occurrence of this accident previous to the swelling of the lower extremity, has given occasion to the hypothesis, that the disorder is owing to the metastasis of the milk." Page 59. In 3 of the cases, communicated to Mr. Trye by Mr. Taylor, the secretion of the breasts was free.

† Mrs. R., mentioned in Mr. Trye's Essay (case 13), suffered from this complaint in 2 lyings-in, and the first

well as to difficult and preternatural births. It sometimes makes its appearance in 24, or 48 hours after delivery, and at other times not till a month or six weeks after : But in general the attack takes place from the 10th to the 16th day of the lying-in.

It has in many instances attacked women, who were recovering from puerperal fever,† and in some cases has supervened, or succeeded to thoracic inflammation. It not uncommonly begins with coldness and rigors. These are succeeded by heat, thirst and other symptoms of pyrexia ; and then pain, stiffness and other symptoms of topical inflammation supervene. Sometimes the local affection is from the first accompanied with, but is not preceded by febrile symptoms. Upon other occasions the topical affection is neither preceded by puerperal fever,

patient I saw in this disease, about the year 1780, had been attacked with it after a preceding delivery.

† Mr. Trye says, page 9—" A greater or less degree of puerperal fever has in every case preceded the glandular inflammation."——In the 14 cases related by Mr. White, 8 of the patients appear to have suffered, previously to the attack of the lower extremity, from fever or inflammation. And in one of the cases communicated to Mr. Trye, the patient is stated to have been seized with this complaint " at the decline of a puerperal fever."

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nor rigors &c, but, soon after it has taken place, the pulse becomes more frequent, the heat of the body is increased and the patient is affected with thirst, headach &c. The pyrexia is very various in degree in different patients, and sometimes assumes an irregular remittent, or intermittent type.

Some writers have described the topical affection as happening to the superior extremities: But I have neither seen a single case of this kind, nor have I met with a genuine case, related by any author.

The complaint generally takes place on one side only at first, and the part, where it commences, is various: But it most commonly begins in the lumbar,* hypogastric, or inguinal region† on one side, or in the hip, or top of the thigh and corresponding labium pudendi. In this

* When it begins in the lumbar region, it appears to be propagated along the psoadic and iliac muscles to the groin, and resembles a severe case of lumbago: When it affects the hip first, it appears under the form of a violent Ischias or Sciatica.

† In 5 of Mr. White's cases the complaint began in the back and descended from thence to the groin, thigh &c, but in the greater number of cases it began in the groin.

case the patient first perceives a sense of pain, weight and stiffness in some of the above-mentioned parts, which are increased by every attempt to move the pelvis, or lower limb. If the part be carefully examined, it generally is found rather fuller, or hotter than natural, and tender to the touch, but not discoloured. The pain increases, always becomes very severe, and in some cases is of the most excruciating† kind: It extends along the thigh, and when it has subsisted for some time, longer or shorter in different patients, the top of the thigh and the labium pudendi become greatly swelled, and the pain is then sometimes alleviated, but accompanied with a greater sense of distension. The pain next extends down to the knee and is generally the most severe on the inside and back of the thigh, in the direction of the internal cutaneous and the crural nerves; when it has continued for some time, the whole of the thigh becomes swelled and the pain is somewhat relieved; the pain then extends down the leg to the foot and is commonly the most severe in the direction of

† The patient in one of the cases, related by Mr. Taylor, declared the pains of labour to have been trifling, compared to her sufferings under this disease. See Trye's Essay, page 68.

the posterior tibial nerve; after some time the parts last attacked begin to swell and the pain abates in violence; but is still very considerable, especially on any attempt to move the limb. The extremity, being now swelled throughout its whole extent, appears perfectly, or nearly uniform, and it is not perceptibly lessened by an horizontal position, like an edematose limb. It is of the natural colour, or even whiter; is hotter than natural; excessively tense and exquisitely tender when touched; when pressed by the finger in different parts, it is found to be elastic, little, if any, impression remaining and that only for a very short time. If a puncture, or incision be made into the limb, in some instances no fluid is discharged; in others a small quantity only issues out, which coagulates soon after; and in others a larger quantity of fluid escapes, which does not coagulate, but the whole of the effused matter cannot be drawn off in this way. The swelling of the limb varies both in degree and in the space of time requisite for its full formation: In most instances it arrives at double the natural size and in some cases at a much greater: In lax habits and in patients, whose legs have been very much affected with anasarca during pregnancy, the swelling takes place more rapidly than in those, who are dif-

ferently circumstanced; it sometimes arrives in the former class of patients at its greatest extent in 24 hours, or less, from the first attack.

Instead of beginning invariably at the upper part of the limb and descending to the lower, this complaint has been known to begin in the foot, the middle of the leg, the ham and the knee. In whichever of these parts it happens to begin, it is generally soon diffused over the whole of the limb, and, when this has taken place, the limb presents the same phænomena exactly, that have been stated above, as observable when the inguen &c. are first affected.

After some days, generally from two to eight, the febrile symptoms diminish, and the swelling, heat, tension, weight and tenderness of the lower extremity begin to abate, first about the upper part of the thigh, or about the knee, and afterwards in the leg and foot. Some inequalities are found in the limb, which at first feel like indurated glands, but upon being more nicely examined, their edges are not so well defined as those of conglobate glands and they appear to be occasioned by the effused matter being of different degrees of consistence in different points. The conglobate glands of the thigh and leg are sometimes felt distinctly, and are tender to the touch, but are seldom materially enlarged.

And, as the swelling subsides, it has happened, that an enlargement of the lymphatic vessels in some part of the limb has been felt, or been supposed to be felt.

The febrile symptoms having gradually disappeared, the pain and tenderness of the limb being much relieved, and the swelling and tension being considerably diminished, the patient is debilitated and much reduced, and the limb feels stiff, heavy, benumbed, and weak. When the finger is pressed strongly against it for some time in different points, it is found to be less elastic than at first, in some places retaining the impression of the finger for a longer, in other places for a shorter time, or scarcely at all. And, if the limb be suffered to hang down, or if the patient walk much, it is found to be more swelled in the evening and assumes more of an edematose appearance. In this state the limb continues for a longer, or shorter time, and is commonly at length reduced wholly, or nearly to the natural size.

Hitherto the disease has been described, as affecting only one of the inferior extremities and as terminating by resolution, or the effusion of a fluid that is removed by the absorbents: But, unfortunately, it sometimes happens that, after it abates in one limb, the other is attacked in a

similar way. It also happens in some cases, that the swelling is not terminated by resolution. For sometimes a *suppuration* takes place in one†, or both legs and ulcers are formed, which are difficult to heal. In a few cases a gangrene‡ has supervened. In some instances the patient has been destroyed by the violence of the disease, before either suppuration, or gangrene have happened. And I have seen one case, where the leg remained tumefied for some time, and a slight erysipelatous inflammation supervened, which was succeeded by several painful superficial ulcerations, that remained unhealed for years, or, if healed, soon broke out again.

† A case of this kind is related by Mr. Taylor, wherein an extensive suppuration took place from the ham to the heel. See Trye's Essay, page 64.

‡ See Hevin's Cours de Path. & de Thér Chirurg. I attended a patient of a delicate habit and much subject to extensive scorbutic eruptions, who had a well-marked febrile paroxysm in her lying-in. Soon afterwards one of her lower limbs became painful in different points, cutaneous inflammation and suppuration took place, and, when the abscesses were opened, large portions of cellular membrane came away, having the appearance of lint, soaked in pus, at first sight. The discharge was so great, that she sunk in a few weeks. The limb never assumed in this case the appearance of *Phlegmatia dolens*.

§ 2. PARTICULAR HISTORIES.

Four cases of *Phlegmatia dolens* have occurred to me since the middle of October 1797, which I shall relate here, as they are marked by some circumstances, that strongly elucidate the essence of the disease, and place its analogy and connexion with puerperal fever in a striking point of view. To these I shall also add several very interesting cases, for which I am indebted to the communications of my friends.

CASE XII.

On the 1st of April, 1800, I was consulted by Mrs. ***** of Manchester, a lady of a delicate constitution, aged 31, and in the 7th month of her fourth pregnancy.

Her legs were edematose as high as the knee and, being very much swelled and stiff, they incommoded her extremely in walking. The swelling had been gradually forming for some time, but had increased rapidly after a walk of several miles into the country. Her appetite was good; her pulse was unaffected; her bowels rather costive; her urine in small quantity, of a dirty straw colour; her thirst not considerable.

As the tumefaction of her limbs appeared

evidently to arise from the pressure of the womb, and to be independent on any primary hydropic disposition, I desired her to keep her legs and feet in a horizontal position, or to lie down occasionally in the day time, and I directed her to take about half an ounce of *Crem. Tartari* daily and to use a generous diet.

April 4th. The swelling was increased; in other respects she was not much altered. I ordered her to take *Oleum Ricini* occasionally as a laxative and prescribed the following mixture to be taken, instead of the *Cremor Tartari*.

℞ Aquæ Menthæ Sativæ ʒviij
Tinct. Cinnam. Comp. ʒfs
Syrupi Zingiberis
Natron præparati, utriusque ʒij.

Dosis—Cochlearia ampla tria 4ta quaque hora.

April 15th. Her urine was not increased in quantity, nor altered in appearance. The swelling of the limbs continued increasing: And she had a cough. I therefore prescribed this tincture for her.

℞ Spir. Ætheris Nitrosi
Tinct. Opii Camphor., utriusque ʒvj
—— Scillæ ʒj

M.

Fiat Tinctura: Cujus capiat ter die cochlearia duo theana ex vini & aquæ commixtorum paululo.

April 22d. The swelling had now mounted higher than the top of her thighs. Her legs were become very uneasy and shewed a disposition to inflame, if suffered to hang down. She was obliged to keep up stairs, on account of the swelling of the labia pudendi, as she could no longer bear to sit upon a chair: She slept very ill; and was rather costive. Being very desirous of unloading the limbs of the enormous quantity of water they contained, and to procure my patient more sleep, I prescribed, as follows:

℞ Pulv. Fol. Digitalis
 — Rad. Scillæ
 — Opii purific., singul. Gr. vj
 — Scammonii ʒj
 Ol. Essent. Juniperi Gtt. x
 Syr. Zingiberis q. s. ut fiat massa in pilulas duodecim formanda.

S.—Capiat ij sing. noct. hora somni.

April 25. The swelling still continued to gain ground, and incommoded her extremely.—As she could not bear to sit, she was desired to be dressed every day, and to lie upon the bed, to prevent her as much as possible from becoming too much relaxed. Her urine remained of the same colour, and was not equal to a pint in the twenty-four hours. Her pulse retained its

firmness and was not accelerated. But her appetite began to decline. She was desired to take jellies, eggs and as much nutriment as her stomach would bear, and to drink 4 or five glasses of wine in the day, or more, if it could be born without inconvenience. The pills were directed to be continued and the following mixture to be taken instead of the medicines before prescribed.

R Infusi Gentianæ Compos. 3vjfs
 Spir. Æth. Nitrosi
 Tinct. Cinnam. Comp., utriusque 3vj
 Natron præparati 3jfs
 F. Mistura. Cujus capiat cyathum vinosum
 bis die, scil: hora 11ma a. m. & 4ta
 p. m.

April 28. The anasarcaous affection was extended over her whole trunk. Her arms, though they did not remain pitted on pressure, were considerably thicker, and her face was evidently affected. She had only occasion to make water twice in the 24 hours and her urine scarcely exceeded half a pint in this time; her respiration was somewhat affected, which obliged her to lie with her head and chest more elevated than usual.

Repet. Mist. additis Natron præp. 3fs &
 Tinct. Scillæ Gtt. lx.

April 30. No abatement of the swelling, nor any increase of the quantity of urine having taken place, I directed the following medicines to be taken, and those, before prescribed, to be discontinued.

R	Infus. Gent. Compos.	℥vij
	Tinct. Cardam. Comp.	℥vj
	Natron præparati	℥ij
	Pulv. Fol. Digitalis	Griv
	F. Mistura.	

Signa—Sumatur hujusce cyathus vinosus ter die.

R	Pulv. Fol. Digitalis	
	— Rad. Scillæ	
	Opij purificati aa.	Gr. vj
	Calomel præparati	Gr. iv
	Cons. Cynosbati q. s. ut fiant pil.	xij.

Signa—Capiat ij sing. noct. hora decubitus.

May 3d. Her appetite and digestion were evidently growing worse, and the dropsical symptoms were not checked. I changed her mixture ; but directed her pills to be continued.

R	Pulv. Cort. Angusturæ	℥iij
	Aquæ Fontanæ ferventis	℔fs
	Macera per horam unam & colato liquori adde	
	T. Cinnam. Compos.	℥vj
	Kali præparati	℥ij
	Tinct. Fol. Digitalis satur.	Gtt lx
	M.	

S.—Capiat coch. iij ampla 4ta quaque hora.

May 6th. Finding the dropsical symptoms were still increasing and my patient expressing a dislike of the last prescribed medicine, I substituted the following.

℞	Extracti Gentianæ	ʒjfs
	Pulv. Rad. Scillæ	Gr. xij
	— Fol. Digitalis	Gr. vj
	Ol. Ess. Juniperi	Gtt. xij
	Syr. Zing. q. s. ut fiat massa in pilulas	

xxiv formanda. E quibus capiat ij 4ta quaq. hora, superbibendo cyathum vinosum Aquæ Mephiticæ, cum dupla Natron quantitate, a Schweppe paratæ.

May 20th. She had persisted in the use of the remedies, last prescribed, without deriving any evident advantage from them. The anasar-cous affection continued to increase. She complained of heartburn, of cough and difficulty of breathing. She only passed her water twice in the 24 hours, and the whole made in this time scarcely exceeded half a pint: It still remained of a dirty straw colour. Having no longer any expectation of affording my patient relief by diuretics, or remedies prescribed with the view of increasing the absorption of effused fluids, I began to turn my attention solely to the support

of her strength by nutritious diet, and tonics and stimulants, and to the relief of any urgent symptoms, that might take place. I therefore directed her to take *Tinct. Opij Camphor.* for her cough, *Troch. e. Creta* for her heart-burn and directed the following medicine to relieve her other dyspeptic complaints.

℞ Infusi Angusturæ* ʒvij

Tinct. Cinnam. Comp. ʒj

Ammoniaë præparatæ ʒj

F. Mistura.

Capiat cyathum vinosum ter die.

June 4th. Her appetite continued to decline. She was troubled with occasional vomitings and purgings, and suffered much from acidity and pain in her stomach and bowels. Her pulse retained its firmness and regularity and rarely exceeded 80 strokes in a minute. The veins on the back of her hands were sufficiently full, but the blood appeared of a dilute purple colour in them. I had reason to believe that, though the cellular membrane was universally and very much loaded, there was no morbid accumulation of fluids in the cavities of the abdomen and thorax, or in the ventricles of the

* See page 144.

brain ; and, as I now expected that labour-pains would ere long come on, I was unwilling to make any punctures in her lower limbs.

The very great distension of the skin of the lower extremities and the inconvenience, produced by it, might perhaps have induced some practitioners to have recourse to incisions, or punctures of the skin at an early period of the disease ; but, having seen gangrene occasioned by this practice in anasarctous limbs and fearing lest the long continued drain in this case might induce inflammation and gangrene, I judged it more prudent to abstain from the employment of punctures. To correct the acidity of the primæ viæ and to obviate the griping and purging, I directed a wine glass of the following mixture to be taken every four hours and her other medicines to be discontinued.

℞ Ammoniaæ præparatæ	
Natron præpar., utriusque	ʒj
Aq. Puræ	ʒviij
Tinct. Cardam. Comp.	ʒj
— Opij	Gtt. lx

M.

June 21st. Though I had visited my patient every day for several days, her complaint proceeded with so much uniformity, that I have not thought it necessary to report the state

of her symptoms except on those days, when her medicines were directed to be changed. After being confined nearly 16 weeks to the house, and 8 weeks to her bed, she was this morning attacked with labour-pains. For a day or two, previous to the commencement of her labour, the nurse had noticed a discharge of water *per vaginam*. When I visited her about nine a. m. her pains were pretty frequent and strong. I examined her soon after and found the membranes burst, the os uteri dilated to about the size of a crown piece, and the *labia pudendi* most enormously swelled. Her labour, though difficult, was not harder, or more tedious than her former ones, notwithstanding the swelling and the difficulty of keeping her placed in a favourable position. She was delivered about noon. The placenta came away without difficulty. She lost but little blood and no fainting supervened. From the time of her delivery she had a headache, which was peculiarly distracting, and a short but almost incessant cough. About two p. m. she appeared very low and the nurse informed me, that she had been confused in her head and a little convulsed. Her pulse 120 and small. I ordered her chamber to be darkened, and the following medicine.

R Aq. Puræ

ʒvj fs

Spir. Æth. Nitrosi	℥j
Syr. Papav. Errat.	℥iij
Tinct. Opii	Gtt. lxxx

M.

Ft. Julepum : Cujus capiat coch. duo ampla
3tia quaq. hora.

Nine p. m. She appeared to be rather better ;
and had neither been materially confused, nor
convulsed since my last visit.

June 22d. Her headach and cough were still
very urgent. The lochial discharge was in small
quantity, but attended with a considerable dis-
charge of water. Her urine was increased : Her
pulse small and as frequent as ever : Afterpains
not severe.

June 23d. The symptoms nearly as the day
before.

A blister was proposed on account of the
headach, but, not being submitted to, a Bur-
gundy pitch plaister was directed to be applied
betwixt her shoulders. The nurse informed me,
that there was a prodigious discharge of water
*per vaginam** and that the anasaruous swelling

* No attempt was made to ascertain the source of this
watery discharge, but I suppose that some part of the va-
gina had yielded to the distension either before, or during
labour. I had no reason to be apprehensive of the ex-

was subsiding rapidly. She was desired not to attempt to suckle her child: And indeed she never had any evident appearance of milk in her breasts.

June 24th. The headach somewhat relieved. The cough still very troublesome. Pulse about 110. The urine in large quantity, and the draining of water *per vaginam* so great, that she required 2 dozen double cloths on one day. The swelling of her lower limbs was very much reduced. Bowels not sufficiently open. She was directed to take magnesia, or castor oil, as a laxative, and the following emulsion; and was ordered to take a nutritious diet with as much wine as she could bear.

R	Aquæ Rosæ	℥v
	Ol. Amygd. Dulc.	℥jfs
	Spir Nuc. Mosch.	℥j
	Syr. Tolutan.	℥fs
	Spir. Am. Comp.	℥iij
	Tinct. Opii	Gtt. lxxx

istence of any inflammation, as she did not complain of any material pain, or soreness in the part. Whether the water, that was discharged previously to labour, was the liquor amnii only, or was in part from the same source, as that which now flowed so freely, I am not able to determine.

Aq. Kali præpar. Gtt. xx

M.

F. Emulsio. Capiat coch. ampla ij 3tia quaq.
hora, vel urgenti tussi:

June 27th. 10, a. m. Her headach and cough were much relieved. Her urine was in large quantity. The swelling was much reduced and the water still continued to drain, though in smaller quantity, *per vaginam*: But she had been much purged in the night, which she attributed to 2 tea spoonfuls of Ol. Ricini, taken at two different times the day before. At 10, p. m. I was called to her, and learnt, that she had experienced coldness and rigors that evening, succeeded by heat, thirst, headach and some degree of confusion in her head. She said she felt, as if she had two heads. She had a tormenting tenesmus, and was affected with vomiting. Her abdomen was painful, tender to the touch, and rather swelled. Her pulse was very small and beat nearly 140 strokes in a minute; her skin hot, and her tongue furred. The watery discharge *per vaginam* was stopped. This was a well-marked attack of puerperal fever, which alarmed her friends very much and excited very considerable apprehensions in my mind; more especially as her system was too much debilitated to admit of evacuations. I prescribed for her

the following remedies, and directed her to abstain from wine and to use a less stimulant diet, than that she had been allowed for a few days before with the view of supporting her strength, under the amazing discharge of water per vaginam.

℞	Muc. Gum. Arabici	℥iv
	Tinct. Opii	Gtt. lx
	M.	

F. Enema statim infundendum.

℞	Succ. Limon. recentis	℥ij
	Kali præparati	℥iv
	Aq. Cinnamomi	℥iijs
	Spir. Æth. Nitrosi	℥fs
	Tinct. Opii	Gtt. lx
	M.	

F. Julepum.

Signa—Capiat quadrantem 4ta quaq. hora.

℞	Linim. Ammonia Fort.	℥ij
	Camphoræ	℥ij
	M.	

F. Linimentum ; quo humectetur pannus laneus & abdomini universo applicetur.

June 28. 9, a. m. She had been very restless and delirious during the greatest part of the night. The pulse, heat, and thirst were nearly as at my last visit. Her vomiting, purging, and

tenesmus were relieved. The skin moister. The abdomen not more painful, nor more distended. Head not painful.

Contin. Julepum & Linimentum.

8, p. m. The symptoms were scarcely more favourable than in the morning. She had got no rest during the day.

℞ Opii purific. Gr. j

Pulv. Antimonial. Gr. ij

Cons. Rosæ q. s. ut ft. Pil. ij hora somni sumendæ.

June 29th. She had got some sleep in the night and had not been delirious. Her head was nearly free from pain. The abdomen was less painful and less tender when touched. Her pulse about 120. Her skin moist and her thirst abated. She was directed to continue her medicines.—If I had not found the symptoms abated, it was my intention to apply a blister to the abdomen and employ the Digitalis for reasons, which will be assigned in the third chapter of this Essay.

July 2d. Her febrile symptoms had been gradually subsiding, and had now nearly left her. The swelling of the limbs was nearly gone, but the labia pudendi were still so much tumefied as to incommode her, when she attempted to sit

up.—She was desired to use a more nutritious diet and to take a wine glass of a Vinous Infusion of Cortex Peruvianus twice a day, instead of the medicines last prescribed.

July 6th. 9, a. m. Her general health appeared daily improving and the swelling of her limbs had entirely disappeared.

At 7, p. m. I saw her again. She had experienced some degree of chilliness soon after I visited her in the morning, which was succeeded by heat, and about 3, p. m. she was attacked with violent pain in the left leg. The pain began upon the fore part of the leg a little below the middle, and extended upwards to the calf. The leg also felt hotter than natural and stiff when moved. It was soon after examined carefully by the nurse, who observed a blush of small extent on the fore part of the leg, which went off after rubbing it a little. In half an hour the pain and stiffness affected the whole limb, and were soon followed by a tense, elastic, hot intumescence, without any discolouration of the skin. When I examined the limb, 4 hours after the attack, the swelling appeared uniform, extending from the foot to the groin, hip and lower part of the abdomen. It was hotter than natural, not at all discoloured, tense, tender and so firm, that it scarcely retained any degree of

impression from the finger. She complained of most pain in the fore and back parts of the leg a little below the calf; but said the limb was extremely painful all over. I examined it with the utmost attention from the foot to the inguinal region, without being able to discover the slightest affection of the lymphatic system. The state of debility was such as to render either general, or topical bleeding, in my opinion at least, inadmissible: And, as she had taken a dose of magnesia that day, which had procured her 2 or 3 loose stools, I only ordered her to take the same pills, that were prescribed for her on the 28th of June, to have the limb well rubbed with oil, to live more abstemiously again, and to discontinue the vinous infusion of bark.

July 7th. 8, a. m. She had got no sleep and had passed an extremely painful night. She complained of headach and thirst, and her pulse was small and frequent, about 120 in a minute. The limb was very much swelled throughout its whole extent, and both the labia pudendi were become more enlarged, more tense, and tender. The limb had increased very materially in size during the night, notwithstanding it had been kept in an horizontal position: It was tense, hotter than natural, excessively painful, and tender when touched. I examined it again very

carefully this morning all over, but without finding any of the lymphatic glands, or vessels enlarged or inflamed: And I desired the nurse to be particularly attentive to any affections of the lymphatic vessels or glands, after describing to her the appearance of them. I then directed the following mixture and liniment.

R	Natron præparati	3ij
	Aq. Cinnamomi	
	— Puræ	āā 3iijss
	Spir. Æth. Nitrosi	3j
	M.	

Signa.—Hujusce Misturæ coch. ampla iij 4ta
quaq. hora sumantur.

R	Ung. Adipis Suillæ	3iij
	Camphoræ	3ij
	Hisce simul liquefactis adjice	
	Tinct. Opij	3ij

F. Linimentum, artui affecto bis terve quotidie
applicandum.

6, p. m. The swelling was somewhat greater than in the morning and the pain not quite so severe. Her urine was in the natural quantity and not high coloured, and a slight discharge of water had taken place *per vaginam*. She was ordered to have a Decoction of Chamomile Flowers and Poppy Heads applied to her limb,

as a fomentation, if the pain should increase, and to take the following pills.

R Pulv. Opij purif.	Gr. iv
—— Fol. Digitalis	Gr. iij
—— Antimonialis	Gr. vj

Mellis Despumati q. s. ut ft. Pil. N. vj.

E quibus cap. ij sing. noct. hora 10ma.

July 8th. 9, a.m. The fomentation had not been used. She had passed a much better night. Her pulse was not more than 110; her tongue was tolerably clean. Her urine not diminished. She complained of her limb being numb and unwieldy; but the pain was much relieved and the heat and tenderness considerably less. The swelling, tension, firmness and colour remained as before. Not the least appearance of inflammation, or enlargement of the lymphatics could be discerned.

7, p. m. Pulse 112. The pain and swelling nearly as in the morning. The nurse had observed a slight redness upon the upper part of the thigh which soon went off; it was not in streaks, nor was there any cord-like or knotty feel in the part. It was merely a blush, like what appeared on the fore part of the leg at the first attack. Her medicines were directed to be continued and her bowels to be kept open by Magnesia.

July 9th. 9, a. m. The limb was less painful, but was numb, and with difficulty moved: The swelling nearly the same in extent, shining and so firm and elastic as scarcely to retain any impression, when the finger was pressed strongly against it in different points. Her pulse 120; skin moist but rather hotter than natural; the urine of a pale straw colour and in natural quantity; tongue clean. There was no appearance of inflamed, or enlarged lymphatic glands, or vessels. The limb in many parts, both where the conglomerate glands have generally been found and where they have never, I believe, been observed, presented that kind of inequalities, mentioned above in page 137.

7, a. m. The symptoms nearly as in the morning.

July 10th. 9, a. m. She had slept tolerably; her bowels were regular and the urine natural in quantity and appearance. Her pulse 108 and small. The uneasiness and swelling of the limb scarcely altered. No appearance of inflammation, or enlargement in any part of the lymphatic system. The Mixture and Liniment ordered to be continued, and the pills to be omitted.

7, p. m. She had perceived a slight degree of chilliness in the course of this day and was apprehensive that it foreboded further mischief:

but, on inquiry, I found, that this had been occasioned by removing to another part of the bed, and, as it had neither been succeeded by heat, thirst, nor acceleration of the pulse, I encouraged her to hope, that the other limb would not be attacked.

July 11th. 10, a. m. She had rested pretty well without her opiate pills. Her pulse 108, small: Bowels regular: Skin moist: Thirst none: Urine natural. She could bear to bend the knee a little, which was less swelled and less painful. The upper part of the thigh, the hypogastric region and the lower part of the leg were not altered. No redness of the limb appeared, except from some enlarged cutaneous veins on the outside of the thigh. The lymphatic system not perceptibly affected.

8, p. m. She complained of a pain in her forehead, over the left eye. The limb was less tense and tender. The other symptoms nearly as in the morning.

July 12th. 9, a. m. Her headach relieved. The swelling, uneasiness and sense of stiffness about the knee materially abated: The lower part of the hypogastric and inguinal regions painful, especially on attempting to sit up in the bed. Pulse 100, urine natural, skin moist, bowels rather lax.

July 13th. 11, a. m. She had been out of bed a little to day. Pulse not quite 100. The affected limb continued improving: The other leg remained free from swelling and pain.

July 14th. 11, a. m. The lower part of the thigh and upper part of the leg were much less tumefied, and had nearly a natural feel. But the calf and lower part of the leg were still very much swelled: And she complained of pain in the lower part of the abdomen, in the labia pudendi, and in the inguen, on raising her body into a sitting posture. Her pulse 94, and not so small as it had been.

July 15th. 11, a. m. This morning I found her dressed and seated in a chair. She expressed her surprize at finding her legs so extremely different from each other: Her pulse under 90. Appetite not good. As she had a stocking on the affected limb, I omitted examining it this day for the first time since her attack. But I enquired of the nurse concerning it, and was told, that neither now, nor during any part of the course of the disease, had she perceived streaks, cords, or lumps, such as I described to her as taking place, when the lymphatic system is affected with inflammation, or enlargement.

July 16th. 11, a. m. Her general health was improving. The limb was less swelled and re-

tained the impression of the finger longer in some points than others. The upper part of the thigh was relieved considerably; but the labia pudendi were still swelled. I was now induced to change her remedies for the following Mixture and Liniment: And I directed a nutritious diet, with the moderate use of wine.

R	Dec. Cort. Peruv.	℥vij
	Spir. Æth. Nitrosi	℥vj
	Syr. Zingiberis	
	Natron præparati	āā ℥ij
	M.	

S.— Capiat cochlearia tria culinaria 4ta quaq. hora.

R	Ung. Adipis Suillæ	℥jfs
	Camphoræ	℥iij
	Quibus liquefactis admisceantur	
	Ol. Essent. Lavend.	Gtt. xij
	Tinct. Opij	℥ij
	M.	

F. Linimentum quotidie ter quaterve utendum.

July 17th. 11, a. m. Her amendment was progressive. She experienced little pain on moving the limb. I desired her to be dressed pretty early in the morning, to lie upon the bed in the day, and not to be too long upon her legs at a time.

July 19th. 10, a. m. She had walked a little yesterday, after I saw her, with the assistance of

her servants. Her limb continued to mend but felt numb, especially at the bottom of the foot. She complained still of pain over her left eye.

July 21st. 10, a. m. Her strength was increased, and her limb less affected. She had walked over the room without the assistance of a servant. The other leg had appeared slightly edematose above the heel, after hanging down for some time the day before.

July 23d. 6, p. m. She had sat up all day. The leg was diminishing in size and retained the impression of the finger more evidently and longer, especially in the lower part. I could not observe the least appearance of lymphatic affection: Nor had the nurse seen, or felt anything of the kind. A calico roller was applied round the limb from the foot to the knee.

July 27th. She had continued to improve. She had been carried down stairs the two last days, and had ridden out once in a carriage. The swelling of the labia pudendi was not entirely gone. The left lower extremity was considerably more swelled in an evening than in a morning. The right leg was also swelled about the ankle, but the swelling was much less firm than that of the other leg, and retained the impression of the finger longer. Her urine was of a light straw colour and in sufficient quantity. She was de-

sired to take a greater quantity of wine, for, from an aversion to it, she had taken very little hitherto; to eat a greater proportion of animal food; to discontinue her mixture and take the following medicines in lieu of it, which I hoped would both strengthen her system and excite the absorbents to more powerful action.

R Pulv. Cort. Angusturæ ʒfs

Aquæ Fontanæ ferventis lbj

Macera per hor. j. & colato liquori adde

Tinct. Cinnam Comp.

Spir. Ætheris Nitrosi āā ʒj

M.

F. Infusum: Cujus capiat cyathum vinosum bis die, viz. hora 11ma a. m. & 4ta p. m.

R Tinct. Digitalis saturatæ ʒfs

Dos.—Gtt. x ad xv in singulis Infusi supra præscripti dosibus.

July 31st. 9, a. m. I examined the left lower limb very attentively this morning, before she rose, and found a great part of it in a natural state: The lower part of the leg was, however, still considerably swelled and tense, but not tender, and there was no discolouration, nor any apparent affection of the lymphatic system.—She informed me, that it was much more tumefied at bedtime, stiffer and of a darker colour than natural, and that the other leg continued to

swell about the ankle in an evening and was easily pitted on pressure. I changed the calico for a flannel roller and desired her, as her pulse and stomach were not materially affected, to take 15 drops of the Tinct. Digitalis at each dose, of which she had not hitherto taken quite so much. I likewise requested, that she would use a pair of crutches, in order that she might be more upon her feet and yet not lay so much stress upon them; that she would use the flesh brush diligently twice a day, and go into the country for a few weeks. I was more anxious about her going into the country, because she had not been long in Manchester and had for many preceding years lived constantly in a country situation.

Aug. 2d. 3, p. m. Her stomach had borne the increased quantity of Tinct. Digitalis, without sickness, or any material nausea; but she thought it would not bear a larger dose. Though her limb was a good deal swelled and stiff, she could walk about the house and up and down stairs pretty well. She could not manage the crutches properly and therefore did not use them much. Her strength was gradually improving. Her pulse of the natural frequency, but rather small. Her urine was natural both in colour and quantity. Her appetite for animal food was not

so good as it ought to have been: She preferred tea to every other article of diet.—She was desired to continue to take her medicines in the same doses as before, to take a more solid and nutritious diet, and to apply the following Liniment twice a day to the limb.

R	Ol. Amygd. Dulc.	℥iijss
	Camphoræ	℥iij
	Aq. Ammoniaë	℥ij

M.

August 9th. She went into the country to a village about 10 miles from Manchester on the day after my last visit: And this day I was informed, that her appetite for solid food was bad; her bowels regular; her urine natural; that she walked into the garden once or twice daily; that her limb was more swelled; that the thigh was of a darker colour than natural and that both her thigh and knee were more painful. I directed the Liniment to be continued, a large blistering plaister to be applied along the outside of the thigh, and the following powder to be taken three times a day in a glass of wine, instead of the Infusion and Tincture, which she had been taking for the last 12 days.

R	Pulv. Cort. Angusturæ	Gr. x
	—— Aromatici	Gr. iv

M. F. Pulvis.

August 18th. She had returned to Manchester the preceding day. Her general health and her countenance appeared considerably improved: But the intumescence of the limb was greater than when she went into the country and more edematose. The thigh was of a dusky red colour in many parts, owing to an enlargement of the cutaneous veins, and her knee was somewhat contracted, so that she could not easily bring her heel to the ground. Several red spots appeared upon the leg. The right leg was edematose nearly as high as the knee. She was ordered to sit in the Semicupium, made as hot as she could bear it, for about 15 minutes every night at bed time, and to have a roller applied to the right as well as the left leg.

Aug. 19th. 9, a. m. She was not risen. Her limb felt more comfortable and was less stiff since she had used the hot bath. The thigh was swelled and dark-coloured in some parts. Her urine was very pale and in the natural quantity. Her pulse 84 and tolerably strong.

Contin. Pulveres, sed singulis addantur

	Natron præp. exsiccati	Gr. vj.
R	Calomel præparati	Gr. vj
	Pulv. Fol. Digitalis	Gr. iij
	—— Rad. Scillæ	Gr. iv
	—— ——— Zingib.	Gr. viij

Mellis despumati q. s. ut fiant Pil. vj.

S.—Capiat duas hora somni.

Ten, p. m. I saw her after she had been in the bath. The left limb was rather more swelled than in the morning; the red spots, which were about half an inch in diameter, continued upon the leg, but were not painful, or tender when touched.

Aug. 21st. The state of the lower limbs was scarcely altered. The pills had purged her very much and she was therefore requested not to take them a second time, till she had received further directions. The blistered part being now healed, the hot bath was ordered to be prepared with water, pretty strongly impregnated with Bay Salt.

Aug. 23d. The edematose swelling of the right leg was very much reduced by the purging. The swelling and stiffness of the left lower limb were evidently improved and the red spots were less conspicuous; but the knee was still contracted and obliged her to walk with the joint bent. Her bowels being too open, she was directed to discontinue her powders; to take a tea spoonful of the Tincture, prescribed below, every four hours, till the diarrhæa was checked; and afterwards to take the following pills.

R Tinct. Catechu 3vj

— Opij 3ij

M. F. Tinctura.

R Extr. Cort. Peruv. 3jfs

Ferri Vitriolati 3fs

Ol. Efs. Junip. Gtt. x

Muc. Gum. Arab. q. s. ut fiat Massa in pilulas xxx dividenda.

S.—Capiat duas ter die, superbibendo Vini Madeirensis cyathum.

Aug. 25th. Her diarrhæa had soon yielded to the medicine, prescribed for the relief of it. The edematose swelling of the left leg was nearly gone. Her right leg and thigh were not perceptibly reduced and the contraction of the knee still continued. Her thigh, however, was less discoloured and she could walk with more ease, especially in the forepart of the day.

Aug. 27th. She had been out once in a carriage and had walked out different times. But the swelling of the left lower limb, though a good deal reduced since my last visit, was still considerable and the contraction of the knee obliged her to walk with the joint bent. Neither at this time, nor any preceding period was there inflammation, or enlargement of the lymphatic system. The right leg was scarcely at all swelled. Her urine was pale and in tolerable

quantity. Her bowels were regular. Her appetite was improved. Her pulse 80, moderately full. She was ordered to ride out every day and, as it was more troublesome to her to walk about towards night, to desist from walking, or standing much, after 7 o'clock in the evening. The hot salt water bath, the Liniment and Pills, composed of Extr. Cort. Peruv. &c., were continued.

I have been induced to relate the above case, the sequel of which must be deferred till some other opportunity, very minutely, as it is an extremely interesting one. It presents the histories of three diseases, occurring in succession to a person of a very delicate habit, viz. *Anasarca gravidarum*, *Peritonitis puerperalis* and *Phlegmatia dolens*. My previous observation had taught me to reject every theory of the last named disease, hitherto offered, as insufficient and unsatisfactory, and had convinced me, that this disease at its commencement is nearly allied to the *Phlegmasiæ*: But, untill I met with this case, I was not sufficiently acquainted with the analogy and connection, subsisting betwixt it and Puerperal Fever.

CASE XIII.

Mrs. HULSE of Henry-street, Manchester,

aged 28, was delivered of her fifth child, on the 8th of October 1797, by Mr. Wood: This, as well as her former labours, was difficult; but till this lying-in she had always recovered very well. No mention is made in my Notes, whether her lower limbs were pained, or swelled during pregnancy, and, as she has removed from Manchester, I have not been able to procure any information, relative to these points.

On the eleventh of October she was attacked with coldness, rigors and other symptoms of pyrexia, and with violent pain in the right side of the abdomen, which began a little above the crista of the os ilium and extended to the spine and to the umbilicus. The left side remained perfectly free from pain. Her uterine discharge was abundant and proceeded with regularity. Her suck was at first in very small quantity, yet she continued to suckle her infant. On the day, that the febrile symptoms took place, Mr. Wood gave her a laxative medicine and a Saline Julep.

Oct. 13th. The symptoms of pyrexia being abated, and the pain in the side of the abdomen much relieved, she was seized with a severe pain in the groin and superior part of the right thigh, which descended to the leg and foot and a tense, colourless, elastic swelling of the whole limb

supervened.—The Saline Julep was continued; a Fomentation and a Liniment, composed of Camphorated Oil and Tinctura Opii were directed to be applied to the affected limb; and a grain of Opium with three grains of Pulvis Antimonialis and five grains of Pil. Aloes cum Myrrha were ordered to be taken at bedtime.

When the pain abated in the right thigh and leg, the other lower extremity was attacked in the same manner: But the left side of the abdomen remained free from pain. The internal medicines were continued and the Liniment was changed for the Linimentum Ammoniae.

Oct. 28th. I visited her this day, for the first time. Both the lower extremities were considerably swelled, hot, tense and exquisitely tender when touched; they were not discoloured nor did they retain the impression of the finger in any part, except in a very slight degree. The pain was abated; but was still very troublesome on attempting to move her limbs. There was not any perceptible inflammation, or enlargement of the lymphatic glands, or vessels. Her bowels were regular. The suck was rather increased in quantity. She experienced some degree of shivering once and not uncommonly twice every day; but these did not recur at any regular periods. Her pulse was small and frequent,

beating more than 100 strokes in a minute: Her heat was greater than natural: Her tongue but slightly furred, yet she complained much of thirst and also of want of sleep. I directed three grains of Pulvis Antimonialis to be taken every six hours; a powder containing one grain and a half of Opium, one grain of Squill and one of Calomel to be taken at bedtime; and a Liniment, composed of Tinct. Opii and Ung. Adipis Suillæ, to be applied very freely to the affected limbs three times a day.

Oct. 29th. The swelling and tenderness of her thighs were somewhat abated; but her legs remained as much swelled and as tender, when touched or moved, as before. She had slept better. Her urine was neither high coloured, nor deficient in quantity. The other symptoms were nearly as on the preceding day.—Her medicines were directed to be continued.

Oct. 30th. There was no material alteration in the limbs. She complained of considerable pain in the right side of the abdomen and of costiveness. I directed a purgative, a blistering plaister to be applied to the pained part of her side, the antimonial powder to be continued and Opium, Calomel and Squill to be taken in the quantity of one grain and a half of each at bedtime.

Oct. 31st. Her legs were less tumefied and the febrile symptoms relieved. She was directed to take a drachm of Spir. Ætheris Nitrosi every four hours in lieu of the Pulvis Antimonialis and to continue her other remedies.

Nov. 1st. Her limbs continued to improve. The dose of Squill was augmented to two grains and the Calomel was omitted.

Nov. 5th. Her health continued improving daily. The swelling of her legs was gradually subsiding. She was ordered to take one scruple of Natron præparatum in an ounce and a half of Tinct. Gentianæ Compos., warmed by the addition of a drachm of Tinct. Cinnam Comp., three times a day. The opium and Squill were discontinued. A flannel roller was applied to each leg.

Nov. 13th. Her general health was very much improved. One of her legs was greatly reduced; the other remained stiff and swelled especially in an evening, and was pitted on pressure; but she could now bear to hang her legs down and to walk a little. Her remedies were ordered to be persisted in.

Nov. 29th. Both her legs were nearly returned to their natural size. She complained of difficulty and pain in making water, on which account she was directed to take a drachm of Spir Æth. Nitrosi, with fifteen drops of Tinct.

Opii every four hours in the day time, and twice the quantity at bedtime, and to keep her bowels open with Oleum Ricini. Her other medicines were discontinued.

Dec. 4th. The dysuria had ceased. Her general health was re-established; there was scarcely any swelling of the legs. The lymphatic glands or vessels never appeared to be sensibly inflamed, or enlarged, after I was called in to this patient, nor were they perceived to be so, before I was called in, by Mr. Wood.

CASE XIV.

SARAH KNIGHT of Salford, aged 25, was delivered of her 3d child, after a natural labour, on Sunday the 1st of July 1798, by Mr. ——. Her right leg and thigh were swelled during her pregnancy and the veins were enlarged; she was lame and suffered so much pain in her hip, that she could not lie on that side in bed. The left lower extremity was not affected.

Her after-pains were slight. The pain in her right hip and the swelling of her right lower extremity soon went off after her delivery. Her suck was in sufficient quantity. The uterine discharge was in small quantity; her urine natural, both in quantity and appearance. On the Sunday following she dismissed her nurse

and undertook the management of her house. She remained very well till Wednesday the 11th of July. On this morning, about 9 o'clock, she was seized with chilliness and rigors, which were succeeded by heat, headach and other febrile symptoms. About 4, p. m. a violent pain seized her right hip, which on the day following extended to her groin, thigh and leg, and was afterwards succeeded by a tense, elastic, lucid, hot, tender, painful swelling of the whole limb.

On the 13th of July, the gentleman being gone from home, who attended her in her labour, I visited her for him till the 19th. She was feverish and had considerable pain in her head. I directed a purgative bolus and mixture for her; a blistering plaister to be applied betwixt the shoulders and Pulv. Ipecac. Comp. Gr. xij to be taken at bed time.

On the 14th, the purgative mixture and sudorific powder were repeated, and a Liniment was directed for the limb. And this plan was continued till the 19th, when the gentleman, whose patient she was, returned and I did not see her afterwards in this illness.

During the time that I visited her, the swelling, tension and tenderness of the limb did not abate. I examined the limb carefully different times, but

did not perceive either inflammation, or enlargement of the lymphatic vessels or glands. The sequel of this case I afterwards learnt from the gentleman.

On the 19th of July, a fomentation was applied to the limb, a neutral salt was given and the Pulv. Ipecac. C. continued at bed time.

On the 21st, leeches were applied to the limb and soon afterwards the pain and swelling began to abate, and some enlarged glands were perceived in the thigh and groin; but no distinct inflammation, or enlargement of the lymphatic vessels could be traced.

On the 25th of July, he directed ten grains of Digitalis and twelve grains of Scilla to be formed into twelve pills, one of which was taken night and morning.

On the 27th, he directed Linimentum Saponis to be applied diligently to the limb. But, notwithstanding these remedies, the limb continued swelled and troublesome for many months.

I likewise learnt from the poor woman the following circumstances: She perceived some round lumps in her thigh and groin, (some of which were about the size of a pea, and the largest about the size of a small hazel nut,) when

the swelling began to subside, but she did not feel any thing like cords in her limb. Her ham became stiff and contracted. In about a fortnight after the attack of this complaint, she was able to sit up and walk with the assistance of crutches; in 2 or 3 weeks more she could walk with a stick, and in about 3 months she laid her stick aside, but the swelling of her limb did not entirely disappear, and the other leg was edematose for some time. In the early part of her next pregnancy the right limb was much affected, but became a good deal better in the last months, and, by being a little more careful, she recovered from this lying-in without experiencing any return of the complaint.

I examined her legs on the 17th and 20th of August, 1800, and found the right leg considerably larger than the left, but it did not appear swelled, nor is it ever edematose in an evening. The cutaneous veins are larger, and some of them varicose about the external angle of the right leg but not in the left leg.

The gentleman, who delivered this patient, informed me, that he has met with different cases, wherein the lymphatics of the extremities were evidently inflamed and enlarged; and he is confident these affections were essentially distinct from the intumescence, observed in the limb

of Sarah Knight, both in the appearances of the swelling, and especially in the duration of it, the limb being soon reduced to the natural size in the former, and very slowly in the latter complaint.

CASE XIV.

ANN MASSEY, of Manchester, a married woman, aged 28, was delivered by Mr. Stuart of her 1st child, after a hard natural labour, on the 26th of June 1800. During the two last months of her pregnancy her legs and feet became so much swelled, that she was obliged to have a larger pair of shoes made. The after-pains were more troublesome than is usual after a first labour. The uterine discharge was natural in appearance and quantity. Her suck was in sufficient quantity at first, and for 4 or 5 days she recovered pretty well.

July 1st. She experienced some coldness and shivering; she afterwards became hotter than natural, had headach and other febrile symptoms, and her breasts were distended, hard and painful. A Saline Mixture was directed for her, which relieved her, and a Liniment for the breasts.

July 5th. She was seized with pain in the lower part of the chest on the left side; her respiration was difficult; her cough slight. The

symptoms of pyrexia were much increased. Ten leeches were ordered to be applied to the pained part, an opening draught was prescribed, and the Saline Mixture was continued.

July 6th. The pain of the side and other symptoms remaining unabated, leeches were again applied and she was better for some time afterwards.

July 11th. The pain was much more severe and situated nearer the spine on the same side, the difficulty of breathing and cough were increased, the pulse was frequent, hard and full.—About ten ounces of blood were taken from the arm; the crassamentum of which had a thick buffy coat upon it and presented a cupped, or concave surface. A blistering plaister was applied to the pained part and the Saline Mixture was continued.

July 12th. The pain and other symptoms were urgent, and she had been rather delirious in the night. About ten ounces of blood were again taken from the arm, which presented nearly the same appearances as before.

July 13th. The pain and difficulty of breathing were a little relieved. A blister was applied to the part affected.

July 14th. The pain and difficulty of breathing had been greater during the night. Eight ounces

of blood were taken away. The blood was now only slightly buffy.

July 15th. The blood-letting was repeated to about eight ounces; and Saline Mixiure with Tinctura Opij Camphorata was directed on account of her cough being more troublesome.—The blood exhibited scarcely any appearance of inflammation.

July 16th. The pain and febrile symptoms were relieved—The mixture was continued.

July 20th. She complained of pain under the false ribs of the left side, and her pulse was small and frequent—A blistering plaister was applied to the affected part.

July 21st. She had occasionally slight shiverings succeeded by heat. Her urine suddenly diminished very much in quantity.

July 22d. The pain in her side went off, and a pain suddenly invaded the whole of the left lower extremity, which was equal in every part. It did not begin in one part and spread over the limb. The limb was rubbed and soon after began to swell. Neither pain nor swelling took place in the lumbar, hypogastric, or inguinal region. The febrile symptoms were aggravated—A fomentation was directed to be applied to the limb.

July 23d. The limb was very painful and

much swelled; the swelling was tense, tender and free from discolouration; it scarcely retained the impression of the finger for any sensible time in the thigh; but was less elastic in the leg. The pain was not more severe on the inside, or back of the limb, than on the forepart and outside. As she had not slept the preceding night, an opiate was directed.

July 24th. The appearance of the limb was little changed.—The opiate was repeated, the fomentation was continued and some camphorated oil was also directed to be applied to the limb.

August 10th. The swelling of the left lower limb had been gradually decreasing, and was nearly gone: But she had for about a fortnight felt a considerable pain in the back part of the calf of her right leg, which she supposes was occasioned by hitting it against the bedstock.—She walked twice over the room this day, with the assistance of a stick, and soon afterwards the pain ascended to her right thigh, groin and hypogastrium on the same side, reaching nearly as high as the navel. The inside of the thigh was more particularly painful. The pain afterwards extended to the leg and the whole limb became swelled, tender, tense, and more or less elastic in different points, but was not discoloured: The calf of the leg was relieved.

August 17th. I saw her for the first time with Mr. Stuart. She was much debilitated; her pulse was very small and frequent, beating 120 strokes in a minute; her countenance pale; her tongue slightly furred; her bowels sufficiently open; her urine in small quantity and high coloured. The left limb was perfectly free from swelling and was neither pained when moved, nor tender to the touch. The right leg and foot were considerably tumefied and pitted on pressure, especially the foot, but were neither discoloured, nor tense or tender. The right thigh was more swelled in proportion than the leg. It was also more tense and very tender when touched, especially along the inside. It did not retain the impression of a finger. Some inequalities were observed in it, and the cutaneous veins about the top of it were much enlarged and blue, imparting a dusky colour to this part. But in neither of the lower limbs was there any appearance of inflammation of the lymphatic vessels, or glands; nor had Mr. Stuart ever discovered any evident affection of the lymphatic system in the earlier periods of the complaint. The pain and tenderness of the right hypogastric region were considerable and extended to the umbilicus. In the direction of the ligamentum rotundum, to the right of the symphysis

pubis, an induration appeared, but it did not present the feel of an indurated lymphatic vessel, or conglobate gland. This part was not discoloured, nor did it appear prominent to the eye. She was applying a Fomentation and Linimentum Ammoniaë to the limb, taking Decoctum Cort. Peruviani with Kali præparatum and Squill, and employing wine and a more nutritious diet. The opiate, given at bed time, had been discontinued for a few days.

Aug. 19th. 3. p. m. She had been carried down into a lower room and was laid upon a sofa. Her pulse was 104 and not quite so small as on the 17th. Her tongue was not furred. Her urine was still in very small quantity. The right limb was less tense and less tender every where, except the inside of the thigh. The indurated part of the hypogastric region was diminished and not nearly so tender as before. The femoral and inguinal glands might be distinctly felt, and were some of them about the size of a horse bean; but they were not nearly so tender as the inside of the thigh, nor could I learn from the patient, that they were enlarged beyond their natural size. She had slept very well the two last nights, without any opiate.— Her countenance and general health seemed rather improved. She was ordered to continue her

remedies, but to take half of a grain of Digitalis twice a day in lieu of the Squill.

Aug. 21st. She was below stairs, laid upon a sofa. Her cough had been very troublesome in the night and prevented her from sleeping. The quantity of her urine was not increased.— Her pulse was about 120 and small. Her limb was considerably less tumefied and much less tender. The tenderness and induration of the hypogastric and inguinal regions were gone. The cutaneous veins of the thigh were much enlarged and appeared very numerous, so that the colour of the thigh was much altered. She complained of stiffness and contraction in the ham. She was directed to continue her former medicines, and to take a mucilaginous mixture with T. Opij Camphorata, when her cough was troublesome.

Aug. 24th. Her appetite was much improved. Her bowels were regular: Her urine somewhat increased in quantity and not so high coloured. Her cough still rather troublesome. Her pulse about 120 and small. Her limb had subsided very much, especially the thigh; which was scarcely at all tumefied, was nearly of the natural colour and not tender to the touch. A little stiffness was felt in the ham. She had been able to hang her legs down, but had not at-

tempted to walk. A drachm of Sp. *Ætheris Nitrosi* and ten drops of Laudanum were ordered to be taken every four hours instead of the mucilaginous mixture, and a flannel roller was directed to be applied to each of her legs, in order to prevent any swelling from hanging them down.

Aug. 26th. She had walked yesterday with the assistance of a stick, and to-day without one. Her leg was scarcely at all swelled and her thigh, though more tumefied than the leg, had nearly returned to the natural state, and was very little discoloured. Her cough was relieved. Her pulse, notwithstanding the use of the *Digitalis*, was still as frequent as 120. Her urine was in small quantity, but not high coloured. Her appetite very keen. The dose of *Digitalis* was directed to be augmented to 3 quarters of a grain, and to be taken three or four times a day.

Aug. 30th. Her general health was somewhat improved; but there was considerable debility. Her pulse remained as frequent as at my last visit. She had walked out of doors, had no pain, or stiffness, and scarcely any swelling in her limb. Her urine was in small quantity and pale. Her bowels were open, from taking a few grains of Calomel. Her cough was nearly

gone. Instead of the medicines she had been using, she was directed to take 8 grains of Extr. Cort. Peruv. with $\frac{3}{4}$ of a grain of Digitalis 3, or 4 times a day, and to take a drachm of Spir. Æth. Nitrosi in wine and water several times in the day as her common drink.

Sept. 2d. There was not the least appearance of swelling in either of the lower limbs, nor had she observed any at bed time for the last 2 days. Her pulse was small and beat 108 strokes in a minute. Her bowels were rather too open. Her urine was in less than the natural quantity. But her general health was improving. She had not taken the medicines, last prescribed, with regularity.

The two next cases were communicated to me by Mr. Barlow of Blackburn, who at the same time informed me, that he considers this disease, as originating in the lymphatics. He thinks, that, in consequence of the pressure of the child's head during labour, a rupture, or inflammation of these vessels is produced; but he acknowledges that the usual time of the appearance of the disease presents a material objection to this hypothesis. And he has not noticed any evident affection of the lymphatics in the instances, that have occurred to him.

CASE XV.

“ Mary Shay of Nova Scotia, near Blackburn, was delivered by Mr. Abbot of this town, of her third child, as she lay upon the bed on her right side, on Wednesday the 28th of May 1800. Her labour was easy. On the Sunday following (June 1st) she was seized with pain in the right knee, and a small degree of swelling in the leg and foot of the same side. This was not preceded by any pain of the head, or back. Her suck was plentiful and the lochial discharge was in the usual quantity and continued its proper time. In this state she remained till June 27th, being able to walk about in the house without much inconvenience; when on a sudden a swelling of the groin, labium pudendi, thigh and leg came on to a great degree. This was the first time I saw her: There was not much fever, or thirst: her pulse beat from 80 to 90 strokes in a minute. A cooling regimen was recommended and she took a mixture of Aq. Ammoniacæ Acetatae with Vin. Antimon. and occasionally a gentle saline purgative. A saturnine lotion was applied to the groin. In this state the swelling remained for the space of seven days; when it began to diminish gradually, and in a day or two after she walked over the room.

On the evening of the same day she was seized with a pain in the left side, which proceeded down to the foot with an enlargement in the groin and a considerable swelling of the whole extremity; on making pressure with the finger there remained for some time an evident depression of the part. The swelling did not remain stationary many days in this limb; but has kept gradually decreasing. I saw the woman to day (July 21st) and she informs me that the swelling, which comes on during the day in this leg, disappears in the morning: The other leg is perfectly free from swelling, and she is now so far recovered as to attend to her usual employment."

CASE XVI.

"A complaint of this kind occurred to me about three years ago in this town, where supuration took place, first in one leg and then in the other, about the part where the *Gastrocnemii* muscles unite under the calves of the legs: It was a considerable time before the parts were healed."

I received the two following histories from Dr. Chew of Blackburn, one of which is a genuine case of *Phlegmatia dolens*: The other

approaches the nearest to it of any he has ever witnessed in the male sex.

CASE XVII.

On the 11th of September 1799, and the 8th day after her delivery, Mrs. B——, aged 28, was attacked with pain in the upper part of the thighs, which shooting down the legs was succeeded on the following day by considerable swelling. The pain in her limbs subsided in proportion to the increase of the swelling. The attendant fever was considered only as symptomatic. The limbs were not affected with external inflammation, nor was there any induration of the lymphatic glands, or vessels. This disease happened after her second labour, which was terminated without much difficulty. The curative means used at the beginning of the complaint were the warm bath and gentle friction. An Embrocation was afterwards applied, together with woollen stockings, which, from the perspiration they occasioned, tended much to reduce the swelling. But it was upwards of two months before the limbs were completely reduced, and for some time afterwards they were liable to a considerable *œdema*.

CASE XVIII.

“ Mr. E. C——, aged 40, of rather a corpulent habit of body, in leaping from the top of a high fence, on the 14th of November 1799, received so severe a fall as to make him suppose, that he had dislocated the left knee joint. He likewise supposed, that it returned to its proper situation by the weight of his own body in making efforts to recover himself. I was immediately sent for and, on examination of the limb, found that it was neither fractured nor dislocated, but very much bruised from the violence of the fall. Leeches, Fomentations, and Saturnine Lotions were applied in succession for its relief. But on the 5th day from the accident he was seized with acute pain in the knee-joint, attended with a high degree of Fever, which was succeeded on the following day by a swelling in the leg, similar to what I have seen in lying in women. The pain in consequence of this swelling was relieved; but there were no marks of external inflammation. The same means as before were continued to the knee joint; a purgative and saline draughts were employed to moderate the fever. Nothing more was done to the leg than gentle friction with oil: But in the course of two days an erysipelatous inflammation supervened

and extended over the whole leg. Instead of Oil a Saturnine Lotion was now kept constantly applied with linen rags, and small doses of Antimonial and Mercurial preparations were given, together with occasional purgatives. By persisting in this treatment the inflammation of the leg was partially reduced, but the complaint extended upwards to the thigh and lower part of the body. It was more than 3 months, before the inflammation was entirely gone; and afterwards a considerable *Oedema* of the limb remained, which was removed by the use of the Flesh-brush, Bark, and Sea-bathing."

I am indebted to Mr. Tomlinson of Manchester for the three cases, next related.

CASE XIX.

"Mrs. C***** of Manchester, was delivered for the 5th time, at the full period of utero-gestation, by me, on Wednesday morning the 18th of April 1798. In the 4th labour she had twins. She had miscarried also four times and once of twins. She was of a sanguineous temperament, but not corpulent.

In the latter part of her last pregnancy, her legs were edematose and very much swelled as high as her knees. Her labour was natural and easy, and she did not suffer very much from after-pains, though these continued more than

3 days. The lochial discharge was natural in quantity. She applied the child to her breasts about 24 hours after her delivery and had a tolerable secretion of milk. She recovered very well till the Sunday night following.

On Monday morning about 7 o'clock, I was called to her and was very much shocked to see such an alteration in her countenance. She informed me, that she had taken two tea spoonfuls of Castor Oil the day before, which had purged her briskly four times in the night and griped her considerably; that she had passed a very restless night and had been very chilly, which she attributed to taking cold in getting up on account of the purging. She was extremely debilitated: Her features were excessively shrunk; her pulse was extremely small and so quick as not to be numbered. She was still very chilly, and her skin had a clammy coldness. Her breasts were flaccid and the lochia had nearly disappeared. She had griping pains, but there was no vomiting, no tension, or tenderness of the abdomen. I directed a saline mixture with ten drops of T. Opii in each dose.

At noon I saw her again. Her pulse was very small and so frequent as not to be numbered; but was certainly above 150 in a minute. She had not been delirious, nor had she much headach. Her skin was rather warmer and moist,

Her tongue was clean. And her restlessness was rather relieved.

At ten in the evening, the symptoms of irritation were still very great; her pulse appeared as frequent as before; but she was not confused in her head. She complained of violent pain in the calf of her right leg, which began early in the afternoon, but was not accompanied by any evident swelling. An opiate draught was directed for her.

On Tuesday morning at 9 o'clock, I visited her again and learnt that she had got some rest. The griping was gone. The heat less than natural. The pulse as before. Her leg was now very much swelled and exhibited the same marks, that are usually observed in the painful intumescence of the lower limbs, incident to lying-in women.

At 6 in the afternoon the pain had extended to the thigh, the other symptoms were nearly as in the morning. Her mixture was ordered to be continued, and she was directed to take a grain of opium at bed time and a second two hours after, if the first did not procure rest.

At 11 in the evening the depression of strength and other unfavourable symptoms continued as before. The whole limb on examination was tense, considerably swelled and very tender to

the touch, but not discoloured. There was no inflammation, or enlargement of the lymphatics in the leg or thigh. The state of the inguinal glands was not particularly inquired into.

When I was called to her on Wednesday morning at 2 o'clock, her extremities were very cold and clammy, she was confused and unable to give any distinct account of herself; and she died in less than an hour.

After her death the leg burst and discharged a liquid slightly tinged with blood, but this was in small quantity and did not reduce the swelling materially. Neither the abdominal cavity, nor the limb were examined by dissection."

CASE XX.

"Mrs. H***, of Manchester, in the 26th year of her age, was delivered by me of her 2d child, on the 1st of December 1795. Her labour was easy. The lochial discharge was regular and did not cease till the 14th day. She did not give suck.

On the 6th day after her delivery she drank a glass of cold ale and was soon after attacked with coldness and rigors, which were very violent and continued for a long time. These were succeeded by a hot fit, pain, tension and tenderness of the abdomen. She had a trouble-

some vomiting and diarrhæa, with confusion and some degree of delirium.

When the symptoms of puerperal fever had continued in an alarming degree for six days, the calf of her right leg became affected with severe pain, and then the pain, swelling and tenderness of the abdomen were relieved and subsided, but the diarrhœa was still very urgent and continued about three months. The pain in the leg was soon followed by a swelling. It ascended to the groin and afterwards passed down the leg to foot, and the whole limb became swelled, tense and tender, but was neither discoloured, nor pitted on pressure.

On the 2d day afterwards, the left lower extremity was swelled in a similar way. The limbs were nearly equally affected and were extremely painful for about a fortnight. It was 3 months before the swelling disappeared and during a great part of this time the lower part of the abdomen was rendered uneasy and painful, whenever she attempted to walk, or suffered her legs to hang down for any length of time.—Although the limbs were carefully examined in every stage of the complaint, neither the lymphatic glands, nor vessels were ever found inflamed, or enlarged.

On account of the violence and long con-

tinuance of the diarrhœa no blood-letting, or purgative was employed. The patient took Pulv. Ipecac. Comp. at bed time, gentle astringents to moderate the diarrhœa, and moderately stimulant and tonic medicines to support her strength."

CASE XXI.

"Mrs. A*****, of Salford, aged 20, was delivered by me, on the 18th Dec. 1795, of her first child. She had an easy natural labour and no after-pains. The lochia were natural both as to quantity and duration. She suckled her infant and had a plentiful secretion of milk. She recovered very well for the first fortnight.

On the 14th day after her delivery she came down stairs, and supposed she had caught cold, as she was on this day seized with coldness and shivering, succeeded by heat and other symptoms of fever. In a few hours afterwards she perceived a violent pain in the calf of her left leg, and the part soon after began to swell. The pain and swelling next day had ascended as high as the groin (but the abdomen was not affected) and had descended to the foot, and the whole limb had assumed the appearances, usually met with in these cases. Her suck was abundant and her urine of the natural quantity.

I directed a Saline Mixture for her, and Lini-
mentum Ammoniaë to be applied to the limb
every 4 hours.

On the 17th day, as the febrile symptoms
still continued and her bowels were not suffi-
ciently open, I directed a powder, containing two
grains of Pulv. Antimonialis and five grains of
Rhubarb, to be taken every four hours, instead
of the Saline Mixture: The external application
was not changed.

On the 21st day after delivery, the febrile
symptoms continuing and the swelling of the
left leg not being at all abated, she was attacked
with pain in the calf of the right leg, which soon
extended over the whole limb and was succeeded
by a very considerable swelling, similar to that
in the other leg.

On the 28th day, the febrile symptoms were
much alleviated, and the extremities, which had
hitherto been equally swelled, tense and tender,
both began to subside at the same time and at the
end of a week from this time no vestige scarcely
of swelling remained. She went to church
within a month from the attack of her left leg
and 6 weeks after her delivery.

She has lain in twice since and has expe-
rienced no return of the complaint."

SECTION SECOND.

Of the Principia, or Remote Causes of Phlegmatia dolens.

These will be considered under the generally received division of them into *predisposing* and *exciting* causes.

§ 1.

THE PREDISPOSING CAUSES, when the disease occurs during the pregnant, or puerperal state, or in a short time afterwards, appear to be :

1st. *The increased irritability and disposition to inflammation, which prevail during pregnancy and in a still higher degree for some time after parturition.* This circumstance is too well known to require any examples, or arguments to be adduced by way of illustration.

2dly. *The over-distended, or relaxed state of the blood-vessels of the inferior part of the trunk and of the lower extremities, produced during the latter months of utero-gestation.* It is known to every person, at all conversant with the diseases of pregnancy, that the circulation of the blood through these parts is very much impeded, and that pain, or uneasiness is frequently produced in them. Moreover, in consequence of the

great pressure of the enlarged uterus upon the iliac veins, it not uncommonly happens, that the blood, by being unnaturally accumulated in the limbs of pregnant women, produces a distended, or even varicose state of the veins, and an increased effusion of water from the exhalants into the cellular membrane of the limbs: And there is reason to believe, that the arteries also are kept constantly fuller than in their natural state, owing to the obstructed return of the venous blood. Hence the coats of the blood-vessels and the cellular texture of the lower extremities and the inferior part of the trunk being over-stretched and weakened during pregnancy, these parts are rendered more subject to inflammatory affections and congestions than the superior part of the trunk and arms.†

† Since the preceding part of this Essay was printed, I have met with an account of an affection of the left arm in a puerperal patient, which, though not minutely described, seems to accord in some measure with *Phlegmatia dolens*. It is given in Case IIIId of Dr. Butter's Account of Puerperal Fevers. I shall adduce as much of the case as relates to the complaint of the arm—Mrs. E. F. was delivered on the 12th of April 1772. On the 14th she was seized with symptoms of pyrexia.—April 26th. The febrile symptoms were moderated, but had not disappeared. She complained of pain in her left arm “which

It may be proper to intimate here, that in general the inferior extremities are much more liable to congestion, inflammation and ulceration than the superior. This circumstance, I conceive, is chiefly imputable to the greater column of blood, which must necessarily be supported by the vessels, distributed to these

gave her the sensation as though it were broken." The arm was ordered to be anointed with Camphorated Oil and to be wrapt in flannel.—April 30th. The febrile symptoms continued and the pain of her arm was still bad. A blister was applied to the pained part of the arm.—May 9th. She had chilliness and shivering with a quick pulse &c., and complained of her arm.—May 10th. She had been very hot and complained of her arm being worse during the febrile exacerbations. She said the heat of the pained arm was then so great, that were she to be equally hot all over, it would be insupportable.—May 14th. She was chilly about one o'clock and became hot afterwards; her pulse was quick; *her left arm was very painful, especially at the shoulder and elbow and the forearm was edematose.*—May 15th. She complained much of her arm, which was fomented and afterwards anointed with Camphorated Oil.—May 16th. Her arm was still painful. She had a slight feverish exacerbation in the afternoon.—May 19th. She seemed to have no complaint but weakness.—Another case will be mentioned hereafter, in which a swelling and severe pain of the elbow-joint supervened to puerperal fever. The patient, whose name was Myrtle, was attended by Dr. Home of Edinburgh.

parts. And who does not perceive, that the additional resistance to the motion of the blood through them, occasioned by the pressure of the gravid uterus, must increase the disposition of the lower limbs to become swelled and inflamed during the latter months of pregnancy, or the 1st and 2d months after parturition, beyond what takes place at other times?

In the 9th case, related by Mr. White, the patient is said to have been subject, in some degree, to the complaints usually termed scorbutic. In 3 or 4 weeks after her delivery she had little ulcers in the mouth, livid blotches in various parts and a pretty large and offensive discharge *per vaginam* and soon afterwards this complaint made its appearance in the right inferior extremity. An acrimonious state of the fluids may therefore be supposed to have some influence in forming the predisposition to this disease.

The reasons, why this complaint does not occur in a greater proportion of puerperal patients, seem to be: 1. that the pressure on the iliac veins is now removed: 2. that the body is placed in a horizontal position after delivery: 3. that the quantity of circulating fluids is diminished by the uterine discharges: and 4. that it is still further lessened by the secretion of milk. By these means a plethoric state of the system is

obviated and the over-distended vessels of the lower extremities have an opportunity to recover their tone in many instances.

Should it be asked, why the complaint does not occur more frequently during pregnancy? The reasons appear to be: 1st. that the distension of the blood-vessels is produced very gradually; and 2dly, that the system is less irritable and less subject to inflammatory and febrile affections in the pregnant than in the puerperal state.

Amongst the EXCITING CAUSES of this disease may be enumerated:

1st. *Contusions, or violent exertions* of the of the lower portions of the abdominal and other muscles inserted in the pelvis or thighs, or of the muscles of the inferior extremities, and contusions of the cellular texture connected with these muscles, during a tedious labour.

2dly. *The application of cold and moisture* ;* which are known to act very powerfully upon every system in changing the natural distribu-

* Puzos has related the case of a lady, who rode out in a coach, six weeks after her delivery, along the bank of a river and, invited by the fineness of the evening, sat down for a considerable time on the green turf. She got no sleep during the night, and next morning was attacked with this complaint in her thigh. Page 354.

tion of the circulating fluids, and consequently, in a system predisposed by parturition, may assist in producing the disease, by occasioning the fluids to be impelled in unusual quantity into the weakened vessels of the lumbar, hypogastric and inguinal regions, and of the inferior extremities.

3dly. *Suppression, or diminution of the lochia, and of the secretion of milk*; which by inducing a plethoric state of the sanguiferous system may occasion an inflammatory diathesis, may favour congestion, and the determination of an unusual quantity of blood to the vessels of the parts just mentioned, and thus contribute to the production of an inflammation of these parts.

4thly. *Food taken in too large quantity and of a too stimulating quality*, especially when the patient does not give suck. This cause both favours the production of plethora, and stimulates the heart and arteries to more frequent and violent action; the effects of which may be expected to be particularly felt in the lumbar, hypogastric, or inguinal regions, and in the lower extremities from the state of their blood-vessels.

5thly. *Standing, or walking too much*, before the arteries and veins of the lower half of the body have recovered sufficiently from the effects of the distention, which existed during the

latter months of pregnancy. This must necessarily occasion too great a determination of blood to these parts, and consequently too great a congestion in them; whence they will be more stimulated than the upper parts of the body, and inflammation will sometimes be excited in them.

SECTION THIRD.

Of the Proximate Cause of Phlegmatia dolens.

From an attentive consideration of the whole of the phænomena, observable in this disease, and of its remote causes and cure, no doubt remains in my mind, that *the PROXIMATE CAUSE consists in an inflammatory affection, producing suddenly a considerable effusion of serum and coagulating lymph from the exhalants into the cellular membrane of the limb.*

Whilst the pyrexia, which precedes, or accompanies this complaint, proves beyond all doubt the existence of general inflammatory action, or diathesis; the excruciating pain, stiffness, tenderness, increased heat and swelling of the parts, more particularly affected, equally evince the presence of topical inflammation.

The SEAT of the inflammation I believe to be in the muscles, cellular membrane, and in-

ferior surface of the cutis. In some cases, perhaps, the inflammation may be communicated from these parts to the large blood-vessels, nerves,† and the lymphatic vessels and glands imbedded in them: For it may be easily conceived, that these parts, though not very susceptible of primary and original inflammation, cannot always escape a participation of the disease; since they derive their arteries and veins from the same sources; and since, when the effused matter is purulent, or unusually acrimonious, they may be considerably irritated by being immersed in it. The lymphatic system is peculiarly liable to suffer from acrimonious fluids, because these in consequence of the absorbing function are applied freely to the irritable internal membrane of the lymphatics.‡

† I suspect that the larger nerves of the limb are sometimes particularly affected in this complaint, on account of the excruciating pain, which not unfrequently attends it, being felt chiefly in the course of them.

‡ I find that Mr. Charles Bell of Edinburgh favours the opinion of the affection of the lymphatics being a secondary one. He says, "It will perhaps appear to an unbiassed mind, that the state of the limb in these cases is more of the nature of a critical swelling than a merely local affection; and that the obstruction and inflammation of the lymphatics of the limb may be more naturally ex-

That the effused fluid differs in consistence, or the proportion of its parts, is proved by punctures and incisions, made in the affected limbs.

In some instances, I apprehend, the fluid when just effused differs in no other respect from the blood than in not containing any red particles : In other instances I am of opinion, that the proportion of coagulating lymph to the serum in the

plained, *upon the idea that this inflammation is sympathetic and communicated from the extremities of the lymphatics to their trunks, than that the disease is primarily in the lymphatics, and that their affection is the cause of the swelling of the limb.*"—System of Dissections. P. iv. page 97.

Kirkland appears also to consider Phlegmatia dolens as a critical swelling. He says, "An œdema of one or both legs, occasioned by *a sudden translation* of matter from the habit, is not uncommon in the 3d or 4th week of lying-in, *where the patient has had a slow fever*, probably in consequence of some morbid alteration in the juices taking place during this period, either from an absorption of acrid milk or other matter."—Treatise on Childbed Fevers, published in 1774, page 150.

Dr. Denman in his description of the Puerperal Fever says, the patient "also feels great pain in the back, hips, and sometimes in one or both legs, which swell and become extremely painful."—Essay on the Puerp. Fever, edition 3d. page 10.

effused fluid is smaller than in the entire circulating mass.† After the fluid has been some time effused and has coagulated, the proportion of serum and coagulum must become different, owing to the absorption, which takes place in the limb. For, as the more liquid parts are likely to be first taken up, if the activity of the absorbents be considerable, the proportion of coagulating lymph may be increased and scarcely a drop of liquid may issue out, when a puncture, or incision is made.

If the absorbents act languidly, a considerable quantity of serum may issue out, when a wound is made in the limb. But in no instance, as far as my reading and observation go, has it been proved that the effused fluid in the early part of the disease consists of serum or serosity only; for, wherever punctures have been made, it has been found impossible to draw off the

† The proportion of coagulating lymph in the blood of different patients must necessarily vary and in some cases, as in Wm. Massey's wife (Case XIV), where much blood has been taken away, or lost, it may with great reason be supposed to have been unusually small. This circumstance may perhaps account for the more speedy disappearance of the tumefaction in this patient than in most others.

whole of the effused matter and reduce the limb to its natural size, as may generally be done in cases of *Anasarca*.

It is not only in different patients, that the proportion of effused coagulating lymph and serum varies, but in the same patient at different periods of the complaint, and in different parts of the same limb at the same period of the complaint: For we find, that in the first week, the swelling is more firm and elastic, either not retaining the impression of the finger at all, or only for a very short time; and that it is not perceptibly diminished by keeping the limb in an horizontal position. But after a week, or more, when the patient begins to hang down her leg, or walk about, we find the limb more pitted by pressure and considerably more swelled at night than in the morning and we also find the lower part of the limb yielding more to pressure than the upper part, which cannot well be accounted for, but by supposing, that there is a greater proportion of serosity in the limb towards the decline of the disease, and that the serosity is more obedient to the laws of gravitation than the coagulating lymph. Some difference, indeed, with respect to the impression made by the finger, and the quantity of fluid that can be drawn off by puncturing the skin, may arise from the

manner, in which the serum has separated from, or remained entangled in the coagulating lymph, after their effusion into the cellular membrane.

Should it be objected to this Theory, that there is no redness of the external surface of the cutis. My answer is, that redness, though a general attendant of inflammation in the human body, does not itself constitute inflammation, nor is it a circumstance essentially necessary to inflammation. The cheek, in blushing for example, presents redness and increase of heat to the eye and touch; but there is no pain, consequently no inflammation. The Cornea, on the other hand, when we cannot trace a single vessel carrying red blood beyond its margin, is frequently affected with inflammation; there is pain, heat &c and small abscesses, or ulcers, or depositions of coagulating lymph, commonly named specks or pearls, take place in it.†

When internal, or deep-seated parts are inflamed, we do not expect to see external redness in every case. The muscles and capsular liga-

† Animals, which have no red blood in any part of their system, are not exempt from inflammation. And the less acute kinds of inflammation, which take place in the membranes of the brain, the pleura, peritonæum, tunica vaginalis testis &c, are not always characterized by

ments are frequently inflamed in acute Rheumatism, before any cutaneous redness, or evident swelling appears. And, not to mention other cases of internal Phlegmasiæ, no external inflammation is perceptible either in Peritonitis *puerperalis*, or *musculosa* of Frank. It may be urged, that Dissection has proved the existence of inflammation in these diseases, but not in Phlegmatia *dolens*. And, indeed, how should it be otherwise, since a limb, affected with the last disease, has never, that I know of, been dissected during the inflammatory stage? But the symptoms of Phlegmatia *dolens*, and its occasional termination in an extensive suppuration of the limb shew, beyond all doubt, that there is at first an inflammatory affection of the sanguiferous system of the limb.

an evident redness, especially when an extravasation of coagulating lymph, or a large effusion of serosity soon happens and moderates them, as in Peritonitis *conjunctiva*, which will be described in the 3d Chapter, and in Apoplexia *hydrocephalica* Culleni and the acute cases of Hydrothorax, Ascites and Hydrocele. Hence it may happen, that when the symptoms of a disease induce the attendant physician to consider it as a Phlegmasia, dissection may be supposed to shew, that he is mistaken as to the nature of the complaint, if redness be admitted as an essential mark, a *sine qua non* of inflammation,

From what is observed in Scalds, Rheumatism, Toothach, and the application of Blisters &c., I am induced to think, not only that inflammation may occupy the surface of a muscle, or the cellular membrane, without affecting the superincumbent skin with redness; but that one surface of the skin may be inflamed and the other shew no evident redness, especially when the inflammation immediately produces a considerable effusion of serum and coagulating lymph. I have seen a blistered part completely covered with a layer of coagulating lymph, where I had reason to believe, that the inflammation was so superficial as neither to affect the cellular membrane, nor even the under surface of the cutis. And it is well known to Anatomists, that one surface of an intestine may be violently inflamed, and the other be apparently unaffected.

The Phlegmasiæ, which occur in the puerperal state, are peculiarly liable to produce, or be accompanied with, large effusions of serum and coagulating lymph, and it is, I conceive, either from the inflammation being less acute, or from the acknowledged power of these effusions in diminishing the violence of inflammation, that Phlegmatia *dolens* is not attended with external redness. It is from the circumstance just pointed out, conjointly with the increased irrita-

bility of the system, that inflammations of the peritonæum, &c, occurring in lying-in women, differ so materially from inflammations of the same parts, which happen to men, or to women at other times.

When an inflammatory affection of the lower extremities takes place in a man, or in a woman, who is neither pregnant, nor lying-in, nor a nurse, we find that it assumes the character of Rheumatismus, Erysipelas, Phlogosis *Phlegmone*, or *Erythema* Culleni, the skin being more evidently affected, because such a copious and sudden effusion of serum and coagulating lymph does not take place. And the more nearly the state of the system of any person approaches to that of a puerperal patient, (who, after having an accumulation of blood, or water, or both for some time in the lower extremities and suffering a considerable loss of blood, is exposed to the action of the various exciting causes above enumerated,) the more nearly is the inflammation, which takes place in the limbs of this person to be expected to resemble *Phlegmatia dolens*; a complaint, which does not perhaps exclusively affect child-bearing women; but which has rarely, if ever, been observed in males, or even in females differently circumstanced. Indeed, the instances are so very few, in which pregnant

women, or women, who have suckled their infants more than two months, have been observed to be afflicted with this complaint, that it may very properly be regarded as a puerperal disease.

I am induced to offer, by way of recapitulation, the following concise account of my notion of the formation, essence &c, of *Phlegmatia dolens*: A patient, predisposed to the disease, being subjected to the action of some, or all of the exciting causes above-mentioned, the balance of the circulation is changed and an unusual determination of blood to the lower part of the trunk, or to one or both of the inferior extremities takes place. Hence the arteries of the part, more particularly affected, are stimulated to increased action; inflammation is produced, and a considerable quantity of serum and coagulating lymph is effused from the exhalants into the cellular membrane, which moderates the inflammation and prevents it from extending to the outer surface of the cutis. The inflammation and swelling are sometimes more limited, but, in general, they (sooner or later in different patients) are diffused over the whole of one limb, and not unfrequently the other lower extremity in a few days becomes affected in a similar way.—Whilst these appearances are observed in the

limb, the whole system exhibits symptoms of considerable pyrexia ; and these febrile symptoms in many instances precede the topical affection. After some time, the symptoms of pyrexia and of topical inflammation subsiding, the general health of the patient begins to improve and the swelling of the limb, instead of being tense, elastic, hot, exquisitely tender and painful when touched or moved, as before, becomes of a natural heat, is stiff and numb rather than painful or tender, yields more easily to the finger, and retains the impression for a considerable time ; in short the intumescence now approaches more and more to Anasarca or Œdema and, for the most part, gradually disappears.*—The disease occasionally has a different termination, as has already been related.

The edematose state of the limb towards the decline of the complaint may be easily accounted for, upon the supposition that the power and action of the absorbents is totally unaffected ; for, after the exhalants have been so far over-

* The limb in some cases remains thickened for years, though it be not edematose as in the case of Sarah Knight ; and it is probable that the effused coagulating lymph in these cases becomes vascular. This circumstance remains to be determined by dissection.

stretched as to pour out serum and coagulating lymph, we may naturally expect, that they will be a considerable time, before they recover their tone and be as much contracted as in their natural state; consequently, till that period arrive, a larger quantity of serosity, especially when the patient is in an erect position, will be effused from them into the cellular membrane, and accumulated in the limb, unless we prevent it by bandaging the limb, or increasing the action of the absorbents. From this view of the disease it appears, that the whole of the phænomena may be satisfactorily accounted for independently of any primary affection of the lymphatic system of the limb. Whilst, on the other hand, they can not be explained independently on an original affection of the sanguiferous system.

SECTION THIRD.

Of the Cure of Phlegmatia dolens.

In this complaint there are three periods, which require different modes of treatment, and which are more, or less distinctly marked, both with respect to the systematic and topical affections, in different cases. Hence in delivering the method of cure it becomes necessary to advert to these three stages.

In the FIRST, which may be stiled the

inflammatory, phlogistic, or sthenic PERIOD, the affection of the system for the most part consists in an inflammatory diathesis, or increased tone, and action of the heart and arteries both with respect to frequency and force; and the affection of the limb consists in a still more violent action of the arteries, distributed to it, producing effusion and an extreme degree of tension of the skin.

For the removal of the systematic affection, the Indications are—

- 1st. To diminish the quantity of the circulating fluids.
- 2dly. To remove, or moderate those irritations, to which the body is almost constantly exposed.
- 3dly. To employ sedatives.
- 4thly. To employ remedies, which determine to the surface.

The 1st indication is fulfilled by Bloodletting, Purgatives and Emetics.—Emetics are useful also as revulsives and by determining to the surface.

The 2d Indication is fulfilled by avoiding exercise of the mental faculties; by keeping the body quiet and constantly in an horizontal position; by using a low, vegetable diet and diluting, acidulated liquids; by keeping the bed-chamber

cool and avoiding too great a quantity of bed-cloths; and by keeping the bowels gently open.

The 3d Indication is satisfied by employing remedies, which directly diminish the action of the heart and arteries, as *Digitalis*, *Acids*, &c.

The 4th Indication is answered by employing Neutral Salts, Antimonial Preparations and *Ipecacuanha*, either singly, or conjointly, and still more completely by combining *Opium* with one, or more of these remedies; and by the use of the Warm Bath.

For moderating the violent action of the arteries of the parts affected, local bloodletting by means of leeches, and blisters or rubefacients are to be employed. For relieving the tension of the skin, emollient Fomentations, Liniments and Ointments are to be applied: Punctures, or incisions, though sometimes employed with this view, are rarely very efficacious, on account of the matter coagulating very soon after its effusion.

§ 2

In the THIRD, which may be named the *antiphlogistic*, or *asthenic* PERIOD, the systematic affection consists in universal debility, in a diminution of the tone and action of the sanguiferous system and in an impoverished state

of the blood—The local affection appears to consist in a relaxation of and increased effusion from the exhalants of the limb and it is not improbable, that the action of the absorbents is sometimes diminished.

For the cure of the affection of the system, the Indications are :—

- 1st. To increase the general strength and the tone and action of the heart and arteries by Bitters, Tonics, Stimulants and Exercise, especially in a carriage.
- 2dly. To improve the state of the blood by a nutritious diet, adapted to the powers of the digestive organs.

For removing the topical affection the Indications are :—

- 1st. To lessen the effusion of fluid from the exhalants ; which may be effected partly by the remedies, used for the cure of the systematic affection, and partly by the application of a tight bandage ; by the cold bath, or cold water, fresh or salt, dashed upon the limb ; and by avoiding too much standing, or walking.
- 2dly. To increase the action of the absorbents of the limb ; which is to be done by the application of heat, blisters, electricity and other stimulants : by friction with the hand,

or a flesh-brush ; by Digitalis, Squill, Mercury, Carbonates of Soda, Potash and Ammoniac, &c.

It is not sufficient, that the absorbents take up what is daily effused by the exhalants in this stage of the complaint ; this will merely render the swelling stationary. It is necessary, that they absorb considerably more, in order that the lymph and serum, accumulated during the inflammatory stage, may be completely removed and the limb return to its natural size.

§ 3.

In the SECOND, or *intermediate* PERIOD the Systematic affection is to be treated by the remedies, pointed out as fulfilling the 2d, 3d, and 4th Indications in the 1st stage : But these are not to be employed so rigorously.—The topical affection is to be remedied by gently stimulating Liniments, Ointments, &c.

§ 4.

In addition to the general plan of treatment, just delivered, I think it necessary to state, that urgent symptoms, as purging, want of sleep, cough, &c. are to be palliated and removed by the same remedies, that are applicable in other diseases ; and to offer a few observations, re-

lative to the selection of remedies to be employed for the relief of patients of different habits and under different circumstances, at the commencement of the complaint, &c.

When the patient is naturally strong and robust, and is not debilitated by suckling, by a large uterine discharge, or preceding disease, and more especially, if the lumbar, hypogastric and inguinal regions be much affected, and the pulse be strong, hard and frequent, general and topical Bloodletting, Emetics, Cathartics, and Blistering are to be employed and a strict antiphlogistic regimen enjoined, lest the inflammation should extend to the cavity of the abdomen, or suppuration should take place in the inferior part of the trunk—two circumstances, that are productive of great danger.

If the disease occur in persons of moderately firm constitutions, and neither affect the lumbar, or hypogastric regions, nor be attended with symptoms of considerable general inflammation, general Bloodletting may be omitted, but Leeches and Blisters may be applied to the part, or parts principally affected, and Emetics and Cathartics, both on account of their evacuant and revulsive powers, may be properly employed.

When the complaint attacks persons either naturally of a delicate constitution, or who have

been previously much debilitated by long confinement, evacuations, &c. ; although the action of the heart and arteries should be somewhat increased in force and frequency, it will be better to avoid Bloodletting altogether. An Emetic may be given, if the state of the stomach require it, and an antiphlogistic regimen, the use of sedatives, diaphoretics, diuretics and laxatives, or gentle cathartics may be properly directed.

Should the systematic affection be marked chiefly by the symptoms of extreme irritation, by great depression of strength, coldness, weak, small and very frequent pulse, as in Mrs. C***** (Case XIX), evacuants are to be avoided ; the warm bath may be employed ; and wine, opium, bark and volatile alkali, in full and frequently repeated doses, are to be administered, till these symptoms be relieved.

By employing proper evacuations at the commencement of the disease, the degree, duration, and extent of the inflammation and tumefaction of the limb, as well as the febrile symptoms, may be much diminished—But, after the swelling has extended over the whole limb and is become considerable, it will rarely, if ever be proper to have recourse to general bloodletting, because little relief of the present symp-

toms will be obtained from it and the third stage, which is in general the most tedious, may be expected to be thereby rendered more obstinate.

Some caution is also necessary in the employment of topical bloodletting after the effusion has taken place: for, in this case, it is to be directed with the view of abating urgent pain in a particular part of the limb rather than with the expectation of curing the disease.—In those cases, where pain and stiffness take place in a part of the limb, before any febrile symptoms appear, and neither spread very soon to other parts, nor are soon followed by swelling, as in the case of Mary Shay and Ann Massey (p. 178 and 187), I should expect that topical bloodletting would frequently arrest the progress of the disease completely.

When Suppuration, Ulceration, or Gangrene take place in this complaint, they are to be treated agreeably to the rules, laid down for the cure of them, when occurring upon other occasions.

CHAPTER THIRD.

OF THE CONNECTION AND ANALOGY SUBSISTING BETWIXT
PHLEGMATIA DOLENS AND SOME OTHER DISEASES.

IT has been already pointed out, that *Phlegmatia dolens* has in many instances supervened and succeeded to *Peritonitis puerperalis*, which shews beyond a doubt the *connection* betwixt these two diseases.

The *analogy* betwixt them seems to have been perceived by those writers, who have favoured the hypothesis of a *METASTASIS LACTEA*, since they have attributed both diseases to this cause: And it appears surprising, that this analogy should have been lost sight of by the different writers, who have rejected the opinion, that these two diseases are occasioned by *milky deposits*.— This analogy may, I think, be clearly evinced by a consideration of the history, causes and cure of *Peritonitis puerperalis*, into which I shall enter in the first section of this chapter.

As *Peritonitis* appears to be the connecting link betwixt the abdominal *Phlegmasiæ* and *Intumescentiæ*, being very nearly allied to the acute cases of *Ascites*; so *Phlegmatia dolens* may be regarded as the disease, which connects the *Phlegmasiæ* and *Exanthemata* with the *Intume-*

scientiæ of Cullen, as far as the limbs are concerned. It is nearly allied in its first stage to Erysipelas and Rheumatismus and in its last stage to Anasarca. Its analogies with these three diseases will be considered in the second section.

SECTION FIRST.

Of its Analogy with Peritonitis puerperalis.

Peritonitis *puerperalis* was well known to Hippocrates. He has related eight cases of the disease in the 1st and 3d books, *De Morbis Popularibus*;* although he has not bestowed any distinctive name upon it. The appellation of Puerperal Fever was first given to this disorder, according to Dr. Hulme,† by Dr. Strother in his *Criticon Februm*, published at London in the year 1718.

The genus *Peritonitis* was first constructed by Vogel, who has given it the following character,

* For these cases, see Book Ist. Sect. III. Patients 4. 5. 11.; Book III. Sect. II. Patients 10, 11, 12; Sect. III. Patients 2, 14.

† Treatise on the Puerperal Fever, page 119—London 1772.

“Peritonæi inflammatio; febris assidua, tumor ventris & dolor punctorius.”

Dr. Cullen has extended the limits of the genus Peritonitis, by incorporating with it two other genera from Vogel, viz. Mesenteritis & Epiploitis, and has thus defined it: “Pyrexia; dolor abdominis, corpore erecto auctus; absque propriis aliarum phlegmasiarum abdominalium signis,.” He has observed respecting this genus, that, if characters could be given, by which they might be distinguished from each other, the following might be enumerated as distinct species.

1. P. (*propria*) in peritonæo strictius dicto, sive in peritonæo abdomen intus succingente.
2. P. (*omentalis*) in peritonæo per omentum extenso.
3. P. (*mesenterica*) in peritonæo per mesenterium extenso.”*

It is much to be regretted, that his masterly hand was no further employed in the delineation of Peritonitis.

The definition of this genus, given by Frank, is nearly the same as the above, “Est igitur PERITONITIS inflammatio peritonæi, quo loco viscera non ambit, cum dolore, sub attactu, vel

* Synops. Nosol. Meth. Tom. II. p. 108—110.

motu corporis inflammatum partem extendente, comprimente, adaucto: ut plurimum cum febre, sine propriis aliarum phlegmasiarum abdominalium signis."†—By this author two principal divisions are made, viz.

1. *P. muscularis*, comprehending those species, in which the abdominal, psoadic and iliac muscles are affected with inflammation—When the psoadic and iliac muscles are affected, he distinguishes this species, or variety by the name of *Psoitis*.

2. *P. membranosa*, in which the cavity of the abdomen is affected and not the muscles—When the peritonæum, investing the back and loins, is affected, he names the species, or variety *P. dorsalis lumbalis*: When it seizes the omentum, the species, or variety is named *P. Epiploitis*. When the peritonæum alone is affected, or when it is affected in conjunction with the mesentery and omentum, he names this species (which he observes is commonly stiled *Febris puerperalis*) *Peritonitis puerperalis*, or *P. membranosa purulenta*.*

† De curandis hominum morbis Epitome. § 213.

* Frank assigns the following reasons for bestowing these names upon puerperal fever—"licet utrumque sexum eidem morbi speciei subjectum agnoscamus; ob

The analogies, subsisting between Peritonitis *puerperalis* and Phlegmatia *dolens*, will be concisely pointed out, according to the following order, viz. as they relate to, 1. Their histories. 2. Their predisposing causes. 3. Their exciting causes. 4. Their proximate causes. 5. Their methods of cure.

§ 1.

Peritonitis *puerperalis* is frequently observed as a sporadic disease. It has also been often observed as a prevailing Epidemic, either confined to the patients of one, or more hospitals, or affecting at the same time a considerable number of patients in private practice : It occurs at all seasons of the year : It attacks women of all ages after delivery, and those who have had many children as well as those, who have had only one or two. It commences most commonly on the 2d, or 3d day after delivery ; but has been known to take place earlier, or even before delivery, and also at as late a period as the 14th day. It sometimes

uberiorem tamen apud puerperas proventum, Peritonitidem *puerperalem* dicimus.”—“ sed transudationibus coagulabilis lymphæ ac seri in cavum abdominis favet magis : ob quem affectum *purulenta* a nobis salutatur.” Ibid. § 214.

attacks women, who have suffered an abortion, or who have been prematurely delivered, as well as those, who have gone to the full time of uterogestation.

In some instances the affection of the abdomen precedes, in others it follows the symptoms of pyrexia. The disease sometimes comes on insidiously: But in general the patient is first attacked with coldness and shivering, which differ considerably both in degree and duration in different persons. These are succeeded by heat and dryness of the skin; by increased frequency and quickness of the pulse (which is sometimes full and hard, at other times hard and contracted, or small and weak); by restlessness, anxiety, flushing of the face; thirst, white furred tongue; headach, more especially pain in the forehead, pains of the limbs, resembling rheumatic affection;† nausea and sickness. Soon after these

* I have seen two cases of puerperal fever, which commenced with severe pains in the arms and both terminated fatally. Dr. Gordon also observes, that many patients complained of a severe pain in the lower extremities, which was mistaken for Rheumatism, in the Epidemic, described by him as it occurred at Aberdeen. And Dr. Home has noticed, that Reid and Myrtle, whose cases he has related in his Clinical Experiments, &c., complained of pain in the lower extremities. Myrtle,

symptoms have made their appearance pain is felt in the hypogastric, or iliac regions for the most part at first, and sometimes in the epigastric, or inguinal regions, or about the pubes, which sooner or later extends over the whole, or a great part of the abdomen. This pain generally is a kind of soreness, different from the pain of phlegmonous, or rheumatic inflammation, is very distressing and is much increased by pressure with the hand, or by the contractions of the abdominal muscles, which necessarily take place in elevating the trunk, or changing its position. The abdomen becomes tumefied, tense and exquisitely tender. A vomiting of bilious, acrid matters, or a purging, or both take place, and sometimes a troublesome tenesmus occurs. The uterine discharge in some cases is not interrupted, but in general is either totally suppressed, or diminished and becomes very thin, acrimonious and offensive. The secretion of milk for the

who recovered, had a swelling and severe pain in the left elbow joint, but he has omitted giving the characteristic marks of the swelling. Reid, who died on the 6th day, had small red tumours under the skin on many parts of her body, which were moveable and painful, and, on the last day, the back of her right hand was swelled and red. "These," the Dr. says, "perhaps were attempts to some critical deposition." Page 76.

most part is suspended, or suppressed, and the breasts are unusually soft and flaccid. Blood taken from the arm at this period is found to be sizy in some cases and not in others.

If the disease be not soon checked, great debility takes place. The pulse becomes more frequent, smaller and weaker. The skin is hot and dry, or, if the patient be kept in a hot room and be supplied with warm cordials, a profuse sweat is excited, which not unfrequently occasions a miliary eruption; and sometimes partial, clammy sweats take place about the head and breast. The tongue has a whitish, or brownish fur upon it and is more dry. The countenance is much changed and the cheeks are frequently flushed. Some confusion of thought takes place in some cases and sometimes, the moment the patient closes her eyes, she is haunted by frightful dreams. The abdomen grows more tumefied and tender. The vomiting and purging increase. The matter discharged upwards is greenish, brown, or blackish, and often flaky. The stools are brown, or black and excessively fetid. The respiration is laborious.†

† The difficulty of breathing arises generally from the tumefaction of the abdomen, which prevents the free descent of the diaphragm, but is sometimes owing to the

As the disease proceeds, the pulse becomes so frequent and small, as scarcely to be numbered, and is not uncommonly irregular. The tumefaction of the abdomen continues for the most part, but the pain and tenderness are diminished and sometimes cease entirely. The respiration is more hurried. Syncope, stupor, delirium, singultus, or subsultus tendinum occur. The fæces and urine are discharged involuntarily. The contents of the stomach are sometimes brought up with little, or no effort of vomiting. A clammy coldness of the extremities and face is observed and death sooner or later puts a period to the sufferings of the patient.

When the disease has a fatal termination, its progress is sometimes so rapid as to destroy the patient in 24 hours; in other instances this does not happen till the 3d week, or even a later period; in many cases the patient is carried off from the 5th to the 11th day of the disease; but the greater number of patients dies on or about the 5th day.*

inflammation's being extended to the diaphragm, or even to the thoracic cavity and viscera.

* Of the 28 patients, who died of puerperal fever under the care of Dr Gordon, " 2 died in the space of 24 hours after the attack; one in 36 hours; 3 on the 3d day

When the disorder terminates fortunately, an abatement is generally perceived on, or before the 5th day. The pulse becomes less frequent; the heat of the body is diminished and the skin becomes universally moister. The purging is moderate and evidently alleviates the complaint. The vomiting ceases. The tumefaction, pain and tenderness of the abdomen gradually subside and disappear. The uterine discharge, if diminished, becomes more copious, and if suppressed, sometimes returns. The breasts become harder and fuller.

The pyrexia is in some cases evidently of an inflammatory nature throughout its whole course. Upon other occasions the inflammatory symptoms are obscure, or the pyrexia assumes a typhoid appearance from the first. And in many instances, where the disease is protracted beyond 4 or 5 days, the pyrexia exhibits the symptoms of a Synochus; the marks of inflammatory diathesis, or symptoms of general inflammation, which were obvious at the commencement of the disease, disappearing in the course of it and being succeeded by symptoms of great debility, irritation and putrescency at the close.

of the disease; 15 on the 5th day; 3 on the 7th; 3 on the 11th; and one on the 23d." Page 274.

As there is frequently an accumulation of bile and other acrimonious matters in the primæ viæ, the systematic affection is modified by this, and hence Puerperal Fever has been considered by foreign writers as a *gastric, saburral, or nervoso-gastric fever*—"Jam vero si omnia, quæ de *febre puerperali* Neotericorum fideliter exposuimus, æqua lance expendantur, si ad bilem crassam & corruptam, quam in cysti fellea sectione demortuarum reperit LEAKIUS; si ad vomitus biliosos, virides, porraceos, ad nauseas, ad tormina, ad ventris inflationem, ad alvi fluxum ad tenesnum, quibus puerperas hoc in morbo affligi tradunt, animus advertatur; & simul consideremus, quibus auxiliis potissimum sublevari, & cum sanitate in gratiam redire soleant, videlicet emeticis, eccoproticis, bilem emendantibus, acescentibus, & antiputridis cujusque generis: profecto concludendum erit, febrem hanc non novum, nec distinctum morbi genus esse, quod seorsum pertractari debeat, sed speciem quamdam *febris gastricæ acutæ* habendam esse plus minus malignam, putridam et complicatam; eandemque curationem exposcere, quam reliquæ gastricæ febres, in primis malignæ et putridæ; de quibus fusius (§ 373.) actum est. Rem ita se habere, nuperrimæ Cl. DOULCETI observationes, de quarum veritate nemo dubitaverit, invictum

nobis exhibent documentum." Burserii Inst. Med. Pract. Vol. I. § 498.—"Ita et variam pro socia assumere febrim potest, atque rarius quidem, et non fere nisi sub initio, cum *inflammatoria*—ut plurimum cum *gastrica*, &, accedente contagio, aut epidemicæ constitutionis influxu, cum *nervosa*, incedere consuevit; sic ut raro tam pura, vel simplex sit hujus morbi natura; semperque *nervosi* aliquid adhærens, faciat ut nec antiphlogistica sola methodus, nec evacuatoria protinus sufficiat."—Frankii Epitomes Lib. II. page 205.

The peritoneal inflammation is terminated in different ways: 1st. By *resolution*, before any material effusion has taken place: 2dly. By *gangrene*. 3dly. By *small distinct suppurations*, or specks of matter,† about the size of a common pea, in the uterus and other viscera. 4thly.

† Dr. Fordyce, in his very excellent Lectures on the Practice of Physic, observes, that this suppuration is very different in its effects from the suppuration, which takes place in other inflammations: For the pain goes off suddenly and even the soreness sometimes, but the tumefaction continues; the pulse becomes more frequent; the strength is more depressed and the patient is cut off in from six to twenty-four hours afterwards; so that from the symptoms it might be supposed, that gangrene had taken place in these cases.

By a *considerable effusion* of coagulating lymph and serum, or of a purulent matter into the cavity of the abdomen.* 5thly. By *metaptosis*; an erysipelatous, or phlegmonous inflammation of the extremities, or abdomen, &c, or *Phlegmatia dolens* taking place, when the original disease recedes.†

On comparing the essential, or characteristic symptoms of *Peritonitis puerperalis*, which are pain, tumefaction, tension, elasticity, and tenderness of the abdomen, without discolouration of the skin, and preceded or accompanied by pyrexia, with the essential marks of *Phlegmatia dolens*, we find a close analogy between these two complaints. Other symptoms undoubtedly occur in *Peritonitis puerperalis*, but these are not essen-

* The effused matter is either absorbed, or discharged from the cavity of the abdomen, in consequence of an ulceration of the parietes abdominis, or intestines, or it destroys by irritating the viscera and inducing hectic fever.

† METAPTOSIS is the generic term used to express the transmutation of one disease into another. The specific terms are: 1st. *Diadoche*, or *Diadexis*, which denotes a fortunate change, the morbid matter being supposed to be thrown upon an external, or less noble part. 2dly. *Metastasis*, which is used to denote the contrary, or a dangerous conversion.

tial ones. They depend upon the inflammation, or irritation being communicated to one, or more of the abdominal, or pelvic viscera, and disturbing their functions: whence arises the great diversity observed in the cases of puerperal fever.

§ 2.

The PREDISPOSITION to Peritonitis *puerperalis* is produced by pregnancy and parturition.—It has already been noticed in page 198, that the system during the pregnant and puerperal states is more irritable and more susceptible of inflammation than at other times; and an attempt has been made to explain, why the lower extremities are more subject to inflammation of a peculiar kind in these situations than the arms. I shall now endeavour to point out the reasons, why the abdominal cavity is particularly liable to be inflamed after parturition, and why this inflammation takes place for the most part at an earlier period than that of the lower limbs.

During pregnancy there is an increased determination of blood to the uterus, for the support and growth of the foetus; whence the bloodvessels of this viscus acquire an extraordinary increase of size. The womb itself, being also extremely enlarged in the latter months, rises very high into

the cavity of the abdomen, overstretches its ligaments and the abdominal parietes, and by its pressure disturbs the functions of the abdominal and not unfrequently of the thoracic viscera. It likewise impedes the circulation of blood through the vessels of the peritonæum and thence occasions an unnatural distension and weakness of their coats.

The uterus, as soon as it is unloaded by the act of parturition, contracts rapidly and considerably in all its dimensions, and the diameters of its bloodvessels are diminished in an equal proportion. The determination of blood to the uterus continuing, the whole of it cannot circulate through the contracted vessels; and a considerable quantity of it is discharged from that part of the uterus, to which the placenta was attached; by which means the general mass of circulating fluids is diminished and a plethoric state of the uterine and abdominal vessels is particularly guarded against for a longer, or shorter time after delivery. A determination of the circulating fluids to the breasts naturally occurs soon after the birth of the child, and, the secretion and evacuation of milk taking place, a plethoric state of the sanguiferous system is obviated and the cavity of the abdomen is further secured against a congestion of blood and inflammatory affections.

In consequence of the two evacuations just mentioned and the determination to the skin, which takes place soon after delivery, the proportion of inflammatory affections of the abdominal cavity is rendered extremely small, especially when we consider the violent concussions and contusions, to which the abdominal and pelvic viscera are subjected, and the rapidity and violence of the circulation of the blood, during parturition.

As the accumulation of blood in the inferior extremities is much diminished, or entirely ceases soon after delivery, partly by the removal of the pressure of the uterus upon the iliac veins and partly by the horizontal position of the body, the reason is obvious, why these parts are rarely subject to inflammation in the early period of childbed; and, from what is stated above, we see the reason why, if an inflammatory diathesis be produced early by the exciting causes to be hereafter mentioned, this is particularly injurious either to the abdomen, or mammæ.

Another circumstance, which appears to me to predispose lying-in women to Peritonitis *puerperalis*, in conjunction with the condition just explained, is an acrimonious state of the fluids and especially the presence of bile in the blood of those women, who are jaundiced. Pregnant

women are not uncommonly affected with jaundice at the time of their delivery and in a great many instances no very bad effects are observed to arise from it, the complaint soon disappearing and the patient recovering very expeditiously and perfectly. This, however, is not always the case. In three cases of puerperal fever, which have fallen under my care, the blood of the patients was very much loaded with bile. Two of them, who had been delivered by Midwives, were in a comatose state, when I was first called in, and died soon after. The third laboured prematurely, about the beginning of the 8th month, and was attended by myself. She was very much indisposed, when she was delivered, and was delirious and comatose on the following day. The affection of the abdomen appeared early and was very considerable. By the employment of purgatives and antimonials, with the application of leeches, fomentations, and a blister plaister to the abdomen, the patient recovered.

By comparing what is alleged, relative to the predisposition to Peritonitis *puerperalis*, with what has been stated concerning the predisposing causes of Phlegmatia *dolens*, it will be found, that the two complaints agree pretty exactly in this circumstance.

§ 3.

Amongst the EXCITING CAUSES are enumerated: 1. A diminution, or suppression of the uterine discharges, occurring too soon after delivery. 2. A defective, or repressed secretion of milk. 3. The application of cold and moisture. 4. Contusions, or wounds of the abdomen, and a narrow inelastic bandage, applied tightly round the abdomen. 5. A stimulant, heating regimen. 6. Putrid lochia, or secundines. 7. Bilious, or acrimonious matters and fæces collected in the primæ viæ. 8. Fear, anxiety and distress. 9. Contaminated atmosphere, epidemic constitution of the air, and contagion.†

Of these exciting causes, which may act singly, or in conjunction, several have been

† “Supra ostensum est eas” (puerperas) “in febrem incidere ab uteri inflammatione, modo a lochiis suppressis, modo a lactis aberratione & metastasi, modo a bilioso, aut pravo humorum apparatu, modo ab aere putridis miasmatis infecto, modo a perspiratione cohibita, modo a retentis corruptisque in utero secundinis, modo a cacoc-hylia gastrica, modo a pluribus hujus modi caussis simul junctis; ac proinde varia, multipliciaque febrium genera esse, quibus illæ persæpe corripiuntur.”—Burserii Inst. Med. Pract. Vol. I. Page 581. § 499.

mentioned above, as exciting causes of *Phlegmatia dolens*. Some of them may act also as predisposing causes, as impure air, depressing passions, &c., for it is extremely difficult to separate the remote causes of diseases into *predisposing* and *exciting*, or *occasional* causes with accuracy. And some of them perhaps act rather in modifying the nature of the pyrexia than in producing inflammation of the peritonæum.

It is not my intention to enter particularly into the consideration of the manner, in which each of the causes, just enumerated, acts in producing puerperal fever: But, since writers are not agreed, whether this complaint be infectious, or not, and since those, who consider it as infectious, are not agreed whether the infection be a *specific contagion*, or *the same, which produces Typhus*, I shall digress into the examination of the arguments, adduced in favour of its being infectious and of its arising from a specific, or from typhous contagion.

If the observations, which I have to make, be of no great moment in themselves, they may prove indirectly useful by exciting the attention of practitioners and leading to the further discussion of a subject, not of mere curiosity but of great practical importance, as the prevention of a very fatal disease is intimately connected

with and extensively involved in the decision of it.

Dr. Walsh has asserted, "that Puerperal Fever is merely an unusual form of a very common disease, and is, in reality, no other than the common infectious fever, complicated with a more, or less extensive inflammation of the peritonæum." In proof of this opinion he adduces the following arguments: 1. "That the same contagion, or infection produces a similar disease." 2. "That this disorder is to a certainty in itself infectious and arises under circumstances and in situations, the most favourable to the production of the ordinary contagion," as in crowded hospitals and amongst the lower and uncleanly sorts of women. 3. "That in the Royal Infirmary of Edinburgh the similarity of the cause was shewn by its effects, as two of the attendants on the puerperal women were seized with the common *Synochus*." 4. "That this is not a solitary instance as in other places" (which, however, he has not specified) "the same thing has likewise been observed." 5. "That the converse of the proposition likewise holds; so that the two first women delivered in the Lying-in Ward, notwithstanding all possible care, taken in cleansing and preparing it, six weeks previous to the reception of any, were

attacked with Puerperal Fever to a very violent degree from the common infection being introduced in the clothes of one of the patients." 6. "That the two diseases rage as *epidemics* very generally the same year."†

Dr. Gordon is a strong advocate for the infectious nature of Puerperal Fever. This disease, he informs us, prevailed as an *epidemic* at Aberdeen from December 1789 till March 1792. It occurred principally amongst the lower classes; but women of a higher rank were not exempted, "when they happened to be delivered by a midwife, or physician, who had previously attended any patients labouring under the disease."* He adds, "by observation, I plainly perceived the channel, by which it was propagated; and I arrived at that certainty in the matter, that I could venture to foretel what women would be affected with the disease, upon hearing by what midwife they were to be delivered, or by what nurse they were to be attended during their lying-in: and almost in every instance my prediction was verified." P. 3. He says he had sufficient evi-

† Pract. Observations on the Puerperal Fever. Pages 13—15.

* Treatise on the Epidemic Puerp. Fever of Aberdeen. Page 3.

dence, that the disease was not owing to a noxious constitution of the atmosphere, "for, if it had been owing to that cause, it would have seized women in a more promiscuous and indiscriminate manner. *But this disease seized such women only, as were visited, or delivered by a practitioner, or taken care of by a nurse, who had previously attended patients affected with the disease.*" P. 63. Amongst other circumstances he states, that the Puerperal Fever prevailed in the new town and not in the old town of Aberdeen, which is only a mile distant from the former, and that it also prevailed in different villages in the parish of the old town of Aberdeen, which he accounts for by saying, "that the Midwife, Mrs. Jeffries, who had all the practice of the old town, was so very fortunate as not to fall in with the infection; otherwise the women, whom she delivered, would have shared the fate of others." P. 66.

This author asserts, that "the cause of the disease was a *specific contagion, or infection, and that the infection was as readily communicated as that of the small-pox, or measles, and operated more speedily than any other infection, with which he is acquainted.*" P. 62. He says he has not been able to make any discovery, with respect to the physical qualities of the infection; but "*had evident proofs, that every person, who had been with*

a patient in the puerperal fever, became charged with an atmosphere of infection, which was communicated to every pregnant† woman, who happened to come within its sphere." P. 63.

He combats the opinion of Dr. Walsh, relative to the identity of the contagions of Typhus and Puerperal Fever, by saying, 1. That "the circumstance, which excites the infection of the Puerperal Fever, seems to prevent Typhus.—The former always takes place after and not before delivery; but the latter (if pregnant women are exposed to the infection) takes place before and very seldom after delivery." Pages 67, 68. 2. That he has attended an immense number of pregnant women affected with fevers, occasioned by infection, "and the result has been abortion in the early part and labour in the latter part of pregnancy. Which events, so far from proving fatal, for the most part brought the disease to an immediate termination, the flooding of abortion and the lochia of childbed, proving critical." P. 68. 3. That the diseases, occasioned by these two contagions, have very different symptoms; since "the principal symptom of the Puerperal Fever is pain in the abdomen, whereas the

† It is evident that *pregnant* is here written by mistake for *lying-in*.

principal symptom of Typhus is pain in the head without any complaint in the abdomen." P, 68.† 4. That Erysipelas and Puerperal Fever, if not precisely of the same specific nature, are connected and analogous; "for these two epidemics began in Aberdeen at the same time and afterwards kept pace together; they both arrived at their *acme* together and they both ceased at the same time." P. 56. At this time, according to Dr. Gordon, almost every person, admitted into the hospital at Aberdeen with a wound, was soon after his admission seized with Erysipelas in the vicinity of the wound, and the same consequence followed the operations of surgery. The cause, he says, is obvious; "for the infectious matter, which produces Erysipelas, was at that time readily absorbed by the lymphatics, which were then open to receive it." P. 57. And he says the analogy of the Puerperal Fever with Erysipelas will explain, why women

† He also relates the 16th Case from Dr. Kirkland's Treatise on Childbed Fevers to shew, that the patient died, without pain, soreness, or swelling of the abdomen, of Typhus on the 12th day after her delivery, in consequence of being put into a bed, out of which her sister was removed, who had been long ill of a slow nervous fever.

escape the former disease till after delivery ; “ for till that time there is no inlet open to receive the infectious matter, which produces the disease. But, after delivery, the matter is readily and copiously admitted by the numerous patulous orifices, which are open to imbibe it, by the separation of the placenta from the uterus.”—Page 57.

That Peritonitis *puerperalis* and Erysipelas have prevailed as Epidemics, both generally and in hospitals, is an established fact, and the facts, adduced by Dr. Gordon, appear to be strongly in favour of the contagious nature of Puerperal Fever; whilst the observations of Drs. Home, Gordon, Wells, &c, appear to be equally in favour of the infectious nature of Erysipelas. But it does not appear to me to be fully proved, that either of these diseases is produced by a *Contagion*.*

As far as my observation goes, Peritonitis *puerperalis* is not infectious. I have never seen a case, wherein I had reason to suppose, that the effluvia, arising from the patient, produced puer-

* By *Contagions* are understood effluvia, arising directly, or indirectly, from the human body under particular diseases and capable of exciting the same diseases in other persons, to whom they are applied.

peral fever, or typhus, or any other disease in another person either directly, or indirectly. The disease in question frequently arises, where there is not the least foundation for a suspicion, that infection has been applied. And I have in more than one instance delivered a patient in an advanced stage of Typhus, without any symptoms supervening, that indicated an inflammatory affection of the peritonæum.

My own observation, as far as it goes, is also contradictory of the opinion, that Erysipelas is infectious. In private practice I have never known two persons in one family attacked by it at, or near the same time; nor have I ever witnessed the communication of the disease from one person to any other. In St. Thomas's Hospital, whilst I was a Physicians' pupil there, two patients were affected with Erysipelas in the face in different Wards and yet the disease was not communicated to any other.

These cases I shall relate,

CASE XXI.

JANE PARSONS, aged 20, was in Mary's Ward and a patient of the late Dr. Crawford. When she was admitted, on the 7th of October, 1784, she had been ill of Typhus about a week, which was accompanied by considerable purging.

On the 24th I learnt, that she had been very delirious in the night and an erysipelatous inflammation was making its appearance upon her face. The symptoms of Typhus had not disappeared. On the 27th the inflammation was very considerable, but without vesications; she was comatose; her pulse was 148, very small and weak.—On the 28th she died.—After the attack of Erysipelas, she took the Bolus Sedativus (which contains half a drachm of Mithridate, ten grains of Castor and four drops of T. Thebaica) twice a day, and Decoct. Cort. Peruv \mathfrak{z} ij cum Pulv. Cort. Peruv. \mathfrak{z} fs every six hours; and a blistering plaister was applied betwixt her shoulders.

CASE XXII.

ELIZABETH MOOR, aged 36, in Elizabeth's Ward, was a patient of Dr. Fordyce. She came into the Hospital, on account of extensive ulcers in her legs, on the 23d of September, 1784.—She had born 6 children, the last about five years since. She had suffered from repeated attacks of the ague during the last two years. Her catamenia had been suppressed about eleven months, and she had a cough and dyspnœa—On Sunday the 12th of December, when her ulcers had been healed near a month, she was attacked

at noon with a well marked paroxysm of fever. The cold stage lasted about half an hour and was preceded by vomiting, yawning, &c. The hot fit continued nearly two hours. The sweating was profuse. Soon after she began to sweat, she perceived a pain betwixt her eye-brows. She was delirious in the night—The next morning her eye-lids were inflamed and so much swelled as to prevent her from opening them. In the course of the day the inflammation and swelling extended to the right eye-lids. Mr. Whitfield prescribed *Cort. Peruv. ʒj 4ta quaq. hora ex Julepo Menthæ sumendam*—On December 14th her eye-lids and forehead were much inflamed and swelled, and the inflammation was extending down her cheeks; but there were no vesications. She complained of great pain in her head and of heat and uneasiness, as far as the inflammation extended; but had not been delirious. Her cough and difficulty of breathing continued. Her pulse was small and weak and beat 104 strokes in a minute. Her heat, taken under the tongue by a very sensible Thermometer, was $99\frac{1}{2}^{\circ}$ of Fahrenheit. Dr. Fordyce prescribed *Pulv. Cort. Peruv. ʒj 2da quaque hora sumendam & Pilulæ Pacificæ Gr. ʒs 6ta. quaq. hora sumendam*. (The Pilula Pacifica consists of equal parts of Opium Purificatum and Conserva Cynosbati). Dec. 15th.

She had slept tolerably. The pain in her head and the inflammation of the face continued. Her eyes were swelled up in the morning, but the left was somewhat open at noon. She had had 3 loose stools in the night. Her tongue was clean and moist, and she was not thirsty. Her skin was moist. Her pulse was 112, very small and weak, and not quite regular. Her heat 99°—Dec. 16th. She was asleep, when I visited her. The inflammation was going off.—Dec. 17th. She had slept very well, and was rather drowsy: She had had 3 stools this morning and one in the night. Her skin and tongue nearly natural; the inflammation and swelling of the face were almost gone off. Her pulse 120, stronger.—Dec. 18th. The inflammation had entirely disappeared and the cuticle had begun to peel off. Dec. 21st. She died from an increase of the pulmonary affection, which took place before the present illness. Dr. Fordyce prognosticated her death, when he first saw her after the attack of Erysipelas.

Dr. Garthshore, in his very interesting account of the species of Erysipelas, affecting new born infants, says: "Our attempts to investigate the cause of this disease have been hitherto unsuccessful. Though not apparently infectious, it has been more frequent at certain seasons than

others; but I never remember to have seen more than three, or four instances of it in the same season. We have seldom had two in the house" (the British Lying-in Hospital) "at the same time, and never two together in the same ward. In a case of twins, suckled by the same healthy mother and both thriving equally well for the first fortnight, I have seen one fall a victim to this disease, while the other escaped."†

I have seen two instances of this disease in private practice, where the inflammation extended over the whole body of the infants, and several, where it has been confined to the abdomen; but I never knew it to be communicated to any other child and am therefore led to believe, that it is not infectious.

When a disease prevails as an epidemic, or affects several persons in one hospital, or in one, or more families, it is often very difficult to determine, whether it be contagious, or not.

I have seen Ophthalmia, in more than one instance, affecting several persons in one family

† Medical Communications, Vol. 2d, Page 40. This disease is described by Dr. Underwood under the name of *Erysipelas infantilis* in his Treatise on the Diseases of Children. Vol. I. P. 67. Edition 2d. *

at the same time, or in quick succession.—I have known *Cynanche parotidea*, when the disease was not prevailing as a general epidemic, affect seven of the children and a nurse in two families at Blackburn, that were nearly related and, from being neighbours, had much intercourse with each other, whilst the other children and servants, &c. escaped it, though one of the children took particular pains to have it. And Gooch† has informed us, that this disease prevailed as an Epidemic about ten miles south of Norwich, where he then resided, from the beginning of spring 1740 till the autumn of 1741: But he has not intimated, that he believed the complaint to be infectious.

I have also known *Cynanche trachealis* attack five children, within about a week, in two contiguous houses, that were at a distance from any town, or village. And Mr. Ramsay of Chesham in Buckinghamshire, in his Account of the Croup, published in the 2d Volume of the *Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge*, says, “The Croup has been sometimes thought infectious, but I have

† See Gooch's Works, Vol. II. P. 72. and Vol. III. P. 13. Edition 1792.

not been able to form a decided opinion upon this point. Some circumstances render it probable, as two and sometimes three children in the same family have been seized with it. But, on the other hand, I have at different times seen two or three in a family escape, while one or two of the others have died of it, without any pains being taken to keep those, who were in health, from the sick."—"It is rather remarkable that, although there were between twenty and thirty children in our workhouse, only one had the disease." P. 35. The instances just mentioned afford a presumption, that Ophthalmia, Cynanche *trachealis* and *parotidea* are infectious diseases; but they are far from proving it. We know, that in much the greater number of instances they occur as solitary, or sporadic diseases. Are these diseases sometimes produced by contagions and at other times by a different exciting cause? This is a question, that I cannot take upon myself to determine positively; but I am disposed to believe, that the exciting causes were not contagions, in any of the cases above mentioned. It may with reason, be supposed, that the same remote causes, which produced the diseases in the first of each of these different sets of patients, acted upon the rest, independently on any contagious effluvia, and affected them in

a similar manner. So in the instances of epidemic Peritonitis *puerperalis* it does not seem improbable, that the same remote cause may produce the disease in a great number of women in childbed about the same time and yet may not be a contagion in a single case. The same argument may be urged with respect to Erysipelas.

If *typhous* infection, which acts upon persons of all descriptions, be the exciting cause of Puerperal Fever, How does it happen, that pregnant women and the attendants, &c., do not frequently become infected with Typhus by patients labouring under Puerperal Fever? Is it to be supposed, when this disease prevails in a hospital, that the *typhous* infection possesses just so much virulence as to act with efficacy upon the puerperal patients and not upon the pregnant women, or nurses? This explanation, I apprehend, will hardly be admitted.

If a specific contagion be the exciting cause, as Dr. Gordon contends it is, in his valuable publication on the Puerperal Epidemic at Aberdeen, and if it be so virulent as to be communicated to every lying-in woman, who happened to come within its sphere,† it seems very extra-

† See above page 245.

ordinary, 1st. that it never affected pregnant women, nor any other persons, who were equally, or more exposed to its influence: For we have no other instance, I believe, of a specific contagion affecting only one description of persons: And 2dly. that it could be so expeditiously cured by bleeding and purging and so certainly prevented by the latter evacuation: For I do not know any other infectious complaint, in which this could be done.

The explanation of the former circumstance, given by Dr. Gordon and mentioned in page 247, appears to me purely gratuitous. It is not, I think, supported by either facts, or analogy. If the contagion be directly applied to and absorbed from the internal surface of the uterus, it might be expected, that the inside of this viscus would be the seat of the disease rather than the peritonæum. When an inflammatory affection is an essential part of an infectious disease, this is generally observed either in the skin, or in some part, to which the contagious effluvia may have been *directly applied*, as in the fauces in *Scarlatina cynanchica*, the eyes, nostrils &c. in *Rubeola*.

Dr. Gordon thinks it is demonstrated by his Table,* that the cause of the Epidemic, of which

* The Table, referred to, contains an Account of the

he has given an account, was a specific contagion. He says, "The midwife, who delivered No. 1, in the Table, carried the infection to No. 2, the next woman whom she delivered. The physician, who attended No. 1 and 2, carried the infection to No. 5 and 6, who were delivered by him and to many others. The midwife, who delivered No. 3, carried the infection to No. 4; from No. 24 to No. 25, 26, and successively, to every woman whom she delivered." P. 64.—Let us examine the Table: The midwife, who delivered No. 1, is Mrs. Blake. She delivered No. 1 and 2 in December 1789; No. 8, 9 and 10 in May, No. 13, 14 and 16 in August, No. 21 in October 1790; No. 45 in March and No. 58 in September 1791.—The physician, who attended No. 1 and 2, is Dr. Gordon. He delivered No. 5 in January, No. 22 in October, No. 32 and 33 in November, No. 38 in December 1790; No. 40 in February, No. 50 and 52 in April, No. 54 in May, No. 60 in September, No. 61 in October, No. 66 in December 1791: No. 73 in February, No. 76 in March

Names and Places of Abode of 77 patients, whom he attended, with the names of the persons, who delivered them, the month, in which they were taken ill, and the event.

and No. 77 in October 1792.—The midwife, who delivered No. 3, is Mrs. Elgin. She delivered No. 3 and 4 in December 1789; No. 11 in May, No. 24, 25 and 26 in October 1790; and No. 57 in June 1791.*

From the above view of the number of women affected with Puerperal Fever, who were delivered by Mrs. Blake, Mrs. Elgin and Dr. Gordon from December 1789 to October 1792, as extracted from the Table, I should be led to conclude, that these three practitioners must have delivered a very considerable number of women, who were not attacked with this Fever, and therefore that the disease, if infectious, was not so much so as has been stated by Dr. Gordon.† It is not improbable, however, that many of the women, delivered by Mrs. Blake and Mrs. Elgin, might become patients of the other practitioners in Aberdeen: But this requires to be explained.

It appears also from the Table, that of the 7 women delivered by Mrs. Elgin, who were affected with the fever under consideration, 3 were attacked in one month, viz. October 1790. And I find that 10 of the 77 patients, *attended* by Dr.

* At least the patients were taken ill in these months.

† See pages 244 and 245.

Gordon, were seized with Puerperal Fever in this month and ten in the two following months, although the average number is not quite 3 in a month—a circumstance, which appears to me to mark a noxious constitution of the air at this season, as having a considerable influence on the prevalence of the complaint, if it be not admitted to have been the cause of the epidemic.

Though the facts and arguments, which I have brought forward, be deemed insufficient to disprove the infectious nature of Erysipelas and Peritonitis *puerperalis*, they may be useful, in a prophylactic view, by directing the attention of the practitioner to the other occasional causes, as well as contagion, and inducing him to prevent their application and obviate their effects, as much as is in his power.

§. 4.

The PROXIMATE CAUSE of Puerperal Fever is an inflammation of the peritonæum, occasioning an increased effusion of fluid into the cavity of the abdomen.

This fluid, which consists of serum with a greater or less proportion of coagulating lymph, or approaches more or less nearly to pus, in different cases, is undoubtedly effused in consequence of increased action of the arteries of the

peritonæum. There is not the least reason for supposing it to be accumulated in consequence of impeded absorption alone. The adhesions betwixt different parts of the peritonæum as well as the nature of the effused fluid clearly evince an affection of the arteries, with which this membrane is supplied, whilst there is no circumstance to prove that the lymphatics, opening upon the abdominal cavity, are primarily inflamed or enlarged. It is not improbable, however, that the lymphatic glands, or vessels may be sometimes secondarily affected either from the inflammation being immediately communicated to them from the contiguous parts, or from the acrimony of the effused matter.

Numerous dissections have shewn, that the inflammation is rarely confined to a small portion of the peritonæum. Instead of being circumscribed like Phlegmon, it extends itself like Erysipelas and is generally diffused over a very considerable part, and sometimes over the whole of this membrane, not only as lining the cavity of the abdomen, but as elongated into the omentum, mesentery and ligaments of the uterus, and as reflected over the uterus, bladder, intestines and other viscera. Instances even are not wanting, where the cavity of the thorax has become affected in a similar manner in this disease.

It has been contended, that the inflammation of the peritonæum is not a primary affection in puerperal fever, because it has been cured in many instances without bloodletting. “*Namque enimvero ejusmodi inflammatio, si primaria & non secundaria exstisset, nullo modo, sine prompta & larga sanguinis missione, vitari aut discuti unquam potuisset.*” Burserii Inst. § 469. But to this assertion I must urge my dissent. No fever, that occurs to a lying-in woman, deserves the name of *Puerperal Fever*, which is unaccompanied with an inflammatory affection of the peritonæum; this therefore must be considered as a primary and essential circumstance. And it by no means follows, when a Puerperal Fever is cured without bleeding, that the peritoneal inflammation was either not present, or not a primary affection. Peritonitis admits of a natural cure by a gentle universal sweating; by a return or increased flow of the lochial flux; by a moderate diarrhœa; and by the supervention of some other disease. Peritonitis exists as a primary affection under circumstances, where bloodletting would be improper and prejudicial; but we are not to infer from thence, that the inflammation is a secondary affection in these cases.—Bloodletting is improper and hurtful in many cases of Erysipelas, of Scarlatina *cynanchica* &c, yet

the inflammation of the face, for example, in the former, and of the fauces in the latter disease are primary affections. It is the nature of the inflammation and of the concomitant systematic affection, which is to determine the propriety, or impropriety of bleeding in any disease, and not its being a primary, or a secondary inflammation. A secondary inflammation, when of a phlegmonous nature and attended by marks of inflammatory diathesis, or symptoms of general inflammation, as Peripneumonia occurring in Rubeola, requires phlebotomy as much as, if it had been the primary disease, whilst the inflammation of the mucous membrane of the eyes, nose, &c, which is a primary and essential affection, very frequently does not render phlebotomy necessary. Cortex Peruvianus is frequently given to a greater extent in Erysipelas than in a Tertian, with very great success and, if bloodletting has been found hurtful and Camphor and Bark have been given largely with manifest advantage in puerperal fever, as would appear from the following quotation, it neither follows, that the inflammation of the face in Erysipelas, nor that the inflammation of the peritonæum in Puerperal Fever, were secondary affections, but that the topical inflammations and systematic affections in these diseases were not

of such a nature as to be cured by the antiphlogistic mode of treatment.

“ Morbus etiam ille, qui anno 1770 in Nosocomio sancti Marci Viennæ* puerperis omnibus infensissimus fuit, ab initio pro inflammatorio habebatur, atque adeo sanguinis missionibus, at infelici semper eventu, impugnabatur. Erat autem natura putridus, natæque ex eo inflammationes in gangrænam citissime desinebant.—

* The following account of this Epidemic, extracted from the description of it by P. X. Fauken, is given by Burserius in § 468. “ Is enim narrat annum 1770. puerperis fere omnibus exitiosum fuisse Vindobonæ, sed præcipue illis, quæ in nosocomio Divi Marci decumbebant. His mox post partum uterus erat durus & tumidus cum doloris sensu, lochiis suppressis, alvi fluxu, æstu, siti, cute humida, capitisque dolore. Tertio aut quarto die universum abdomen, speciatim versus diaphragmatis regionem intumescebat, tendebatur & dolebat, flaccidis interim mammis & lacte vacuis. Die sexto & septimo hæc ita incresebant ut velut suffocatæ necarentur. Sectio anatomica in earum abdomine detegebat pseudo-membranam ex materia quadam caseo & lacti simili conflata, qua omnia viscera obducebantur.—Totum ejus cavum sero veluti lactis scatebat; neque id deerat interdum in ipsomet thorace. Non unum viscus, sed aliud atque aliud, inflammatione obsessum reperiatur. In nonnullis vero uterus sic affectus occurrebat, ut sphacelo correptus videretur.”

Inflammationes vero hujusmodi, manifesto malignæ, et putridæ sanguinis missionem nequaquam ferunt. Itaque morbo accuratius examinato & recognito, suasu Cl. Storckii omitti cœpta est sanguinis missio & ejus loco dari camphora ad magnam dosim cum cortice peruviano, itemque in clysmatibus ad drachmam unam pro qualibet injectione cum drachmis duabus gummi arabici subacta, & deinde unciis octo aquæ soluta adhiberi. Hac methodo antiseptica plures quam quadraginta servatæ dicuntur." Burserii Inst. Med. § 497.

From this view of the ESSENCE of *P. puerperalis*, it appears, that the principal point of distinction, or difference betwixt it and *Phlegmatia dolens* is the SEAT of these diseases. It has been already shewn, that *Phlegmatia dolens* frequently supervenes to *Peritonitis puerperalis* and very generally begins in the hypogastric, or inguinal regions: And I have now to remark, that we have an intermediate form of disease, a connecting link in the *Peritonitis muscularis*† of Frank,

† " In Peritonitide sub abdominalibus musculis sedem figente (§ 213), inflammatio per cellularem musculorum telam propagata, sensibilitatem abdominis, frequentius circa umbilicum quam alibi, insignem, & sub qua nec minimum ægrotantes attactum perferunt, inducit. Incipit

with which the *Hysteralgia ab Sparganosi* of Sauvages in some measure corresponds—On the one hand it is difficult to draw the line betwixt *Peritonitis puerperalis* and *muscularis*, so closely are they connected and so easily may they become complicated with each other.—On the other hand *P. musculosa* of Frank is so nearly allied to *Hysteralgia lactea* of Sauvages, that they appear to differ only in extent. If the disease remain confined to the trunk, it is *P. muscularis*; if it descend to one, or both of the lower extremities, it is *H. lactea* and *Phlegmatia lactea* of Sauvages; in short, it constitutes the disease,

nempe hic morbus, aliarum inflammationum adinstar, ut plurimum cum horrore, calore; succedit aut interdum etiam præcedit dolor ad certam abdominis regionem fixus & ardens: sub inspiratione, tussi, nixu, corporisque erectione insignius urgens; cum calore cutis, subjectarum partium duritie ac circumscripto nonnunquam tumore. Subinde fibrarum muscularium tractum exprimit hic tumor, inprimis cum *rectos* abdominis occupaverit musculos; in quorum vaginas interdum aut coagulabilis lympa, aut sanguis effusus, tensionem summam ac deliria, citamque nonnunquam gangrænam producit. Interea febris acuta & inflammatoriorum symptomatum cohors ægrotantem divexant. Nec tamen viscerum internorum phlogosi correptorum symptomata, & ut plurimum nec vomitus, nec pertinax alvi obstructio adsociantur.”—De curandis hominum morbis Epitome, § 215.

to which I have given the name of *Phlegmatia dolens*, from the pain which invariably precedes and accompanies it—These facts and observations sufficiently evince the connection and analogy subsisting betwixt *Peritonitis puerperalis* and *Phlegmatia dolens*.

The ligamenta lata of the Uterus and the Ovaria have been very frequently found by dissection to be affected in *P. puerperalis*; and, when *Ph. dolens* supervenes to this complaint, the inflammation in some instances appears to have been propagated from thence along the ligamenta rotunda to the hypogastric and inguinal regions and the upper part of the thigh.

Of the *Peritonitis muscularis* of Frank I have met with several instances in puerperal patients, two of which terminated in suppuration. In the first of these the abscess pointed in the inguen and I opened it by a caustic. The sore soon healed and the patient recovered perfectly. In the latter the abscess pointed near the coccyx and I opened it with a lancet; but not with the same success. The patient was hectic and much debilitated at the time and soon sunk under the fever and discharge, which took place.

§ 5.

The METHOD OF CURE of Puerperal Fever is a subject of high importance, since this disease

is frequently occurring and proves fatal to a great proportion of those females, who are seized with it.

Before I lay down the TREATMENT, which appears to me, from observation and much reflection, to be best adapted to the different cases of Puerperal Fever, I shall take notice of two methods, that have been published within the last twenty years and stand recommended by their simplicity, uniformity and success. These are so simple and uniform, that a practitioner, or indeed any person, is in a few minutes enabled to conduct them and so extraordinary has been the success attending them, that they have been deemed infallible, or very nearly so.

The FIRST was suggested by M. Doulcet, and the Royal Medical Society of Paris have asserted respecting it, that *it has never yet failed of success since it has been employed; although, before this method was made use of, the disease had always been fatal to every woman, who had been attacked with it in the Hôtel-Dieu** and, “that in four

* See A Report, made by order of Government, of a Memoir, containing a new, easy and successful method of treating the Childbed, or Puerperal Fever, made use of by the late M. Doulcet, &c. Translated by J. Whitehead, M. D. Page 2.

*months, during which this epidemic disease raged with fury, near two hundred women were saved to society, excepting five or six, who all refused to take the vomit, and were victims to their own obstinacy.”**

This method of cure “consists in taking the advantage of the moment of attack and giving, without losing an instant of time, fifteen grains of Ipecacuanha in two doses, at the distance of an hour and an half from each other, and repeating them again the next day in the same manner, whether the violence of the symptoms be abated or not; and, if the disease should continue much the same, they are repeated again the third and even the fourth day, according as the case may require. In the intervals between the doses, the effect of the Ipecacuanha is kept up by a potion composed of two ounces of Oil of Sweet Almonds, one ounce of Syrup of Marsh Mallows and two grains of Kermes Mineral. The common drink is Linseed Tea, or an Infusion of Scorzonera Root, edulcorated with Syrup of Althæa; and towards the seventh or eighth day of the disease the patient takes a mild purgative, which is repeated three or four

† Ibid. Page 10.

times according to the exigency of the case.”—
 “The efficacy of this method of cure consists wholly in its early application, namely, in the very moment when the disease first commences: and though experience has since taught us, that the loss of a few hours is not always irreparable, yet it seldom happens, that Ipecacuanha has the same complete success, when the first moment of attack is lost.” Pages 11, 12.

The SECOND Method, which is recommended by Dr. Gordon of Aberdeen, consists in “large bleeding early in the disease and plentiful purging with the interposition of opiates—With respect to *bloodletting* he says, that practitioners should be governed by the stage of the disease and not by the state of the pulse, because the pulse is more frequently weak and feeble than strong and full even at the beginning of the disease, and yet, instead of being weakened by bleeding, becomes more full and strong than before; that, when he took away only 10 or 12 ounces of blood, the patient always died; but that 20 or 24 ounces, taken away at one time within 6 or 8 hours after the attack, never failed to cure the patient.—He observes, that *purging* is the outlet, by which nature attempts her own relief, and immediately after bleeding he administered a bolus, containing two scruples of

Jalap and three grains of Calomel, and he kept up the purging to about 5 or 6 stools every day for the first three days, by a medicine, composed of a drachm of Jalap, or two ounces of Syrup of Buckthorn, and six ounces of the saline mixture, of which the patient took an ounce at proper intervals. The dose was then diminished, but the medicine was continued, till the disease totally ceased.—He exhibited an *opiate* every night to enable the patient to bear the evacuations, which she had to undergo the ensuing day.

Dr. Gordon informs us, that he had a fair trial of his method in 50 cases, and that only five patients died. He adds further, that all the five died before the dissection of Mrs. — (Case 4th), from which he *discovered the certain method of curing the Puerperal Fever*, and that, after that time, of thirty patients, who were treated in the manner above mentioned, not one died.

When two very different methods of treating an extremely dangerous disease are represented as infallible by their respective inventors, or abettors, a suspicion naturally arises, that one, or both parties have been deceived. As both M. Doulcet and Dr. Gordon have laid particular stress upon the employment of their remedies immediately after the attack of the disease, it

does not seem improbable, that in many instances it was not Puerperal Fever, but some other complaint of a less dangerous tendency, that was cured; because other febrile affections take place in puerperal patients, which are not always easily distinguishable on their first appearance from Peritonitis *puerperalis*. It must be allowed, however, that this complaint is much more manageable at its commencement, and that, as M. Doulcet's method was employed for the cure of patients, confined in a crowded hospital, whilst Dr. Gordon's was used for the treatment of women in a colder climate and in private practice, each of these two methods of cure might in general be properly adapted to the respective patients, who were to be treated according to them.

Some practitioners are, I believe, of opinion, that every case of a particular disease ought to be treated in an uniform manner and hence they do not give themselves the trouble of adapting remedies specially to the different cases, that occur. Of this class some probably may have exclusively adopted M. Doulcet's and others Dr. Gordon's method of treating Puerperal Fever, according as they happened to become acquainted with one before the other, or to have an aversion to, or a predilection for the use of the lancet.

If this be the case, these practitioners would do an essential service to the public by giving a full account of their success. If this were done, I suspect, that from the alledged facts it might be proved, that neither plan ought to be indiscriminately adopted to the exclusion of the other.

From what I have seen of this complaint, I am of opinion, 1st. that an emetic, administered early, will cure the disease in many cases; 2dly. that general bloodletting and brisk purging may in other cases be employed freely with success; 3dly. that these two methods may in some instances be advantageously combined; 4thly. that in some cases the disease may be cured without employing either general bloodletting, emetics, or brisk cathartics; 5thly. that other remedies, which have been neglected as useless and unnecessary, or condemned as hurtful, may be joined with Doulcet's and Gordon's plans with very great advantage.

With this impression on my mind, I enter upon the consideration of the cure of Puerperal Fever, although the plan I have to recommend is neither simple, nor uniform, nor nearly approaching to infallibility.

The Indications of Cure, which arise in puerperal fever, respect either the systematic, or

abdominal affection. Those, which belong to the former head, are

1st. To moderate the action of the heart and arteries.

2dly. To support the action of the heart and arteries.

3dly. To prevent, or correct the putrescency of the fluids.

4thly. To palliate or remove urgent symptoms.

Those, which relate to the latter head, are

5thly. To moderate and subdue the increased action of the peritoneal bloodvessels and thereby prevent the mischief, arising from extensive adhesions, from the effusion of fluids into the abdomen, from suppuration and gangrene.

6thly. To promote the absorption of the effused fluids.

7thly. To favour the discharge of pus, when formed.

Instead of proceeding to point out the means of fulfilling these different indications, which may be understood from what has been laid down above, respecting the cure of *Phlegmatia dolens*, I shall consider the treatment of Puerperal Fever, as occurring in 3 classes, or descriptions of patients and appearing under 3 principal forms.

In the 1st class the patient is generally of the

lower order, is of a robust constitution naturally, has lived in pure air, has enjoyed good health during the latter part of her pregnancy, and has not been weakened by a profuse lochial discharge, or any previous disease. The systematic affection is marked by the symptoms of general inflammation, or those, which characterize Synocha, viz. a strong, hard, full and not very frequent pulse, increased heat, white tongue &c. The peritoneal affection is marked by greater pain in a particular part, most frequently in the hypogastric region, resembling more the pain felt in phlegmonous inflammations and accompanied by less sense of soreness and tenderness of the abdomen, than is observed in other cases. The disease frequently assumes this form after an abortion.

In this form of the disease : 1st. A strict antiphlogistic regimen is to be enjoined. General bloodletting to 16 or 20 ounces is to be employed and repeated, if necessary. Emetics and Saline Cathartics are then to be administered; and Pulvis Antimonialis, Ipecacuanha, or Saline Mixture may be afterwards exhibited as relaxants. 2dly. Leeches are to be applied to the pained part of the abdomen and the orifices kept discharging for an hour, or two, by flannels wrung out of a warm Decoction of Poppy heads, or

Chamomile flowers. The fomentation may be afterwards had recourse to every six or twelve hours, guarding against exposure of the abdomen by keeping a single layer of flannel constantly applied over it. Linimentum Ammoniaë, or a blistering plaister may also be applied.—When the skin is to be inflamed by the application of Cantharides, the plaister should be removed in twelve or eighteen hours, which should be covered by a piece of thin muslin or cambric, lest a portion of it should be left adhering to the skin and strangury should be produced, in consequence of the cantharides being absorbed from thence.

In the 2d class, the patient is of higher rank, or extremely poor; and has been debilitated and rendered irritable by preceding circumstances, as living in a large town, confinement in impure air, (especially in that of a Lying-in Hospital) anxiety, profuse evacuations, or other diseases. The systematic affection in these cases is not marked by any mixture of symptoms of general inflammation, but by symptoms of irritation only, the pyrexia exhibiting from the first the characteristic marks of Typhus. There is great depression of strength. The pulse is very frequent, 120 or more, small, weak, and not hard. The tongue is whitish, or brownish. The pain

is not very severe in any particular part, is more diffused over the abdomen and is accompanied with, or consists in a high degree of soreness or tenderness.

In this form of Puerperal Fever: 1st. General bloodletting and brisk purging are inadmissible; but gentle cathartics, or laxatives are to be employed and Ipecacuanha may be exhibited as an emetic either alone, or mixed with a small quantity of Antimonium Tartarizatum.— Small doses of Pulv. Antimonialis, or Ipecacuanha may be employed as relaxants; but, if these produce sickness, Kali, Natron, or Ammonia, saturated with lemon juice, are to be used in preference, and to each dose five or ten drops of Tinct. Opii may be sometimes added with advantage. 2dly. Topical bloodletting is to be employed with great caution, or wholly omitted, as it may do more harm by debilitating the patient and increasing the irritability of the system, than good as a topical evacuation. Emollient and sedative fomentations and glysters may be employed and Linimentum Ammoniae Fortius, or Blisters may be applied to the abdomen with advantage. Linimentum Ammoniae is preferable, when the bladder, womb, or rectum seems to be particularly affected, and, if made sufficiently strong, will act more quickly than cantharides

and produce a vesication and a considerable discharge—As the disease proceeds, the strength is to be supported by wine and other stimulants, cautiously administered, and by Infusions or Decoctions of Colomba, Angustura, or Cortex Peruvianus—The Peruvian Bark has been exhibited freely in substance for the cure of this disease, as in Erysipelas, but not with success, as we are informed by Dr. Fordyce;* who observes, that neither the more powerful remedies of phlegmonous, nor of erysipelatous inflammation can be employed with advantage in Puerperal Fever. Acids may be employed with freedom to obviate, or correct the tendency to putrefaction.

In the 3d Class, The patient is exactly in the intermediate state betwixt the two just described. The systematic affection is a compound of symptoms of general inflammation and irritation.—The affection of the peritonæum is neither so much confined to a particular part, as in the first, nor so much diffused as in the 2d class. It will

* Lectures on the Practice of Physic—This mode of exhibiting the bark in Erysipelas is explained in the 1st, Vol. of the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, (Page 293) and is exemplified above in Case XXII.

be obvious to every one, that every gradation betwixt the first and second forms of the disease, both with respect to the systematic and peritoneal affections, may occur, and that the treatment is to be specially adapted to individual cases, according as they approach more nearly to, or recede farther from, the two extremes already explained; but I am here to consider only the middle point of the scale.

In this intermediate form of the disease, 1st. General bloodletting is to be employed with great caution, if at all. It is to be considered, whether the symptoms of general inflammation are sufficient to prevent the disease from being cured by other means, and whether more harm may not be done by debilitating the patient than good by the evacuation, before we determine upon taking away blood by phlebotomy. Emetics may be very properly administered, and the bowels may be kept open by Neutral Salts, as Natron Vitriolatum, Phosphoratum, or Tartarizatum, Kali Tartarizatum, &c. The skin may be kept moist by relaxants, as Pulvis Antimonialis, Ipecacuanha, or Neutral Salts formed from Kali, Natron, or Ammonia and lemon juice. 2dly. Bleeding from the skin of the abdomen may be employed with great advantage and is to be employed more, or less freely, according as general

bloodletting has been practised, or omitted.—Fomentations of the antispasmodic, or sedative kind may be applied to the abdomen and emollient and sedative Decoctions may be thrown into the Rectum and Colon partly with the same view and partly to wash out any acrimonious matters from the large intestines. The skin of the abdomen may be inflamed either by Lini-mentum Ammoniaë, or Cantharides.

When the disease has continued a few days, if it be not relieved by the means pointed out above, the remedies, recommended with the view of supporting the strength and of obviating, or correcting the tendency of the fluids to putrefaction for the 2d class of patients, become proper and necessary.

The treatment of urgent symptoms demands great attention in Puerperal Fever.

When the *rigors* at the accession of the complaint are very severe, or continue long, they should be moderated by administering warm diluting liquids pretty frequently and by the application of warmth to the feet and scrobiculus cordis—If the warm bath could be employed during the presence of the cold stage, I should expect great advantage from it, as, by determining powerfully to the surface, and extremities, it might take off the impetus of the blood from the abdominal cavity.

When the *head* is particularly affected with pain, or with delirium, the application of leeches to the temples may sometimes be necessary, if there be evident marks of determination of blood to this part. The application of a blistering plaister near the part will be more frequently requisite, and the pediluvium, or fomentations to the legs and feet may be also employed. *Sleep* is to be procured by Opium, combined with Pulvis Antimonialis, Digitalis, or Camphor, &c.

When the *thorax* is affected, the application of leeches, or blisters, or both, may be requisite, according to the state of the pulse, the degree of pain and difficulty of respiration. And Demulcents, or Opiates may be used with the view of quieting the cough, when urgent; which is peculiarly distressing, on account of the exquisite soreness and tenderness of the abdomen, in this complaint.

Costiveness is particularly to be guarded against by the employment of laxatives and saline cathartics, taken into the stomach in the early stage of the disease and when the patient is sufficiently strong to bear the evacuation, and by emollient, or gently stimulating glysters, in an advanced period of the disease and when the patient is much debilitated.

When there is *Ischuria*, the catheter should be introduced two, or three times in 24 hours.

Purging, when it appears to be doing harm, by the weakness it induces, is to be moderated by giving small doses, as from five to ten drops, of Tinctura Opii every four or six hours, with one grain of Pulvis Ipecacuanhæ, or with an ounce or two of Mistura Cretacea, or, if very violent, with the more powerful astringents as Kino, or Catechu. But the diarrhœa should not be suddenly, or entirely stopped. Excessive purging and Tenesmus are most expeditiously and certainly palliated by injecting into the rectum from 40 to 100 drops of Laudanum in four or five ounces of Mucilage of Gum Arabic, or some other demulcent fluid.

Excessive pain in the abdomen, when we have made the requisite evacuations by general and local bloodletting and purging and have employed fomentations, rubefacients and blistering without effect, is to be alleviated by opiates combined with remedies, which determine to the surface without stimulating the system much, as Pulvis Antimonialis, Ipecacuanha, Saline Mixture, or Camphor.

Vomiting, if occurring early in the disease and attended with great pain in the region of the stomach, may require in some cases the application of six or eight leeches near the part; but, if the state of the patient will not admit of

this evacuation, the skin of the epigastrium may be inflamed by Linimentum Ammoniae with Camphor, or by Cantharides. And half of a grain, or a grain of Opium may be given in a pill, or from fifteen to thirty drops of Tinctura Opii may be given in Saline Mixture and repeated according to the urgency of this symptom. In some cases it will be found more useful to give a solution of Kali, Natron, or Ammonia in the state of effervescence with lemon juice, or to exhibit the alkali and acid separately, that a part, or the whole of the carbonic acid may be disengaged in the stomach. When the vegetable alkali is exhibited separately from the lemon juice, it should be fully saturated with carbonic acid, as in the chrystallized carbonate of Kali, or it may be supersaturated, as in Mephitic Alkaline Water. The prevalence, or absence of acidity in the stomach must determine us as to the proportion of lemon juice, or citric acid, that is to be given with each dose of the alkaline solution. Where there is very great acidity, the alkalis, or absorbent earths, are to be given alone, and acids are to be entirely withholden. When Opium is constantly rejected from the stomach, it may be employed glysterwise with advantage for suppressing obstinate vomitings.

If the lochia be acrimonious and offensive, the

discharge should be favoured by raising the body occasionally into a sitting posture; the cloths should be frequently renewed; and a decoction of bitter herbs may be thrown up the vagina two or three times a day with advantage.

When *subsultus tendinum*, *singultus*, or other convulsive affections occur, Opium, Camphor, Musk, Volatile Alkali, Castor, &c., may be given with the view of removing, or moderating them.

In Puerperal Fever the pulse is for the most part greatly accelerated and a considerable effusion of fluid into the abdominal cavity generally takes place, unless the disease be speedily cured; we may, therefore, with reason expect, that Digitalis will prove an useful remedy in this complaint, after the necessary evacuations have been made. It has been found to possess in a high degree the powers of reducing the velocity of the pulse and exciting the action of the absorbents in other diseases, and, if upon trial it should be found to produce these effects in Puerperal Fever, without weakening the system generally, or increasing the symptoms of irritation, it is exactly the remedy, we require. Hitherto it has not been employed in any case of this disease, that I know of. I have mentioned above my intention of employing it in a case,

which lately occurred to me, provided the disease had continued to resist the remedies employed; but, fortunately, it was soon relieved and wholly disappeared in a few days. To those practitioners, who are inclined to make use of Digitalis in *P. puerperalis*, I would suggest, that the trial be made with great caution and with close attention to its effects, that it may be soon relinquished, if the symptoms of irritation should be manifestly increased by it—It is probable, that, if employed very early in the disease, this remedy might contribute materially to the prevention of the effusion of fluid into the cavity of the abdomen—a circumstance greatly to be desired, as the viscera must be much irritated by the presence of such a quantity of acrid fluid as is sometimes observed—It is probable also, that Opium may be employed with more safety and advantage, when combined with Digitalis, for the purposes of abating pain and procuring sleep in this disease.

When the inflammation of the peritonæum terminates by SUPPURATION, this is to be promoted by the application of emollient fomentations and poultices, and the abscess should be opened, as soon as the fluctuation of matter is sufficiently evident, lest ulceration of the intestines should take place and a communication be

formed betwixt the alimentary canal and the abscess. An instance of this kind I saw in the wife of James Abbatt of Whalleybanks, near Blackburn. After an attack of Puerperal Fever an abscess formed and burst near the umbilicus. Different alimentary substances, as the skins of currants† &c, passed through the orifice and appeared in the dressings. The abscess healed and she lived many months afterwards; but the mischief, done to the viscera, was so considerable, that she was rarely long free from pain, or uneasiness in the abdomen, and was under the necessity of taking Tinctura Opii very frequently and in pretty large doses, during the remainder of her life. The quantity of alimentary matter, that was discharged through the ulcer in this case was very small, so that I did not appre-

† In the treatment of wounds, or ulcers of the intestines, or of obstinate vomitings, herniæ, &c, it is frequently desirable to know, whether the alimentary matters, taken into the stomach, pass through the rectum and in what proportion. Currants, given in gruel, furnish a very excellent test of this kind, which I have availed myself of, upon many occasions, with much satisfaction; for, as they are perfectly indigestible, if we do not find them in proper time amongst the fæces, we may safely conclude, that the ingesta do not pass regularly through the alimentary canal.

hend any danger from this source of inanition. But in one of the patients, upon whom I performed the operation for the femoral hernia, viz. R. Cooper's wife of Blacksnape, a very large discharge from the intestines took place through the wound in a few days after the operation. Though the protruded portion of intestine, which was small, had been long incarcerated and was materially injured, I hoped, that it would not slough, and therefore returned it without taking any steps to retain it near the wound. But in this expectation I was deceived. The quantity of alimentary matters, discharged in this case, was so great as to make me apprehensive, that my patient would sink under it. To compensate this loss, as well as I could, I directed nutritious glysters to be injected every four, or six hours, which were retained and contributed materially to the support of her strength.* The opening into the intestine and

* The advantage to be derived from nutritious glysters in wounds of the throat will be rendered very evident by the annexed case.—J. S— in a fit of insanity cut his throat in such a manner, that every thing, he attempted to swallow, passed through the wound. I saw him in a few hours after the accident and, after dressing his wound, I bound his chin down to the sternum. I di-

the external wound gradually contracted and healed completely in a few weeks. The patient suffered no inconvenience afterwards from this complaint and, for any thing I know, is still living.

§. 6.

Peritoneal inflammation of the kind, described in the preceding pages, is almost exclusively observed in females, who are pregnant,

rected glysters of milk, broth &c, to be thrown up every four, or six hours and desired, that nothing might be given by the mouth. The glysters were retained sufficiently and he was supported solely by them for nearly 3 weeks, in which time the wound was so far healed, that he could swallow his food very well. He felt a very considerable uneasiness at his stomach for some days after the accident, and having obtained some water from his attendants at different times under a promise of only washing his mouth, he made some attempts to swallow it, but it returned by the wound. Having expressed a particular wish for some ale one day, I directed a quantity to be given as a glyster, with which he remained satisfied; and the ale glyster was frequently repeated afterwards. Besides supporting the patient, another great advantage is derived in wounds of the throat, from using nutritious glysters, namely, that the injured parts are not disturbed and irritated by the act of deglutition and therefore heal more expeditiously.

who have lately suffered abortion, or have been delivered at, or near the full time of uterogestation. In this respect also it is analogous to *Phlegmatia dolens*.

But women, who have not been lately impregnated, and men and children are liable to a less acute kind of inflammation of the peritonæum, in which an extravasation of coagulating lymph takes place and occasions more, or less extensive adhesions betwixt the abdominal viscera, or betwixt these and the peritonæum investing the cavity of the abdomen. From this circumstance I shall give it the name of *Peritonitis conjunctiva*.

This species of Peritonitis is well described by Dr. Fordyce in his Lectures on the Practice of Physic, and, as I have not met with a satisfactory account of it in any publication, I am induced to give the history and treatment† in this place and to illustrate these by the relation of a few cases.

The inflammation of the peritonæum is sometimes so slight, that, though marks are

† The following account is taken in part from Dr. Fordyce's Lectures—A short account of the symptoms, I find has been given in the Appendix to Baillie's Morbid Anatomy, pages 48 and 49.

found on dissection, the patient perhaps never complained of any symptom of the disease.— Sometimes a slight pain, or some little uneasiness in the abdomen is the only symptom, that such inflammation excites; but in these cases no bad consequences arise, for the system is not generally affected and the adhesions produced are not so extensive as to prove detrimental.*

At other times the inflammation is in a greater degree. Pain is perceived in the abdomen, which for the most part is not fixed, but sometimes affects one part and sometimes another.— This pain frequently resembles slight spasmodic pain of the intestines, but at other times is such, that it cannot well be supposed to arise from any spasmodic affection of the intestines: It is sometimes accompanied with costiveness, sometimes with purging, and upon some occasions the peristaltic motion of the intestines goes on regu-

“ There are no symptoms, which mark the existence of adhesions in the abdomen; and they seem to be attended with no inconvenience to the functions, which are carried on in that cavity.” BAILLIE'S Morbid Anatomy.— This is to be understood of the slighter adhesions only; for it will be shewn hereafter (See Case XXV.) that prodigious derangement of the functions takes place, when the adhesions are general, or universal.

larly. In the same patient there is purging perhaps for a few days, then costiveness for a week, and then the bowels become regular for about the same length of time, and so on. There is in general little, if any, swelling of the abdomen; but there is tension, soreness and tenderness, which sometimes prevent the patient from keeping his trunk in an erect position. Sometimes, however, there is more swelling of the abdomen with some degree of fluctuation, but this is always attended with great tension and pain.*

The system is sometimes not at all affected and there is rarely either any considerable degree of general inflammation, or symptoms of irritation. The pulse is not uncommonly frequent, contracted and hard; but is seldom full, or strong. The appetite is diminished and sometimes there is nausea and vomiting. The strength declines. The patient is heated during the digestion of the food. The natural evening paroxysm of fever is increased and sometimes there are slight irregular febrile paroxysms in the day.

* I suspect that some pains in the loins, which are of long continuance and not very acute, and are considered as rheumatic, or nephritic, are owing to this chronic inflammation affecting the posterior part of the peritonæum, where it passes over the kidneys and ureters. But this has not yet been proved by dissection, that I know of.

The inflammation is sometimes carried off by the remedies applied. Sometimes it goes off of itself, without any apparent cause, or natural cure. The loss of appetite, the purging and vomiting, and the hectic fever, which take place, often gradually wear out the patient.

This inflammation sometimes runs on for a great length of time, even two or three years, without any suppuration taking place; in the mean time, however, a great deal of mischief is done. Those parts of the membrane, that are opposite to one another, are glued together and contract firm adhesions. The omentum is frequently diminished and almost obliterated. All the viscera sometimes adhere together and are so confused, that they can hardly be distinguished. Sometimes there is a collection of watery fluid which is of a wheyish colour, or whitish, as if a small quantity of pus were diffused through it, and is often mixed with masses of coagulating lymph. But this fluid is rarely in any considerable quantity; for the inflammation will not allow the peritonæum to be very much distended. Sometimes exulcerations are produced upon the surface of the intestines; this, however, is not common.*

* For the appearances on dissection, see Baillie's
N N

Peritonitis conjunctiva is a common disease, but, not being generally understood and the symptoms being often very obscure, it has frequently been mistaken for dyspepsia, or some chronic disease of the intestines, as weakness, &c. It may often be distinguished from these affections, because in the 1st place, the intestines in this inflammation of the peritonæum are very irregularly affected, being sometimes costive, sometimes loose and sometimes acting properly; in the 2d place, when the disease is in any considerable degree, the pulse becomes frequent, hard, small and contracted; and in the 3d place, the pain of the abdomen is constant and lingering, or wearisome, and attended with more or less soreness, tenderness and tension, but with little, or no tumefaction.

The REMOTE CAUSES of this disease have not been very particularly attended to. It sometimes appears to arise from exposure to cold and moisture; from indulgence in fermented liquors and other stimulants; or from contusions and wounds (from the operation of tapping, for

Morbid Anatomy, pages 77 &c.; Lieutaudii Historiæ Anatomico-Medicæ Lib. I. Sect. 1.; Morgagni de Sedibus & Causis Morborum Epist. XXXIX. § 28 & seq.; Boneti Sepulchreti Libri III. Sect. 14 & 21.

example) &c. of the abdomen.† In other cases no occasional cause can be assigned : Nor is any thing in particular known, with respect to the predisponent cause.

The CURE of *P. conjunctiva* differs from that of the more acute inflammations of the membranes, which do not open externally, upon this ground, viz. that, when a disease of any part, as Pleurisy for example, affects the system generally in a great degree and in the same manner, then remedies acting generally upon the system have considerable effect : But, when a disease is only topical, as Ophthalmia for example, or affects the system generally but little, or in such a manner that the systematic affection is different from that of the part, remedies employed so as to affect the system generally are very rarely efficacious. So it is in this disease. Great evacuations by bloodletting, or purging and other remedies acting powerfully upon the system are rarely useful ; whilst remedies employed principally so as to affect the particular part are very efficacious.

† The inflammations of the peritonæum, which arise from external injuries, are sometimes of a very acute kind and ought, perhaps, to be referred to a distinct species.

1st. If there should happen to be any considerable degree of hardness with strength and frequency of the pulse, some blood may be taken from the arm; but bleeding from the skin of the abdomen by scarifying and cupping, or by 8 or 10 leeches, is generally more efficacious. The quantity of blood to be taken away at one time and the repetitions of this remedy are to be determined by the strength of the patient and the violence, or obstinacy of the disease. In some cases it has been found requisite to repeat the bleeding every 3 or 4 days, for six, or even ten times in this way.

2dly. It is particularly necessary to attend to the state of the intestines—If there should be purging, a dose of Rhubarb should be given to clear the primæ viæ and afterwards a small quantity of Opium (about $\frac{1}{4}$ grain) with a grain of Ipecacuanha may be given every four hours, or small quantities of moderate astringents may be employed to check the purging—If there should be costiveness, gentle purgatives, as Natron Tartarizatum and Kali Tartarizatum, may be employed, or oily laxatives as Oleum Ricini, or Oleum Olivæ & Amygdalæ mixed with Infusum or Tinctura Sennæ. Oily medicines are particularly adapted to this disease, as they tend to forward the passage of the fæces, without ex-

citing any forcible exertion of the peristaltic motion. The more heating, or drastic purgatives, as Jalap, &c. cannot be employed with advantage, since they produce too great a determination of blood to the interior parts of the body and do not act sufficiently as topical evacuants to prevent the mischief arising from thence—When the costiveness is obstinate, especially if there be nausea and vomiting, laxative glysters are necessary.

3dly. Antispasmodic and sedative fomentations, as Decoctum Capiti Papaverum, Radicis Bryoniæ, vel Herbæ Matricariæ, &c, with a mixture of Alcohol may be used with advantage. The fomentations should be applied to the abdomen, for an hour, or two at a time, twice or thrice in twenty-four hours. The Semicupium is frequently found of very great use in abating the pain, tension, and soreness.

4thly. An inflammation of the skin of the abdomen may be excited by applying stimulants, which should be such as are not apt to give a disposition to suppuration. Linimentum Ammoniacæ may be employed with good effect, when the pain and soreness is more diffused: And Cantharides may be applied, when the pain is more confined to a particular part. Blistering plaisters, however, have sometimes been found trouble-

some and less useful, on account of the irritability of the skin of the abdomen. How far it is advisable to excite inflammation, or vesications of the skin of the abdomen by means of *hot water*, either in this complaint or in *P. puerperalis*, has not yet been ascertained.

5thly. Ipecacuanha, Preparations of Antimony, or Saline Mixture may be employed with advantage as Relaxants—Ipecacuanha is to be preferred when there is purging; Antimonial Preparations, when there is costiveness, and Saline Mixture, when there is much nausea, or sickness.

It is to be observed further, that the use of the above remedies must be persisted in for several weeks in some cases, before the inflammation can be entirely taken off. For, as the disease does not come on suddenly and with violence as Pleurisy, the patient frequently does not apply for relief, till the parts are much injured.

The first case of *P. conjunctiva*, which I shall relate, I had an opportunity of seeing in St. Thomas's Hospital. The patient was in Queen's Ward and under the care of Dr. Fordyce.

CASE XXIII.

SUSAN THOMAS, aged 25, was admitted into the Hospital on January 6th 1785. She had

menstruated with great regularity and her general health had been very good till within the last 3 months. She was seized, without any evident cause, with pain and tenderness of the abdomen exactly 3 months before, at the time when her catamenia were present. The pain was chiefly perceived about the umbilicus. She was much reduced and weakened. Her appetite was bad, but she had not been affected with vomiting, or much nausea. She had not experienced any material degree of coldness or heat, nor was she very thirsty. During the last week the pain had rather abated, but she complained of soreness of the abdomen. Her pulse was small and about 85. She had been as regular during her illness as before and this was the menstrual period—*Sumat Haustum Febrifugum** 6ta quaq. hora.

January 7th. 10, a. m. She had slept very ill. The soreness of the abdomen as on the day before. She had had two loose stools in the night and one this morning without much griping. Her pulse was small, rather hard and beat 84 strokes in a minute. Her head was free from pain. She had no cough, dyspnœa, or pain in her chest.

* This is a common saline draught.

January 8th. 10, a. m. She complained of considerable pain in the abdomen, which was a little tumefied, but not very hard. She had passed twelve loose and copious stools. Her pulse was as yesterday. Her tongue clean. Skin not hot—*Omittatur Haustus Febrifugus—Capiat Julepum Menthæ—Applicetur Fodus Papaverum abdomini.*

January 9th. 10, a. m. The pain in her belly was rather relieved, but her looseness continued. Her tongue was cleaner than natural. Her pulse 80 and small, with some degree of hardness. Her heat 97°. Her skin rather contracted. She coughed a good deal, but did not expectorate much, nor had she any pain in her breast.

January 10th. 11, a. m. Her abdomen was less painful, but was rather swelled and sore to the touch. She had had five loose stools. Her pulse 84, in other respects as yesterday. The appearance of the tongue and skin not altered. Heat 97 $\frac{3}{4}$. Cough less troublesome—*Capiat Julepum Menthæ cum Ipecacuanhæ pulv. Gr. j & Tinct. Thebaicæ Gtt. v in singulis dosibus.*

After this day I took no notes of the case and, as I left the hospital soon after, I am not able to give the event of it.

CASE XXIV.

BENJAMIN MOORHOUSE, aged 24, an unmarried man of a delicate constitution, temperate and by trade a compositor, called to consult me respecting a complaint, which he termed an inflammation of his bowels, on the first of September 1800. He informed me, that his general health had not been good for some time and that about five weeks ago, on the day after drinking a bottle of Port, to which he was unaccustomed, he began to have a pain in the lower part of the abdomen, on the left side; which was constant and lingering, not acute, nor increased at intervals. This pain was attended by soreness and tenderness of the part, which rendered it painful to him to raise his body, or keep it erect. He was costive, faintish and hotter than natural and generally worse in the evening. His appetite was bad, but he experienced no spontaneous vomiting. At that time he lived at Blackburn, and the gentleman, under whose care he was, gave him an emetic and some opening medicines. The latter failing to open his bowels, he had several glysters administered and a blistering plaister was applied to the abdomen, which afforded him relief. He was confined to his bed about ten days by this illness.

He then became better and attended at the Printing Office for a few hours a day. His bowels were afterwards rather loose and the pain continued, but in a slighter degree. On Saturday the 23d of August he came over to Manchester to seek employment, and returned to Blackburn on the Monday following. He drank some cold milk on the road, which disagreed with him very much and occasioned him to vomit. After this journey he was confined to his bed for about two days and took some opening medicines, which relieved him; but he still continued to feel the pain and soreness in the left side of his belly. His bowels were now pretty regular and sometimes rather loose. He had some degree of nausea and vomited occasionally; but not very often. He continued to follow his employment, as a compositor, during a part of the day. On Sunday the 31st of August, he came to reside in Manchester. He walked a considerable part of the road, and, as he was weak and experienced much pain in his belly from the action of walking, he was much fatigued and indisposed; he vomited what he took that evening and got no sleep. He now complained of pain, soreness and tenderness of the abdomen, especially the lower part on the left side, but there was no evident swelling.—

The pain was increased by drinking cold liquids. His countenance was sallow, dejected and expressive of pain. He stooped and could not easily raise his body, or keep it erect. He had no complaint in making water. His bowels were not sufficiently open. His tongue had a white fur upon it. His skin was not much hotter than natural to the touch. His pulse was contracted and frequent. I ordered him to use a vegetable diet, to avoid stimulant drinks and to take the medicines prescribed below.

R Natron Tartarizati	℥j
Aquæ Fontanæ ferventis	℥vij
Solutio Sale adde	
Tinct. Cardam. Comp.	℥ss
Spir. Æth. Nitrosi	℥iij

M.

Capiat coch. ampla tria 4ta quaque hora.

R Opij purificati	Gr. ij
Pulv. Antimonialis	Gr. iv
Cons. Cynosb. q. s ut ft.	Pilulæ iv.

Dosis—Pilulæ duæ hora somni.

Sept. 3d. He had been at the Printing Office and worked a little each day, since I saw him, and called upon me again to-day. He had slept none scarcely. The pain, soreness and tenderness of the abdomen were increased. He complained of nausea, but had not vomited.

His bowels were costive. His pulse about 84, rather hard and contracted. His tongue had a whitish fur upon it. His skin was scarcely hotter than natural to the touch. His appetite was bad and his strength was declining.

Applicetur Empl. Cantharidis Abdomini per horas octodecim.

R Ol Ricini 3ij

— Efs. Menth. Sativæ Gtt. xx

M.

Capiat coch. ampv. j 4tis horis, donec allus soluta fuerit.

R Calomel præpar.

Opij purific. āā Gr. iij

Cons. Cynosb. q. s. ut ft. Pil. vj.

Capiat duas hora somni sing. noctibus.

Sept. 5th; His bowels had been opened by the oil; but he still complained of constant pain, or uneasiness and soreness of the abdomen. His pulse, tongue and skin were nearly as on the 3d. He was much debilitated—He was ordered to keep within doors, to foment his abdomen occasionally, and to apply another blistering plaister, and also to take the Solution of Natron Tartarizatum.

Sept. 6th. 10, a. m. I visited him at his lodgings, in Hanover Street, and found him in bed. He had slept but indifferently. The ab-

domen had been relieved by the fomentation and blistering, but was still painful, sore and rather tense but not tumefied. He had passed no stool, nor had he vomited. His urine was rather high coloured and in small quantity. His pulse was only 64, small and rather hard. He had experienced no alteration in his heat, nor did his skin feel materially hotter to the touch than natural. His tongue was still furred and white and he complained of some thirst. He was ordered to have eight leeches applied to the abdomen, to persist in the use of the fomentation, to take the Solution of Natron Tartarizatum regularly and to take the Castor Oil, whenever he was costive.

Sept. 7th. 10, a. m. He was in bed. His abdomen was almost free from pain, but was tender when touched and pained a little upon motion. He had passed no stool, although he had had two domestic glysters as well as taken the Oleum Ricini. He had not vomited, nor did he complain of much nausea. His pulse was near 70, and small. His tongue whitish, but not dry. His skin nearly natural. He was ordered to persist in the use of his remedies and to have a glyster thrown up, containing about half an ounce of common salt.

Sept. 8th. 11, a. m. He was below stairs.

The pain and soreness of the abdomen were nearly gone. The glyster had brought away but little fæces. He had not slept well. His pulse 84, small, but not hard. His tongue and skin as before. I directed him to take the Oleum Ricini regularly, till his bowels were loose; to apply Linimentum Ammoniaë to the abdomen two or three times a day; and, if he should have more pain in the course of the day, to use the Semicupium, before he went to bed, for about a quarter of an hour.

Sept. 9th. 10, a. m. He was walking about in the house. Having perceived an increase of pain and soreness in the abdomen towards evening, he made use of the Semicupium last night for about 15 minutes, which afforded him relief. He perspired freely in the night and slept comfortably. The abdominal affection was now scarcely perceptible. His appetite was rather improved. His bowels were slow. His pulse near 100, contracted. His countenance more animated and less sallow than before.

Persistat in usu Linimenti Ammoniaë—Capiat Olei Ricini \mathfrak{z} ss in Infusi Sennæ \mathfrak{z} ij, vel \mathfrak{ij} pro re nata.

Sept. 10th. 10, a. m. His pulse 120, not so small as before. He complained of no pain. His tongue was white and furred. On inquiry

I learnt, that he had drank more than a pint of strong ale this morning, which had affected his head and accelerated his pulse. His remedies were continued.

Sept. 11th. 11, a. m. He had passed a natural stool. His abdomen was free from pain, but not without some tenderness in his limbs, which he attributed to sleeping with his chamber window open the day before. His pulse was more than 100, when I first examined it, but on a second examination I found it had fallen to 88. He was directed to continue his remedies and to use the warm bath once more in the evening.

Sept. 12th. 11, a. m. His sleep had been refreshing. He had passed three plentiful and loose stools. He had no pain in his belly and scarcely any soreness, or tenderness, either on pressure, or on raising his body erect. His appetite was improved. His thirst was inconsiderable. His tongue was cleaner and his skin nearly natural to the touch. His heat to his own feelings did not seem increased; but, taken by a very sensible thermometer under the tongue, was found to be $99\frac{1}{2}^{\circ}$. Pulse 88, rather small.

Perstet in usu Linim. Ammoniaë—Capiat Ol. Ricini cum Infuso Sennæ pro re nata atque

Pilularum infra præscriptarum duas 4ta quaque hora.

℞ Pulv. Rad. Rhabarb. 3j
 — Antimonialis Gr. xxiv
 Ol. Efs. Menthæ Piper. Gtt. xij
 Muc. Gum. Arabici q. s. ut fiat massa
 in pilulas xxiv dispescenda.

Sept. 14th. 11, a. m. He made no complaint. He had walked out this morning and on the two preceding days, and intended to return to his work the day after. He could bear to have the abdomen pressed strongly, without perceiving pain, or soreness. His tongue and skin seemed natural. His pulse 88, soft, and not so small. His appetite and general strength much improved. The Pills had procured him two rather loose stools every day, since he began to take them—He was ordered to take them only once, or twice a day.

Sept. 18th. 2, p. m. He called at my house and informed me, that he had been at his work for the last 4 days and remained well. I took his heat with the Thermometer and found it to be 98° under the tongue.

CASE XXV.

On the 29th of March 1798, I was called to Mr. RICHARD OWEN, at Green Hey near

Manchester. He was about 22 years of age; was lately arrived from Wales, of which country he was a native; and was engaged in superintending an extensive Spinning Factory. Till his present indisposition his general health had been good.

He had been attended by Mr. W. Henry since the 2d of this month; from whom I learnt the following circumstances. There had been no febrile symptoms from the first of his attendance. The disease appeared to be a common case of Dyspepsia and not presenting any thing curious, or uncommon at first, he had not been induced to take notes of it. There had been no constipation till the 13th—An Emetic had been given in the beginning of the complaint and was followed by an Infusion of Columbo. Small doses of Pulvis Antimonialis had been given at bed time on account of a pain in his hip, which appeared to be rheumatic. Some Rhubarb and Calomel were exhibited on the 13th and cordial and anodyne medicines were afterwards exhibited, but without any advantage.

When I first saw him, on the day above-mentioned, he was much reduced and debilitated. He could not retain any thing upon his stomach. He did not complain of so much pain

and soreness, as might have been expected from the urgency of his vomiting.

On examining the abdomen attentively I perceived a little fullness in the region of the stomach; but there was no material tension, nor tenderness on pressure. The matter, which he vomited, was very green and bitter. His face was rather flushed, but his skin was not hotter to the touch,* or drier than natural. His tongue had a whitish fur upon it. His bowels were not costive. His pulse was very small and weak, but not very frequent—I directed the following remedies for him.

R Infusi Rad. Colombæ	ʒviij
Tinct. Cinnam. Comp.	ʒvj
—— Opii	Gtt. xl
Ammoniæ præparatæ	ʒjss

M

F. Mistura: Cujus capiat coch. ampla iij cum
coch. amplo j Succi Limonum 4tis horis.

R Opii purificati	Gr. j
Calomel	Gr. iv

Cons. Cynosbati q. s. ut fiant pilulæ
duæ mediocres, hora somni sumendæ.

Admoveatur Empl. Cantharidis Scrobiculo
Cordis.

* The heat of this patient was never taken by the Thermometer.

March 30th. The symptoms nearly as yesterday.

Persistat in usu remediorum.

March 31st. He had slept better. The sickness and vomiting still continued urgent.— He did not complain of much pain either in his stomach, or head. He was thirsty and his tongue had a brownish fur upon it. His skin had been rather moister in the night. His pulse small, about 94 in a minute: He had passed no stool for the last two days.

R Aloes Socotorinæ

Pulv. R. Rhabarb., singulorum ʒ j

Calomel. Gr xvj

Ol. Essent. Caryoph. Gtt x

Muc. Gum. Arab. q. s. ut fiant pilulæ

xvj—Capiantur ij pro re nata.

R Infusi Colombæ ʒ xj

Tinct. Cinnam. Comp. ʒj

— Opij Gtt. vj

M.

F. Haustus 4ta quaq. hora sumendus.

Omittantur remedia antea præscripta.

April 1st. The vomiting still continued. A great quantity of bile was thrown up, which was of a pure yellow colour. He did not complain of pain at his stomach, nor was there much tension, or soreness upon strong pressure being

applied to the abdomen. His pulse was small and weak, about 100. His tongue had a brown fur upon it. His skin was dry and his heat scarcely greater than natural. He had no pain in his head, nor was he delirious in the night. He had not passed any fæces.

Omittantur remedia here præscripta.

℞ Decoct. pro Enemate $\bar{3}x$
 Natron Muriati $\bar{3}j$
 Ol. Menth. Pip. Sacch. instil. Gtt. x
 M.

F. Enema statim infundendum.

℞ Opii purificati Gr. fs

F. Pilula tertiis horis sumenda.

April 2d. He had experienced a slight febrile paroxysm yesterday, which began about 10, a. m. and continued till near 4, p. m. His vomiting had been very troublesome; but was now relieved. The matter brought up was chiefly bile. He had passed a sufficiently soft stool in the evening. His pulse 88, rather small and weak. His pain trifling.

℞ Opij purificati Gr. $\frac{1}{3}$

F. Pil. 4ta quaq. hora sumenda, atque duæ hujusmodi sumantur hora somni.

April 3d. He had not taken his pills regularly, because he thought they made him sick. His vomiting had been relieved for some hours by

drinking some weak brandy and water. His pulse was very small, about 88 in a minute.

April 4th. The febrile paroxysm returned about 10, a. m. yesterday, but was of shorter duration. His skin was rather dry and his tongue had a brown fur upon it. He had not vomited quite so frequently; but the matter brought up was very bilious and in great quantity. The pulse weak and small, about 84.

April 5th. He had less fever yesterday and it came on later. His bowels were not sufficiently open. His vomiting was very urgent and as bilious as before. He complained more of acidity, uneasiness, and heat at his stomach. His tongue and skin as yesterday. His pulse 84, rather stronger.

℞ Misturæ Cretacæ	℥vj
Ol. Cinnam. cum Sacch. trit.	Gtt vj
Tinct. Opij	Gtt. cxx
M.	

Signa—Capiat coch. j amplum omni bihorio.

℞ Muc. Gum. Arab.	℥iv
Tinct. Opij	Gtt. xc
M.	

F. Enema, hora somni infundendum.

April 6th. He had slept better and had experienced no sickness, since the Glyster was administered. The febrile paroxysm came on

about 3 p. m. yesterday and continued about 3 hours.† His tongue was rather cleaner. His heat, to the touch, not greater than natural. Pulse 92, very small.

Infundatur Enema cum T. Opij Gtt. lx circa meridiem atque aliud cum T. Opii Gtt. cxx circa horam 9^{am} p. m.

April 7th. He had passed a better night and had no return of fever yesterday. His vomiting did not recur so frequently. His skin was rather moister. His tongue brown and furred. His pulse betwixt 80 and 90, rather stronger. He had passed no fæces for the last four days. He was desired to take an egg, beat up with brandy and water, frequently.—An opening glyster was ordered to be injected immediately and another glyster of a nutritious kind, containing 120 drops of T. Opii, to be thrown up before bed time.

April 8th. There was little alteration in the state of the symptoms; but his strength was gradually declining. A blistering plaister was applied to the region of the stomach. A glyster of egg and milk with 60 drops of T. Opii was

† I never saw him, when the paroxysm of fever was present.

ordered to be administered every 4 hours and at bed time one with 120 drops.

April 9th. The symptoms nearly the same. He rejected almost every thing he took and the glysters were only returned about two hours—The Glysters were ordered to be continued.

April 10th. The vomiting as frequent and as bilious as before. The glysters were returned in about two hours after being injected—Twenty drops of T. Opii were ordered to be added to each of them.

April 11th. The vomiting recurred as frequently as before, and the matter brought up was very yellow and bilious. He did not complain of pain, or soreness. His tongue had a brown fur upon it. His heat was not greater than natural. His skin more moist. His pulse 88, very small. He had experienced no hiccup. The opiate glysters did not stay above an hour—The day glysters were now ordered to contain 100 drops of T. Opii each, and the night glyster 200 drops.

April 12th. He had not slept at all during the night. The glyster, administered at bed time, was not retained more than half an hour. His pulse was very low and about 80. His tongue had a brown fur upon it. The vomiting

was not less troublesome and the matter brought up was very bilious. He had no hiccup, nor did he complain of pain, soreness, heat, or acidity in his stomach. He had not passed any proper fæces with the glysters. An opening glyster composed of veal broth and common salt was ordered to be immediately administered and another, composed of starch and 120 drops of Tinct. Opii, was directed to be thrown up at bed time. He was also ordered to take occasionally an ounce, or two of Schweppe's Soda Water.

April 13th. The symptoms were nearly the same. Electrical Friction and Sparks were applied to the abdomen. The nutritious Glysters were continued.

April 14th. The abdomen was rather more full than natural, but neither painful, nor tender to the touch. He had vomited a great quantity of bilious matter. The nutritious glysters had been longer retained—His pulse was 88 and not quite so weak as before. His spirits were better. He was ordered to take from 10 to 60 drops of Æther Vitriolicus frequently in a glass of water.

April 15th. He seemed more cheerful. His symptoms nearly the same as at my preceding visit. The Glysters and Vitriolic Æther were ordered to be persisted in,

April 16th. He appeared very low and weak. His pulse was about 100 and smaller. He vomited every thing he took; but the matter was not so bilious as before. The fæces, which had been passed for several of the last days, were white and did not appear to contain any admixture of bile. He was free from pain. The glysters were continued.

R Calomel.

℥ j

Opīi purific.

Gr. ij

M

F. Pulvis in chartas iv dividendus, e quibus capiat unam omni trihorio.

April 17th. The glysters had been returned very soon. He had taken three of the powders and vomited soon after each of them. His pulse was more than 100 and smaller. The glysters and powders were directed to be continued and two drachms of the Ung. Hydr. Fort. were ordered to be rubbed into the abdomen.

April 18th. His strength had declined very much. His vomiting had been more frequent and more copious. The pulse was very small and much increased in frequency. The extremities were rather cold. He was ordered to take cordials frequently and the opiate glysters were continued. The Calomel Powders and Ung. Hydr. were given up.

April 19th. 9, a. m. The glyster, which was given at bed time, was not returned. He had rested little and vomited much in the night. He did not complain of pain, nor was there any tension, fullness, or tenderness of the abdomen. The pulse was thread-like and very frequent. His extremities were colder.

7, p. m. The vomiting had continued very urgent. About 3 in the afternoon the matter, which was rejected, became of a coffee colour. He did not complain of pain either in the abdomen, or head. He was rather delirious betwixt sleeping and waking. His pulse was scarcely perceptible. The extremities were very cold.

April 20th. He died about midnight. The vomiting had continued to the last. He had neither complained of pain, nor tenderness of the abdomen, nor was he affected with hiccup after I last saw him.

Dissection.—Having obtained permission to inspect the abdominal cavity, in about 14 hours after his death I made a crucial incision down to the peritonæum. I then cut carefully through the peritonæum in various points and was astonished to find it every where firmly adhering to the subjacent viscera. Having cut through this membrane in the direction of the incisions of the abdominal muscles and integuments, I tore it

from the abdominal viscera. Its internal surface was covered with a thick layer of coagulating lymph. The intestines were also covered with coagulating lymph, which was thicker and whiter in some points than others and gave them a dotted, or studded appearance. There was no vestige of omentum. Betwixt all the convolutions of intestines a quantity of coagulating lymph was interposed, by which they adhered strongly to each other and were formed into a confused mass.* The liver was covered with a coat of coagulating lymph and of this as well as the other viscera I could only obtain a very indistinct view. In the pelvis the peritonæum was less affected, but the bladder was connected with the pelvis by different bands, or processes of coagulating lymph, which were of considerable length and breadth. There was a little fluid in the pelvis, which had nothing particular in its appearance. The small intestines were cut open throughout their whole length and their coats were found much thickened, owing to a deposition of coagulating lymph betwixt them. This produced a considerable diminution of their di-

* Bonetus and Morgagni have both taken notice of these general adhesions of the intestines.

ameter in different places, but the canal was nowhere completely obstructed. On opening the colon some fæces were found, which were soft and not tinged with bile. There was no morbid redness in any point of the internal surface of the alimentary canal, or on the external surface of the viscera, or on the external surface of the peritonæum.† There was not the least appearance of pus, or curd-like matter, such as is observed in scrophulous affections, in any of the abdominal viscera. The Thoracic viscera were not examined.

Observations.—When I first saw this patient, the prominent feature of the case was an obstinate and urgent vomiting; the debility, the inconsiderable degree of pain in the abdomen, and the slight acceleration of the pulse, &c. appeared all to depend upon this affection of the stomach. I apprehended at first, that the

† Dr. Baillie observes, that “when a portion of the inflamed peritonæum is separated from the abdominal muscles, there is commonly no appearance whatever of the inflammation having spread into the muscles, but where the peritonæum covers the intestinal canal, the inflammation is sometimes found to have penetrated not only into the muscular coat of the intestines, but even into the villous membrane.”—MORBID ANATOMY.—Page 77.

vomiting might arise from atony and morbid irritability of this organ and the medicines and diet, which I prescribed, were adapted to this view of the complaint. I applied a blistering plaister to the region of the stomach, partly as a counter-irritation and partly with the view of preventing inflammation, for I did not suspect the actual existence of such an affection of the abdomen.

When I had attended a few days, I began to suppose, that there was some mechanical obstruction of the higher part of the intestinal canal, either from an organic affection of the coats of the intestines, or from a calculus &c. I was led to form this opinion for various reasons: 1st, from the obstinacy of the case; 2dly, from the small degree of pain and soreness; 3dly, from a circumstance attending the vomiting; for this was sometimes suspended for several hours, though he continued to take considerable quantities of food, drink &c. and he then brought up a prodigious quantity of bilious matter, which far exceeded the *ingesta*; 4thly, from the slowness of his bowels; and 5thly, from the appearance of the *fæces*, which neither exhibited any marks of bile, nor of any alimentary substances, that had been taken.—The febrile paroxysms, which occurred from the 2d to the 6th of April,

I had not an opportunity of observing; but, from the account I received, they were more like the exacerbations of Hectic Fever, than the paroxysms of a primary Intermittent, or Remittent Fever, which are uncommon complaints in and near Manchester. There appeared to me, however, to be no reason for suspecting the formation of an internal abscess.

Although I entertained this discouraging idea of the nature of his complaint, I continued to employ antispasmodics and I endeavoured to support his strength by nutritious substances, thrown into the rectum as well as taken by the mouth; hoping that, if the vomiting should arise from an inverted peristaltic motion, independently of any obstruction of the intestinal canal, the complaint might in time be cured, and judging it proper that the benefit, to be derived from such means, should not be withholden, as they might prolong the life of the patient, provided the complaint should be of an incurable nature. The nutritious glysters in this case were not found very serviceable, for they were not long enough retained to counteract the exhaustion, produced by the constant rejection of bile and of every thing taken into the stomach. The semicupium was not employed, because I was afraid it would increase the debility.

The appearances on dissection excited my astonishment. Such extensive adhesions of the abdominal viscera I had never before seen, nor did I think it possible, that so much mischief could have taken place in the cavity of the abdomen, where the symptoms of inflammation had been so obscure. At what period of the complaint the coagulating lymph was effused and produced these adhesions, I cannot pretend to determine. The adhesions might have been formed suddenly in the beginning of the disease, or they might have been gradually forming through the whole course of it. The latter seems the more probable supposition.

The extensive adhesions, which had taken place, betwixt the different viscera, and betwixt the viscera and the peritonæum, lining the cavity of the abdomen, will satisfactorily account for the obstinacy of the vomiting and for the absence of any material tumefaction of the abdomen: For, in the first place, the peristaltic motion of any given portion of the intestinal canal must have been impeded and overpowered by the adhesions, which it had contracted on every side with the adjoining viscera and the parietes of the abdomen: And 2dly, every given portion of the intestines must have been prevented from becoming materially distended by

the universality of the adhesions and consequently the distance of the anterior part of the abdomen from its posterior part could not be much increased.

The following case, which occurred to Dr. Garthshore, shews, that new born infants are not exempted from extensive and acute peritoneal inflammation. It is related in the 2d vol. of the Medical Communications, Pages 44 and 45.

CASE XXVI.

“The child of ——— Warwick in June, 1773, was observed after the first week to be uneasy and hot, to vomit a yellow fluid frequently and to have fewer stools than is usual for a child of that age. A gentle emetic was first given, after which Manna was copiously poured down and clysters frequently exhibited: Notwithstanding which, his bowels were difficultly and scantily evacuated. Two days after, the abdomen was observed to be swelled, tense, painful to the touch and had an inflamed appearance, which extended to the scrotum. Gentle aperients, clysters, fomentations, and the semicupium, often repeated, were of no avail. He died on the 12th day from his birth and the fifth from the attack.”

“On opening the abdomen, we found the

appearances very similar to what we had often observed in the true puerperal fever, viz. a purulent exudation covering the surface of the peritonæum, and an adhesion of many of the viscera to this membrane, and to one another, from the diaphragm downwards, with some extravasated fluid in the abdominal cavity. On laying open the scrotum, that also was swelled and inflamed; and we found purulent matter upon the surface of the epididymis and testis on each side, the testes themselves appearing inflamed. But, though the chylopoetic and spermatic organs seemed to have undergone superficial inflammation, there was no appearance of any tendency to mortification.”*

* Dr. Garthshore observes, that this inflammation ought to be carefully distinguished from the Erysipelas of new born infants, mentioned above in page 251, to which it was somewhat similar in appearance, but very different as to its attending symptoms, parts affected and termination.—He relates, that on examining the body of the infant of — Winepress, which died of Erysipelas on the 13th day of the disease, “it appeared universally tense, but the sphacelated spots were formed only on the nates and loins. On the strictest examination of the viscera of the thorax and abdomen, no mark of inflammation was discovered. The disease appeared to have affected the skin *only*, and we could hardly perceive any morbid appearance in the cellular membrane.” MED. COMMUN.

SECTION SECOND.

*Of its Analogy with Rheumatismus, Erysipelas and
Phlegmatia diuturna.*

§ 1.

IN RHEUMATISMUS pain is sometimes felt before any febrile symptoms make their appearance: But it not uncommonly begins with a cold stage, which is succeeded by increased heat and other symptoms of pyrexia, and then pain is perceived in one or more of the large joints, which also affects the muscles to a greater, or less distance from the articulations.

After the pain has subsisted for some time, a swelling and, for the most part, a redness of the part, or parts affected supervene, by which the pain is relieved; but the part is hot, tense, elastic and exquisitely tender, when pressed, or moved. The complaint passes from one articulation, or limb to another. Suppuration, or Gangrene very rarely takes place. The matter,† which is

Vol. 2, page 35.—Abscesses however did occasionally take place in this disease in different parts of the infants, who were attacked with it, at the British Lying-in Hospital.

† I have the authority of Mr. Hewson for saying,

effused, is generally completely absorbed sooner, or later. The lymphatic vessels are rarely, if ever, primarily inflamed, or enlarged.

The analogy betwixt this disease and Phlegmatia *dolens*, especially at their first formation, is so striking, that the latter might without impropriety be placed as a species of Rheumatismus under the title of R. *puerperalis*, with a reference to Phlegmatia *dolens*—There is also an analogy betwixt them, with respect to their occasional and proximate causes, method of cure, &c.

§ 2.

In Erysipelas the symptoms of pyrexia sometimes precede and at other times accompany, or succeed to the topical affection, which consists in a diffused swelling, redness, heat, pain and tension. After some time the inflammation spreads to another part, whilst the part, first affected, returns more, or less nearly to the natural colour, but remains for some time tumefied

that a gelatinous fluid, similar to what is observed in Phlegmatia *diuturna*, is sometimes seen upon cutting into tumours of the rheumatic kind near the ligaments of the joints. See Hewson's Experimental Inquiry, Part II. Page 198.

and tender and often retains the impression of the finger. There is no primary inflammation, or enlargement of the lymphatic vessels.

From this short view of the symptoms of Erysipelas it appears, that there is a considerable analogy betwixt it and *P. dolens*, the former differing from the latter complaint principally in this, that the inflammation for the most part affects the outer surface of the cutis, or the cutis only and not the cellular membrane and occasions an intense redness, which is sometimes accompanied with vesications and is pretty constantly succeeded by a desquamation of the cuticle.

§ 3.

PHLEGMATIA DIUTURNA is a chronic disease, is unaccompanied with pyrexia; attacks both sexes indiscriminately; and seizes the superior as well as the inferior extremities. The intumescence is diffused, pale, firm, elastic; is attended with little, if any, pain and with little tenderness, and is not hotter than the rest of the body; it generally begins in the lower part of the limb and rises gradually upwards. The accumulated matter has a gelatinous consistence and little, or no water escapes, when incisions, or punctures are made into the swelling.

This disease occurs as a primary affection; is sometimes found affecting the limbs of infants at their birth; is met with as the sequel of Erysipelas and Phlegmatia *dolens* and as the concomitant of cancerous affections.

A friend has informed me, that he met with a case of this disease as a primary affection in January last; the subject of which was a female betwixt 40 and 50 years of age. Both her legs were considerably swelled as high as the calf; but they were neither painful, nor materially tender to the touch, nor pitted on pressure. The complaint was speedily cured by general blood-letting—The cases of this disease, mentioned by Mr. Hewson, in his Experimental Inquiry, Part 2d, appear to have been primary affections. He says, “The cellular membrane is sometimes filled with a gelatinous fluid, which does not ouze out, when the integuments are scarified,* nor does it retain the impression on being pressed with the finger as in the common *anasarca*; this was remarkable in a woman, who was in *St. George's Hospital* a few years ago, and who at the same time had an obstruction of her

* Perhaps if the punctures, or incisions had been made deeper, some humour might have flowed out in some of those cases of Phlegmatia *dolens* and *diuturna*,

menses, but no other symptom of ill health. The legs in this woman were swelled to twice their ordinary size, but did not pit on being pressed with the finger. A case of the same sort may now be seen in one of the nurses at *St. Bartholomew's Hospital*," pages 197 and 198. Mr. White† informs us, that he has met with several instances of this disease, which have been of many years standing; but he does not enter into the consideration of the origin and formation of the swelling.

I have seen this complaint affecting the hand and forearm of a girl, who was said to have brought it into the world with her. When a child is born with a limb, or limbs affected with this intumescence, it may in some instances, perhaps, have been a primary affection; but it is probable, that in other cases it may have been preceded, or occasioned by Erysipelas, since the case, related by the late Dr. Bromfield and inserted in the 2d volume of the *Medical Communications* (p. 22—27), proves that a foetus in utero may be attacked with Erysipelas.

Phlegmatia diuturna has occurred to me as

wherein surgeons have not succeeded in drawing off any fluid by these means.

† Inquiry, Pages 55 and 56.

the sequel of Erysipelas and *Ph. dolens*. I have also seen it as accompanying a cancerous affection. And as this disease, whether occurring as a primary, or as a connate complaint, or as the sequel or concomitant of some other disease, is rather a rare occurrence, I am induced to relate the histories of two cases, that I have met with within the present year.

CASE XXVII.

ELIZABETH DUTTON of Manchester, aged 62, received a blow on her left fore-arm, when she was only twelve years of age. Several abscesses formed in the injured part of the arm and also about the elbow-joint, which, from her account, I believe to have been of a scrophulous nature. When she was 14 years of age, she bathed her arm in a well by the advice of a friend. She was soon after seized with symptoms of pyrexia and an erysipelatous inflammation of the arm supervened. From this time she suffered repeated similar attacks of Erysipelas; the hand and arm swelled considerably, but the swelling always disappeared completely after some time, till within the last 14 years.

When the catamenia ceased, about 14 years since, several abscesses formed in her neck; and she continued to be subject to frequent attacks

of Erysipeias. These have always commenced with coldness and shivering, succeeded by heat and other febrile symptoms; the inflammation has then taken place in her arm and after some days has gone off. The cuticle of the hand and part of the arm has afterwards peeled off, but the swelling, instead of subsiding as before, has remained and gradually increased after each attack, the last of which happened about thirteen months ago.

The left arm is now swelled higher than the elbow-joint, and is so much enlarged, that it measures $16\frac{1}{2}$ inches just below the elbow. The sound arm measures only $8\frac{1}{4}$ inches in the same part. The swelling is elastic near the elbow, but retains the impression of the finger for a short time about the wrist and rather longer on the back of the hand. It is neither tense, nor discoloured, nor tender to the touch, nor has she much uneasiness in using it. She has never perceived any red lines, or streaks upon it, nor is there at this time any appearance of enlargement of the lymphatic vessels, or glands of the limb. Her fore arm having been accidentally wounded, some fluid was discharged, but the swelling was not materially reduced by it.

Her right arm has also been several times affected with Erysipelas, and the back of the hand and wrist are a little swelled in conse-

quence thereof; but there is no tumefaction above the wrist. She has had repeated attacks of Erysipelas in her face, which have left a permanent swelling, or fullness there also. No remedies have been used for the removal of these swellings.

Her legs have never been subject to an erysipelalous inflammation; nor did either of them swell, when she lay in; but she had a troublesome suppuration in one of her breasts. The axillary glands have not been affected.

CASE XXVIII.

ANN HAMPSON, of Hooley-Hill, near Ashton-under-line, aged 46, had her left breast taken off and several conglobate glands removed from the axilla, on March 27th, 1800, in the Manchester Infirmary.

On the 3d of April, 1800, I was consulted by her. Ever since the operation she had experienced pain, soreness and stiffness in her left arm, just below the shoulder, and had been unable to raise her elbow as high as her shoulder. About a fortnight before, this arm had begun to swell. The swelling commenced near the shoulder; passed downwards and in a few days arrived at the elbow. In a few days more it had descended to the wrist and, in about a week

from the first attack, the hand and fingers became affected with swelling. A slight degree of uneasiness and stiffness followed the tumefaction, first to the elbow and afterwards to the hand. She could bend the elbow without pain and in a morning could grasp her hand close, the swelling of the hand subsiding a little during the night; but, when she had been up a few hours, she could not close it. The colour of the arm was scarcely affected. The arm was not tense, nor hot, nor tender to the touch. The intumescence above the elbow was perfectly elastic; below the elbow it retained the impression of the finger for a shorter or longer time, according as it was pressed in the higher or lower parts. The back of the hand was more pitted on pressure than the arm, and appeared semitransparent: But it did not retain the impression of the finger quite so long as is common in Anasarca. The circumference of the affected arm above the elbow was $2\frac{1}{2}$ inches greater than that of the sound arm; and it was $1\frac{3}{4}$ inch greater below the elbow, in the thickest part. The circumference of the tumefied hand was $1\frac{1}{2}$ inch greater than that of the sound hand. There was not the least appearance of either inflamed, or enlarged lymphatic vessels in any part of the arm.

In the situation of the extirpated mamma there was a large cancerous ulcer; the surrounding parts were considerably inflamed, and affected with burning and lancinating pain. The intumescence extended further than the inflammation, reaching laterally into the axilla, and upwards nearly to the clavicle. The cutaneous veins of the tumefied part of the thorax were considerably enlarged and appeared unusually numerous. Her urine was in natural quantity. Her sleep disturbed and unrefreshing. Her pulse remarkably small and weak, and beating more than 100 strokes in a minute. She was applying an herb poultice, composed of Foxglove,* Groundsel, Chickweed, &c, both to the breast and arm by the advice of an old woman, who was bold enough to promise her a cure.

I directed a full dose of Opium and Succus Cicutæ Spissatus to be taken at bed time, and

† *Foxglove*, from its abundance perhaps, is very commonly used in Lancashire, as the principal, or only ingredient in fomentations &c. I have witnessed the application of it in inflammation, supervening to Anasarca and a variety of other inflammatory affections; but my experience does not authorize me to say, that, as an external application, it has more efficacy than Chamomile flowers.

an Emollient Ointment to be applied to the arm. As I could not promise her any relief for the cancerous ulcer, I left her at full liberty to continue the use of the poultice to it.

August 7th. No material alteration had taken place in the appearances of either her arm, or her breast, or in her other symptoms.

August 10th. Her pulse was smaller and more frequent; her general health was evidently declining. She had continued to apply the poultice to her arm. The fore arm was now considerably inflamed on the outside, and was redder than natural on the inside. The swelling was not increased. I desired her to discontinue the use of the poultice and apply the liniment, before directed.

August 11th. She had left off the use of the poultice to the fore arm, which was less inflamed, but not less swelled. She continued to apply the poultice to the upper part of the arm and breast. The ulcer and swelling of the breast were rather increased. She complained of a troublesome pain in her side, to which I desired her to apply a blistering plaister, and directed her to take some Oleum Ricini, as her bowels were not sufficiently open.

August 13th. 8, p. m. The arm was rather more swelled and there was more redness along

the back of the fore arm, but this part was neither hot nor tender. In other respects she was little altered.

August 16th. 5, p. m. The swelling of the arm was evidently increased, but was less red. The elasticity of the arm above the elbow was as great as before, but the fore arm and hand retained the impression of the finger longer. The ulceration and tumefaction of the thorax were increased. Her pulse beat 108 strokes in a minute and was very feeble. I was not able to perceive at this, or any preceding visit, any inflammation, or enlargement of the lymphatic vessels. The axilla was much swelled, but I could not find any distinct, enlarged conglobate glands there.

August 18th. On calling to see her this day, I was informed, that she had returned home the day before.

September 17th. I was this day informed by Mr. Stewart, who saw her on the 14th of this month, that her general health was much impaired since she left Manchester; that the state of her breast was little altered; and that the upper part of the arm was rather less tumefied, but that the fore arm and hand were equally as much swelled as when I last saw her. He also informed me, that the swelling was less elastic,

free from discolouration and not tender to the touch.

In those primary cases of *Phlegmatia diuturna*, which depend upon a plethoric state of the system and are removed by general bloodletting, I apprehend that a thicker fluid is forced out of the exhalants into the cellular texture of the limb and that the absorbents act naturally, or even more powerfully; whence the swelling becomes firm and elastic and no fluid issues out, when the limb is punctured.

In those cases of it, which succeed to *P. dolens* and to Erysipelas, I believe the effusion to be made in consequence of the exhalant arteries of the part being overstrained during the inflammatory stage and allowing a large quantity of coagulating lymph to escape into the cellular membrane of the part.

When *P. diuturna*, or *Œdema†* occurs, as the concomitant of a cancerous affection, as in the arm, for example, along with a cancerous state of the breast and enlargement of the axillary glands,* it is probable, 1st, that in some

† When in these cases the effused fluid is a mere serosity, and the swelling is easily pitted upon pressure, the complaint is to be referred to *Œdema* or *Anasarca* rather than *Phlegmatia*.

* In many cases of cancerous *mammæ*, which termi-

cases the exhalants are little, if at all, affected, the swelling being imputable to the obstruction of the absorbents either in the arm or the axilla; 2dly, that in other cases the scirrhus affection of the axilla, by compressing the principal vein and thereby impeding the return of blood from the arm, may occasion an increased effusion of a thicker fluid into the cellular texture of the arm; and 3dly, that in other cases both the exhalants and absorbents are considerably affected. From whichever of these causes the swelling of the arm takes place, it will generally begin in the hand and rise gradually upwards. Thus, in the case of G—— related by Dr. Ferriar, the swelling of the fore arm, which was full, uniform, not painful, nor pitted on pressure, began in the hand and “rose gradually as high as the elbow, but never went farther.”—“No enlargement of the lymphatic vessels could be ascertained by the touch.”—Page 123.—During the night the more fluid portion may be expected to pass, in part at least, into the cellular membrane of the trunk and be absorbed from thence, whilst the thicker and

nate fatally, no tumefaction of the arm takes place, although the axillary glands be enlarged,

coagulated portion will remain in the arm and present a more or less elastic tumour.

In the arm of Ann Hampson (Case XXVIII) the swelling however took a different course: It began about the shoulder and descended to the fore arm and hand. It may, therefore, be doubted, whether the above explanations are applicable here—No tumefaction followed the division of the absorbents, when the conglobate glands were cut out of the axilla; hence we may suppose, that an adhesive inflammation soon took place and, by closing their canals, prevented, or soon stopped the effusion of lymph from them, which might otherwise have been expected: And the divided parts of the lymphatics being closed, no perceptible accumulation of fluid took place in the limb during the first 16 weeks after the operation, either because the uninjured lymphatic vessels of the arm were capable of absorbing and conveying the whole of the effused fluid to the thoracic duct; or because the superabundant quantity passed to the shoulder and trunk during the night and was taken up by the absorbents opening into the cellular membrane of those parts. However this may be, after the lapse of 16 weeks the balance betwixt the exhalation and absorption was destroyed and a considerable accumulation of effused fluid was pro-

duced in the arm—How is the formation and course of the swelling of the arm to be explained in this case? Did some lymphatic burst, or ulcerate in the upper part of the arm and pour out its contents there? Were the lymphatics, opening upon the cellular membrane in the upper part of the arm, principally or solely affected? Or did inflammation arise in the muscles, or cellular membrane of the upper part of the arm and produce an effusion of serum and coagulating lymph there?—Since the affection of the lymphatic glands was permanent, if not increasing, it seems extraordinary at first sight, that the tumefaction of the arm in this case, as well as in the case related by Dr. Ferriar, should have diminished, or have become stationary—Was this owing to the veins, or lymphatics of the limb, which were not obstructed by the pressure of the axillary glands, becoming enlarged and carrying the whole of the blood, or lymph, that was afterwards circulated or deposited in the arm, to the heart? If the tumefaction were occasioned by the enlargement of the lymphatic glands pressing upon the axillary vein and producing an increased effusion of fluid into the limb, the swelling may be supposed to have become stationary from a dilatation of the other veins of the limb—If the swelling were

occasioned by the enlargement of the lymphatic glands impeding the absorption of the effused fluids, the tumefaction may be supposed to have become stationary from the collateral lymphatics, which were not compressed by the axillary glands, becoming dilated.

In the CURE of Phlegmatia *diuturna*, if it be a recent, primary affection and appear to have arisen from and be connected with a plethoric state of the system, (as when it occurs in consequence of the suppression of some accustomed hæmorrhage) &c, general bloodletting and other evacuants may be proper and necessary.

When the systematic affection is removed and only the topical affection remains, or when the complaint has succeeded to Erysipelas, local remedies are principally to be depended upon, namely, stimulating applications, friction with the hand or a flesh brush, and bandages.

In recent cases a calico, or flannel roller properly applied may be found sufficient; but, when the intumescence is of long standing and obstinate, I should prefer long slips of linen, or calico, spread with Empl. Lithargyri, or Empl. Lithargyri cum Resina, and from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches broad, applied as a roller, or in the manner recommended by Mr. Baynton for the cure

of ulcerated legs.* The pressure, made upon a limb by slips, or straps of an adhesive plaister,

* Mr. Baynton has conferred a great obligation on the public, by the early and unreserved communication of his method of treating ulcers. The advantages of this practice appear to be derived solely from the strong, steady and equable pressure, produced by the proper application of straps of adhesive plaister, aided by a calico roller.—In the first place, this pressure by exciting the action of the absorbents occasions the callous edges of the ulcer to be rendered thinner and softer and the callous, or fungous incrustation to be removed from the surface of the sore. For, agreeably to a law of the animal economy well explained and illustrated by the late Mr. John Hunter, weak, diseased and newly formed parts are readily absorbed, when exposed to pressure or irritation. 2dly. By increasing the tone and energy of the sanguiferous system of the limb, it occasions the extremities of the vessels, opening upon the ulcer, to act vigorously, to secrete pus and coagulating lymph, to become elongated and perhaps multiplied so as to form granulations of a florid red colour, which gradually fill up the sore. 3dly. When healthy granulations are formed, by aiding the contraction of these in producing an approximation of the margins of ulcers, it favours their healing. This advantage, derivable from Mr. Baynton's method, is most evident in linear and oblong ulcers, placed in a longitudinal, or slightly oblique direction with respect to the length of the limb. It is less evident in ulcers of a circular, or roundish form, but here it favours in some degree what may be named the centripetal power of the circumference of the ulcer—a

is more equal, steady and constant than can be made by any other means and hence is particu-

power, which is usefully exerted and beautifully exemplified in the cicatrices of those stumps, where a sufficient quantity of the integuments has not been preserved, and which is injuriously exerted and productive both of great deformity and much inconvenience in the cicatrices of ulcers occasioned by burns, when these happen to be situated upon the neck, or near any of the large joints, and are not very carefully attended to. It is still less evident in those ulcers, which are linear, or oblong and are placed transversely on the limb : But in these cases the advantage, arising from the circular application of the straps of plaister, may be increased by previously applying long slips of plaister across the ulcers, so as to bring their edges nearer to each other. 4thly. By repressing the luxuriancy of the granulations and preventing them from rising above the level of the circumjacent skin, it promotes the skinning of the ulcer, which Mr. Hunter says is a process "somewhat analogous to chrySTALLIZATION."—Hence it appears, that the steady, regular and equal pressure, produced by straps of plaister in conjunction with a calico roller, is capable of promoting each of the four processes, observable in the healing of old ulcers. It has not yet, I believe, been fully determined whether any, or what degree of advantage is derived in Mr. Baynton's method from the plaister lying in contact with and acting upon the surface of the ulcer. But this might be easily done by observing the effect, produced by interposing a piece of gold-beater's skin betwixt the sore and the plaister. It is worthy of inquiry how far this

larly useful in diminishing effusion and promoting absorption. From some late observations of its efficacy in reducing tumours of different kinds, I am convinced that the introduction of this kind of bandage gives us a command over tumours, unaccompanied with inflammation, which we did not before possess and that its use should not be confined to the treatment of ulcers merely. In proof of what I have just been advancing, I shall relate the following case.

CASE XXIX.

ALICE HARWOOD, a girl about 12 years of age, consulted me more than 9 months since, concerning a complaint in her left knee. Her mother informed me, that the knee began to be painful and swell, about half a year before, without any evident cause; that the swelling had been gradually increasing and her health was declining. On examining the knee, I found, that there was a considerable accumulation of fluid within the joint, by which the patella was elevated about three quarters of an inch from the trochlea of the os femoris, and there was also

method of healing ulcers may be assisted by applying dry lint and other dressings.

a collection of fluid in the *Bursa mucosa* situated behind the tendon of the extensor muscles of the leg, forming a tumour on the inside of the thigh above the patella. Knowing that the mother, who is a poor widow and has seven children, could not well procure the necessary medicines, I advised her to send the girl into the Infirmary: But learning afterwards, that the mother could not be prevailed upon to send her thither, I took the girl under my care on the 8th of February 1800. The knee was nearly in the same state, as when I before saw it and I directed the following medicines for her.

℞ Pulv. Cort. Peruv.	Gr. x
—— Fol. Digitalis	Gr. $\frac{1}{4}$
—— Aromatici	Gr. iv

M.

F. Pulvis ter die sumendus.

℞ Spir. Camphorati	ʒijss
Tinct. Opii	
Linim. Saponis	āā ʒij

M.

F. Embrocatio bis die utenda.

She had an issue in the inside of the thigh, above the swelling, which I desired might be kept open, and I directed a flannel roller to be applied exactly and tightly round the knee after each time of using the embrocation.

At the end of April she had taken 48 of the Powders and had used six bottles of the Embrocation, prescribed above. Her general health was improved and the knee was less stiff and also less painful when moved, but not reduced in size—I ordered her to discontinue her remedies and, instead of having recourse to leeches, blistering, purgatives, or emetics, which are often employed in these cases, I directed long straps of adhesive plaister to be applied round the knee and lower part of the thigh, with as much tightness as she could well bear, and the flannel roller to be applied tightly over them, hoping, that by this compression the effusion of fluid within the articulation and *Bursa mucosa* would be lessened and the action of the absorbents increased.

Under this treatment her knee soon began to improve. The swelling gradually subsided. The joint is at this time no larger than natural and she walks with perfect ease: But there is a slight tumefaction on the inside of the thigh above the patella, which appears to be owing to a small collection of fluid within the *Bursa mucosa*,† situated behind the tendon of the extensors of the leg. On this account the application of the

† See Monro's Description of the Bursæ Mucosæ &c. Tab. IV.

adhesive plaister to the lower part of the thigh is continued and the flannel roller is still applied round the articulation, to prevent a return of the complaint. The issue is healed.

When *Phlegmatia diuturna* occurs as the sequel of *Ph. dolens*, the remedies, directed above for the cure of the 3d stage of this complaint, are to be employed. The superiority of a roller composed of straps of plaister, in reducing the intumescence of the limb in these cases, will appear evident from its effects upon the left lower extremity of the patient, who is the subject of the twelfth case.

Continuation of CASE XII, from page 169.

Sept. 2d. Mrs. *****'s left leg and thigh remained considerably swelled, and the knee joint was stiff, but not so much contracted as it had been. Her right leg was edematose as high as the calf and she complained of a fullness in the hypogastric region. Her urine was in small quantity. Her appetite was good and her pulse natural. She rode out frequently in a carriage and walked about in the house as usual—She was directed to discontinue the hot bath; to apply a fomentation of milk and soap to her knee twice a day and to rub Ung. Hydr. Mit. ʒjss into the contracted part every night; to

take the pills prescribed on the 23d of August, and to take two pills, containing Pulv. Zingib. Gr. iv & Pulv. Scillæ Gr. ij, every night at bed time.

Sept. 8. Very little alteration had taken place. Her mouth was not at all affected by the mercurial ointment—She was ordered to continue the Ointment and the Squill Pills and, instead of the other Pills, to take the following Mixture.

R Ferri Vitriolati	Gr. xvij
Gummi-Res. Myrrhæ	ʒiv
Carbonatis Kali crystalliz.	ʒij
Aquæ Puræ	ʒvij
Tinct. Cinnam. Comp.	ʒj

M.

Sumat coch. ampla iij ter die.

Sept. 16th. Her general health and the state of the lower limbs were improved. Her mouth was unaffected. Urine natural in appearance and quantity.—The mercurial ointment was directed to be applied only every other night. Her other remedies were continued.

Sept. 18th. The swelling of the left lower extremity appeared to be stationary; in some parts it was firm and elastic and in others edematose. A flannel roller had been constantly applied to her legs.—Straps of calico spread with

Empl. Lithargyri, from one inch and a half to three inches in breadth and about a yard and a quarter in length, were applied round the left foot and leg, as high as the knee, with a considerable degree of tightness and over these a flannel roller was applied. Two scruples of Myrrha and six grains of Ferrum Vitriolatum were added to her Mixture; and one grain of Gambogia to each dose of the Squill Pills. The Ointment was continued.

Sept. 20th. The left leg and foot were reduced and rendered easier by the straps of plaister. The Mixture and Ointment were continued and the following Pills were directed, instead of those last prescribed, which had purged her very much.

R Pulv. Rad. Scillæ	Gr. vj
— Fol. Digitalis	Gr. ij
— Gummi-Res. Gambogiæ	Gr. j
Ol. Efs. Bacc. Juniperi	Gtt. vj
Cons Cynosb. q. s. ut fiant Pilulæ iv.	

Capiat ij sing. noctibus hora somni.

Sept. 22d. The fullness of the hypogastric region was considerably diminished; the right leg was but little swelled. The urine in natural quantity. The left leg was very much reduced and she walked with more ease. The

straps of plaister were applied with more tightness.

Sept. 26th. The left leg was reduced to the natural size: The contraction of the knee was much less. The left thigh remained swelled and the right leg was edematose as high as the calf. Fresh straps of plaister were applied to the left leg and her other remedies were continued.

October 1st. The left thigh continuing swelled, straps of plaister were applied to it and seconded by the application of a flannel roller. The Pills and Ointment were discontinued.— Her mouth had not been affected by the Mercury.

October 3d. Her strength continued to improve. The swelling of the left leg was completely reduced, and that of the thigh considerably less. Her right leg was slightly edematose as high as the calf and she perceived some swelling of the hypogastrium; but this was diminished. Her urine natural. Her appetite good. The Mixture was continued.

There is great reason to believe, that her complaints will be removed in a short time by this method of cure.

From the advantage, gained by the application of straps of plaister in this case, I am in-

duced to think, that they will prove a very useful remedy in those cases, wherein there is less disposition to anasarca.

Occurring in the arm, as a concomitant of a cancerous breast, this complaint cannot well be expected to admit of a perfect cure. But the tumefaction may be moderated by a proper position of the arm, and by gentle friction with the use of emollient and sedative liniments. If, it should continue to increase very rapidly and be not accompanied with inflammation, the swelling may be restrained by the application of a roller, or straps of adhesive plaister, which may be managed so as to prevent, or diminish the effusion of fluid from the exhalants into the cellular texture of the limb.

§ 4.

IN ANASARCA the intumescence at first is always soft and inelastic, yielding easily to the finger and retaining its impression for a considerable time: It is neither preceded by pain, nor is it hotter than natural: It is not particularly tender, or painful, when the limb is touched, or moved: It generally begins upon both feet, or about the ancles, and gradually rises upwards: It disappears, or at least is materially diminished

during the night, from the limbs being placed in an horizontal position : If a puncture, or incision be made in an anasaruous limb, a watery fluid issues out very freely. Hence the distinction of *Phlegmatia dolens* and *Anasarca*, in the first stage of these complaints, is extremely easy.

As the first stage of *Anasarca* resembles the last stage of *Ph. dolens* ; so it sometimes happens, that *Anasarca* in a more advanced stage approaches nearly to the first stage of *Ph. dolens*. For, as the accumulation of fluid increases in the lower limbs, the skin becomes stretched and irritated, takes on a shining appearance and yields less easily to the pressure of the finger ; the limbs are tender and painful when touched, or moved rudely : The effused fluids become in some cases of a gelatinous consistence* and consequently cannot be drawn off by making punctures, or incisions through the cutis.— Arrived at this state, anasaruous limbs not unfrequently become affected with an erythematic

* The thicker consistence of the effused fluids in *Anasarca* is, probably, sometimes owing to a great degree of relaxation of the exhalants and at other times to increased action of the arteries.

inflammation, which produces vesications, ulcerations, or gangrene—Thus, whilst Phlegmatia *dolens* descends from an inflammatory affection to a cold intumescence, Anasarca rises gradually from a cold intumescence into a violent inflammatory affection.

CHAPTER FOURTH.

OF THE CHARACTERS AND SYNONYMS &c. OF PHLEGMATIA AND ITS SPECIES, WITH THEIR MOST PROPER PLACE IN THE NOSOLOGICAL SYSTEM OF CULLEN.

THE genus Phlegmatia, as characterized by Sauvages and Sagar,* differs in no respect from Anasarca, except in being confined to the lower parts or extremities. But a mere difference in the extent of the intumescence does not appear to me to be a good ground for a generic distinction; since, if this be admitted, almost every case of Anasarca must at first be a Phlegmatia and almost every case of Phlegmatia, if its progress be not stopped by nature, or art, must become an Anasarca. Hence, I have thought it proper, in establishing Phlegmatia as a genus distinct from Anasarca, to take its character from a manifest difference in the assemblage of symptoms, or phænomena, as will appear from the view of this genus and its species, given in the first section of this chapter.

* See above p. 46 and p. 53.

SECTION FIRST.

Of the Character, Synonyms, Description and Diagnosis of the genus Phlegmatia and its species.

PHLEGMATIA. Phlegmatix, Oedematis, Ischiadis, Hysteralgix species *Sauvagesii*: Anasarca species *Culleni*: Phlegmatix, Hysteralgix species *Sagari*: Phlegmatix, Ischiadis species *Danielis*: Oedematis species *Ploucqueti*.

Artus unius, vel plurium, intumescencia diffusa, albida, renitens, elastica, non crepitans.

Obs. Differt ab Anasarca, vel Oedemate; 1° quod digiti impressi foveam vix, vel ne vix quidem servat; 2° quod situ horizontali vix, vel omnino non imminuitur; 3° quod vulnere inflicto humor aquosus vel non, vel exigue admodum effluit: A Pneumatosi, quod sub manu non crepitat.

I. PHLEGMATIA *dolens*.

Artus, ut plurimum inferioris, tumor tensus, calidus, tactu ac motu dolentissimus.

Phlegmatia lactea *Sauvagesii* Tom. II. p. 475. *Sagari* p.

153. *Danielis* Syst. *Ægriitudinum* P. II. p. 203.

Ischias ab Sparganosi *Sauv.* T. II. p. 142 & seq.

Ischias lacteum *Danielis* P. II. p. 199.

Hysteralgia lactea *Sauv.* Tom II. p. 126. *Sagari* p. 264.

Oedema lacteum* *Sauv.* Tom I. p. 142.

* The generic character of OEDEMA is thus given by

- Oedema galacticum* Ploucqueti Delin. Systematis Nosologici Tom. III. p. 165.
- Anasarca serosa Culleni* Nos. Meth. Ed. 3. p. 275.
- Metastasis lactis, vel lymphæ Selle Pyr. Meth. p. 368.
Lib. de curandis homin. morbis p. 481 &c.
- Materiæ lacteæ decubitus in partem. *Lieutaud* p. 465.
- Metastases lacteæ. *Van Swieten* Comm. T. IV. § 1329.
- Tumor lacteus extremitatum *Plenck*. Compend. Inst. Chirurg. p. 378.
- Enflure des jambes & des cuisses de la femme accouchée.
Mauriceau Traité des Mal. des Fem. p. 446.
- Dépôt laiteux sur la cuisse. *Puzos* Mémoire p. 350. *Astruc*
Tr. des Mal. des Fem. Tom. V. Lib. III. Ch. 16.
§ 1. *Hevin* Cours de Path. T. I. p. 259.
- Engorgemens laiteux aux extrémités inférieures. *Leuret*
L'Art des Acc. p. 168.
- Infiltration laiteuse des extrémités inférieures. *Leuret*
Mém. Supplém. p. 338.
- Swelling in one or both of the lower extremities, which

Sauvages "Tumor diffusus, frigidus, pallidus, laxis, doloris expers," and the following is the specific character of *Œ. lacteum*, with its synonyms &c.

7. *Œ. lacteum*; infiltration laiteuse, lait repandu. C.
Vide Mémoires de l' Acad. Roy. de Chirurgie. T. 2.

Puerperis, rarius gravidis, accidit; textum cellulosum inflat; dolore stipatur; mammas, inguina sæpius afficit; phlebotomiis, diureticis, fomentis resolventibus, impugnatur. Vide *Mastodyniam lacteam*, *Ischias lacteum*.

From what is said by Sauvages under *Ischias ab Sparganosi*, it is evident that he considers the two complaints as the same.

sometimes happens to Lying-in Women. *White's Inquiry.*

Swelling of the lower extremities, incident to lying-in women. *Trye's Essay.*

Affection of the lymphatic vessels hitherto misunderstood.

Ferriar's Medical Hist. and Reflections, Vol. 3.

DESCRIPTIO. Morbus initio semper fere pyrexia stipatus; puerperis, ut plurimum circa 14m a partu diem, rarissime gravidis, nutricibusve infestus; a dolore & rigiditate lumbi, hypogastrii, inguinis, aut femoris plerumque incipiens, ad genu, tibiam & pedem ejusdem lateris descendens; rarius pedem, aliamve artus partem primum afficiens. Succedit artus totius intumescencia pallida, tensa, elastica, calida, tactu motuve dolentissima. Artus affecti glandulæ conglobatæ nonnunquam aliquantum tument & dolent, forte etiam vasa lymphatica, arteriæ, venæ & nervi majores. Intra hebdomadam unam, vel alteram cessat, aut saltem declinat pyrexia; artus dolor, tensio et calor sublevantur; tumor minus firmus evadit, digiti impressi foveam diutius retinet atque posthac sensim disparet. Interdum, sed rarissime, in apostema, ulcus, gangrænamve abit. Nonnunquam ad extremum alterum inferius serpit, vel transit morbus. An artus superiores petit?

DIAGNOSIS. Differt ab *Anasarca* & *Phlegmatia gravidarum* Sauvagesii, quod in istis morbis a pede utroque ad tibias cruraque sensim ascendit intumescencia, atque doloris expers saltem initio est & digiti impressi foveam facile satisque diu servat; ab *Erysipelate*, quod rubedine vacat cutis; a *Rheumatismo* quod diffusior est neque articulos potissimum adficit tumor.

2. PHLEGMATIA diuturna.

Artus inferioris, superiorisve, tumor, doloris expers, naturali non calidior.

Phlegmatia Malabarica Sauv. Tom. II. p. 477. Sag.

p. 155?

———— hystERICA Sagari p. 154?

Anasarca hystERICA Sauv. Tom. II. p. 473. Sag. p. 152?

Hewson's Experimental Inquiry &c. Part II. p. 197.

White's Inquiry &c. p. 55—Trye's Essay &c. p. 8.

Ferriar's Medical Histories &c. Vol. III. p. 122.

Hujusce speciei Varietates sunt

α. primaria, a nullo alio morbo pendens.

β. secundaria, a morbo prægresso ortum ducens.

γ. symptomatica, alium morbum comitans.

DESCRIPTION. Morbus chronicus, seu pyrexia non stipatus, interdum connatus; sexui utrique sine discrimine accidens; artus tam superiores quam inferiores infestans. Intumescentiâ diffusa, rubedinis & doloris vacua, digiti prementis vestigium vix vel prorsus non retinens, calorem naturalem non superans; ab artus inferiori parte plerumque incipiens & pedetentim sursum progrediens—Var *α.* a plethora nonnumquam provenit. Var *β.* Erysipelatis, Phlegmatix *dolentis* &c est sequela. Var *γ.* Glandularum lymphaticarum scirrhi aliquando est comes.

DIAGNOSIS. A Phlegmatia *dolente* differt hæc species, quod intumescentiâ dolore acuto & calore aucto non stipatur: Ab Anasarca, quod renitens & elastica est: Ab Hydarthro, quod diffusior est, neque articulum præsertim afficit.

Fatendum vero est limites inter Phlegmatiam *diuturnam* & Anasarcam satis accuratos non ubique assignari posse; nonnumquam enim occurrit mista, vel utriusque generis particeps intumescentiâ;† quippe quæ in toto

† The complications and transmutations of diseases with the varieties, arising from particular circumstances,

artu Anasarcâ renitentior & Phlegmatiâ minus elastica sit, vel quæ in artus parte superiori sit firma & elastica atque in inferiori digiti prementis vestigium facile & satis diu retineat.

The principal objects of a System of Nosology, in the more limited acceptation of the term, are

1st. *To teach us to distinguish diseases from each other by arranging them methodically; by giving to each an appropriate generic and*

are so numerous as to render it extremely difficult, if not impossible, to exhibit all their forms accurately delineated in a Nosological System. But, if the more simple, constant and essential forms of diseases be properly established, this will be productive of much benefit; for whoever is well acquainted with these will find himself much less perplexed by the complicated, diversified and varying forms, that occur in actual practice. He will be enabled to appreciate the degrees of proximity of each of these forms of disease to the different simpler forms, to determine of what species each is to be regarded as a variety and of what other species it participates. Were practitioners to investigate diseases with the same ardour and attention, that the objects of Natural History have been and are scrutinized, and to preserve and communicate the result of their observations, the descriptive part of the Science of Medicine would soon arrive at a degree of excellence, which to many may appear unattainable. And who does not perceive the great advantages, that would result from a successful cultivation of what may with propriety be named the basis of this most useful science?

specific name ; by presenting abbreviated, or essential characters, expressed in accurate and precise language ; by adding full descriptions and occasionally illustrating these by particular histories : and by indicating the particular circumstances, in which each disease differs from those, that most nearly resemble it, in the general course and succession of symptoms.

2dly. *To constitute a convenient Index to the valuable part of the Bibliotheca Medica and Chirurgica*, by pointing out the Synonyms of each disease and giving references to those nosological and practical works, which contain any material information, relative to the characters, histories, causes, terminations, prognosis, prevention and cure of particular diseases.

The above view of the genus Phlegmatia presents an exemplification of the plan, upon which I think the genera and species should be given in a System of Nosology. It is exhibited here in expectation, that those, who have paid attention to the subject, will be induced to offer their sentiments upon it and that those, who have leisure and opportunity, will labour particular genera of diseases upon a similar, or improved plan.

The field is extensive and a general cooper-

ation is necessary :* For, until the genera, species and varieties of diseases are more accurately described and characterized,† the superior divisions of orders and classes must remain liable to objections and the diagnosis of diseases must be attended with insuperable difficulties.

SECTION SECOND.

Of the place, which this genus should occupy in the Nosology of Cullen.

In distributing diseases into orders and classes, we ought to be guided by a similarity in their phænomena, or symptoms, not by speculations concerning their nature, or proximate cause.

Since the generality of writers and practitioners, attending to the external appearance of the swelling of the limb, has considered Phlegmatia dolens as an Intumescencia rather than a Phlegmasia, I am hence inclined to arrange the

* “ Singulorum generum elaboratio non est opus unius hominis, nec forte unius sæculi,” Sauvages Nos. Meth. Tom. II. p. 628.

† Nemo est, ut opinor, qui non facile agnoscat historias morborum pleniores, magis exactas & characteribus melius distinctas, quam quas adhuc habuimus, desideratas esse.” Culleni Nos. Meth. Proleg. Tom. II. p. 2.

genus in question immediately after *Anasarca*, in Class IIId, Order IIId, Section 3d (CACHEXIÆ —INTUMESCENTIÆ *Aquosæ*) of Cullen's System: But, as *Ph. dolens*, at its commencement, agrees in its assemblage of symptoms with the diseases placed in Class Ist Order IIId (PYREXIÆ —PHLEGMASIÆ of Cullen), it will be also proper, either to place it as a species of Rheumatismus,* or to add it in Italics at the end of the synoptical table of the genera, referred to the Order Phlegmasiæ, agreeably to an useful practice amongst botanical writers; who generally place one (or more) species of a genus in the synoptical table of a different Class and Order from that, in which the genus is arranged, when it happens to agree with this Class and Order in the number of the stamens, or pistils, &c, and to disagree in these circumstances with the rest of its congeners.—The practical botanist derives great advantage from this kind of reference in the investigation of plants.

Should any person be averse to the introduction of a new genus into Cullen's Nosological System, or think *Anasarca* and *Phlegmatia* too nearly allied to be made distinct genera, the two

* As intimated above in page 325.

species of the latter genus, which I have been endeavouring to establish, may be referred to the *Anasarca* of Cullen, by making a slight alteration in the generic character (as, for example, by the insertion of the word *plerumque*) and dividing the genus into two sections, according to the following scheme.

G. LXXV. ANASARCA:

Corporis totius, vel partis ejus intumescencia
plerumque mollis, inelastica.

* *Inelasticae, molles.*

- | | |
|-----------------------------|-----------------------|
| 1. <i>A. serosa.</i> | 4. <i>A. anæmia.</i> |
| 2. <i>A. oppilata.</i> | 5. <i>A. debiliū.</i> |
| 3. <i>A. exanthematica.</i> | |

** *Elasticæ, non crepitantes.*

- | | |
|----------------------|------------------------|
| 6. <i>A. dolens.</i> | 7. <i>A. diuturna.</i> |
|----------------------|------------------------|

FINIS.

CORRECTIONS.

PAGE. LINE.

- 4 — 15 After *Rheumatism* add &c.
 9 — 2 For *clan-* read *clau-*
 17 — 27 & 28 Some italic *e*'s are not accented and others improperly accented, for want of types.
 108 — 17 For *had theory* read *theory had*
 163 — 12 For *3j* read *℥j*
 230 — 19 For *dreams* read *phantoms*
 302 — 11 For *ampv.* read *ampl.*—For *allus* read *alvus*
 313 — 5 For *returned* read *retained*

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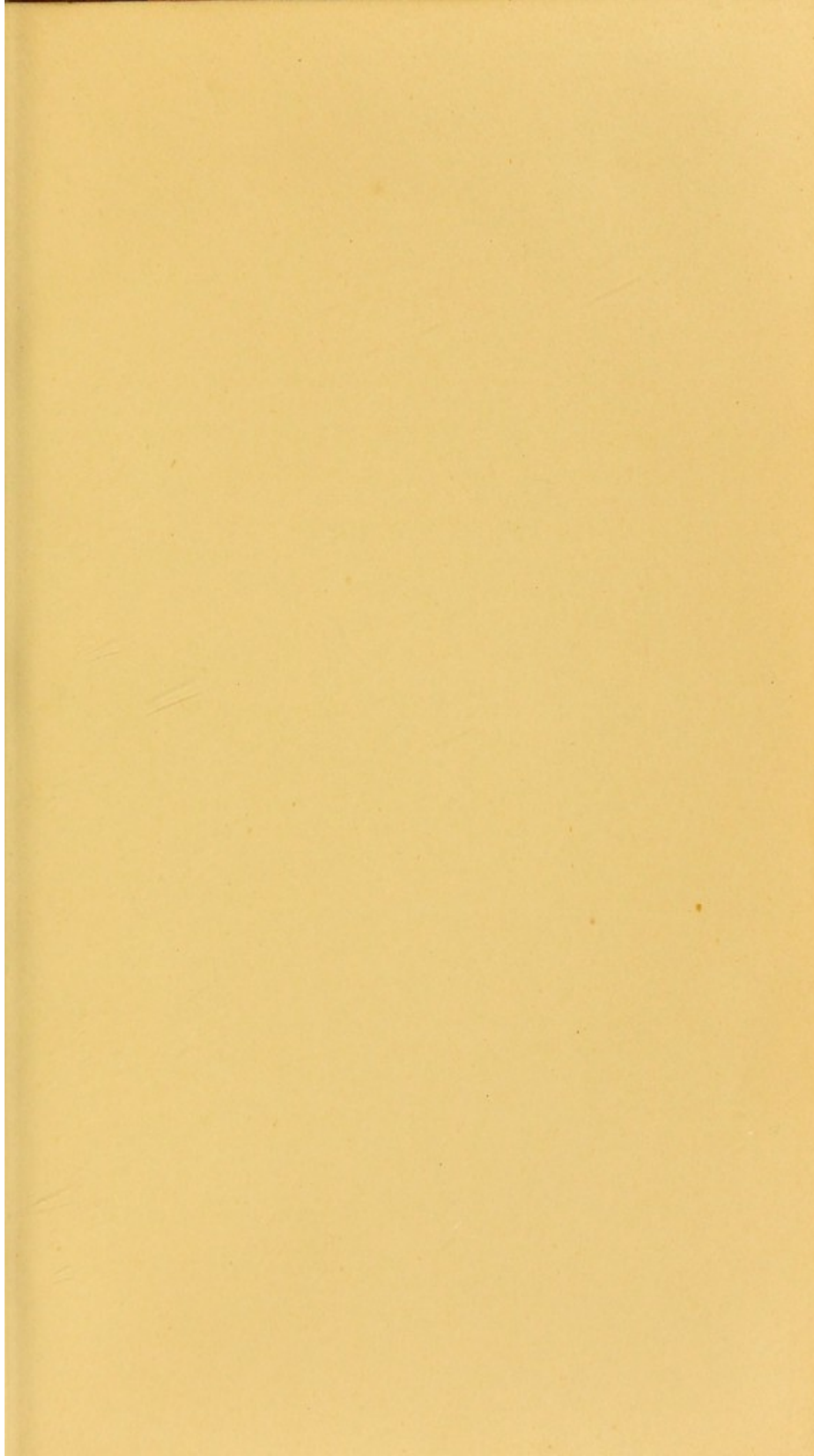
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