

ARTICLE IV.

A

DISSERTATION

ON

PHLEGMASIA DOLENS.

BY RICHARD HAZELTINE, M.D. A.M. M.M.S.

Read at the annual meeting, June 5th. 1816.

OBSERVATIONS ON PHLEGMASIA DOLENS.

THE Earl of Chesterfield, in one of his letters to his son, as a motive to enterprise, activity and diligence, tells him it ought at least to be the aim of every rational being either to do something worthy to be written, or to write something that may deserve to be read.* If the correctness of this opinion, as it respects the obligation of men in general to become candidates for fame, should be denied ; its truth, probably, will not be contested, when the question relates to the duty of men in any of the learned pro-

* A sentiment, however, for which he was indebted to a passage in the writings of the younger Pliny.

fessions. Without, however, indulging so much self-complacency, as to flatter myself that I shall even have attained either object to which the noble Lord would urge every man to aspire; animated by a motive so laudable, and obedient to a call of the counsellors of this society, I have prepared for the present anniversary exercise, and proceed to read, *Observations on that singular affection of the lower extremities especially incident to puerperal women, and described in medical books, under the unrelated names of OEDEMA LACTEUM, PHLEGMASIA DOLENS, HYSTERALGIA A SPARGANOSI, &c. &c.*

I shall not pause to inquire into the antiquity of this disease, nor at how early a period it first engaged the attention of physicians; it is sufficient that it frequently occurs in our own times, and in this part of the world; that it is, though commonly mild and easily cured, occasionally so severe as to require the best directed efforts of art to assuage its violence; neither will a formal description of the disease be attempted; since that has been already amply given by others. I shall, therefore, offer only such pathological remarks as may tend to bring into view, some of the leading circumstances of the disease: and then exhibit what I conceive to be the best method of treatment, illustrated by the history of a few apposite cases.

IN entering on the discussion of the subject before us, it cannot be deemed irrelative to in-

quire, why this disease has occurred much more frequently in the practice of some physicians than in that of others? In prosecuting this inquiry it is proper to observe, that there has been a remarkable difference in this respect in different places; as a reference to a few facts will strikingly evince. Mr. Trye, in his essay on this disease, has given the history of nine cases only as his own; but has not stated the number of cases which he had seen, nor the extent of his practice in obstetrics. Mr. White informs us that out of 1897 women delivered at the Westminster General Dispensary, five only were attacked with this disease; and of 8000 women delivered at the Manchester lying-in-hospital, and their own houses, no more than four were seized with it. Dr. Thomas states that during a practice of thirty years, a solitary case had fallen under his care.* Mr. Burns of Glasgow, without specifying the number of cases which he had seen, or speaking of its comparative frequency, says, "it is by no means uncommon;" and adds, "is exceedingly troublesome."† The late Dr. Wyer, of this society, in a communication on this subject,‡ says that he has "met with only five cases in nine hundred and eighty-

* Modern practice of physic; Miller's edition, p. 611, New-York, 1811.

† "Obstetrical works," New-York edition, p. 199.

‡ Medical communications to the Massachusetts Medical Society, vol. 1, p. 3, series 3.

nine women," whom he had delivered ; and another gentleman of this society informs us in a communication on the same subject ;* that "in the course of twenty-eight years' practice," he recollects "to have seen seven or eight cases" of this disease ; but does not name the number of parturitions in which he has been concerned. I am not able to speak with much precision respecting the comparative frequency of this disease in the County of York, where I have resided more than twenty years ; but I am possessed of facts which warrant me to believe that it has occurred more frequently there within that space of time, than any where else among the same number of inhabitants.

† [EDUCATED in a part of the country where the state of society was very propitious for the introduction of a young man *in rerum puerperarum exercitationem* ; and having since resided in places where, if not already in the hands of accoucheurs, it speedily became a part of their routine of duties ; the writer has been concerned in the business twenty-five years ; and within that space of time, has presided at the birth of 800 children. Phlegmasia dolens, though occasionally occurring, never excited any particular in-

* Medical communication to the Massachusetts Medical Society, vol. 2, article 1.

† Whatever here or hereafter occurs included in brackets, was omitted when this discourse was read.

terest till the year 1804 ; the writer is, therefore, unable to say precisely, what number of cases has fallen under his inspection ; but he recollects perfectly to have had the care of seven, and to have been somewhat acquainted with the circumstances of two others, within the fifteen years ; and the number of parturitions which he has attended within the same time, amounts to 584. The total silence on this subject of all the medical books which he met with during his pupilage, and the limited opportunity which he then had of perusing Motherby's Medical Dictionary, which alone contained any, to him accessible, account of the disease, afforded him little or no advantages as it respected the particular method of treatment ; of course, he had treated all the cases which came under his care previously to the year 1804, altogether on what Mr. Burns calls "general principles ;"* and in this way his practice had been uniformly successful ; but in that year a case occurred of singular severity and obstinacy, and accompanied with circumstances calculated to rouse all his feelings, and to call into exercise all his powers of investigation and reflection. The long continuance of this case engaged his attention for several months ; nay, his patient having already suffered extremely, and still experiencing not a little inconvenience from

* " Obstetrical works," New-York edition, p. 200.

the chronic effects of the disease; and being anxious to treat it with more satisfaction to himself, and more to the benefit of his patients in future, should other cases ever come under his care; he prosecuted his inquiries respecting it on every hand; but obtained no valuable information till in the following spring of 1805; when he procured Mr. Trye's Essay. From this Essay, which the writer acknowledges afforded him much important instruction, he soon discovered that there was still room for further investigation and improvement. He has never lost sight of the subject; he has perused new books; he has attended to new cases of the disease, with unwearied diligence and care: and if he have a claim to the credit of advancing any thing new or useful respecting the nature or treatment of the disease, it is owing to the interest which the case alluded to, excited.]

THE question now recurs, to what cause shall we attribute this difference in the reports of different physicians, respecting the comparative frequency of this disease in different places? To me it appears it cannot be ascribed merely to the difference in the number of obstetric cases which have fallen into the hands of different practitioners, nor to any deficiency of professional knowledge or care in these practitioners, but it is believed that the cause of this difference must be sought for, and will be found, in some other circumstances connected with the

pregnant, parturient, and puerperal states ; and that in ascertaining these circumstances, we shall develop some of the causes of the disease.— What are these circumstances ?

1. IT is believed that this disease has most rarely occurred in those places where the management of female complaints, peculiar to the pregnant and puerperal states, has been exclusively under the direction of well-informed accoucheurs and midwives.

2. THIS disease appears to have occurred most frequently in those places where midwives only, and those possessed of inadequate practical information, have been consulted in the diseases of women concerned in the business of procreation ; or at least in those places, where, if accoucheurs have begun to be employed in parturition, their assistance has not often been solicited on account of the diseased conditions of the system incident to the pregnant and puerperal states ; and where, of course, not much has ever been done by way of prevention.

3. IT appears that this disease is most frequent in those places where the practice of midwifery is passing from the hands of female, into the hands of male, practitioners ; and in new settlements, where pregnant and puerperal women are more exposed to the causes of inflammation, and where, from the want of proper medical aid, this disposition is not obviated by a suitable regimen, blood-letting and other evacuations.

4. A circumstance of the system itself, which almost always attends the pregnant and puerperal states, and is supposed to constitute the predisposing cause of this disease, is a phlogistic diathesis, by which, on the application of the usual exciting causes, the disease is readily induced at any time and in any place, independently of the other circumstances enumerated: hence the disease is so frequently preceded by parturition.

FROM these considerations it appears, that the circumstances which give occasion to a more frequent occurrence of this disease in some places than in others, the number of parturitions being the same, are, a more powerful operation of the remote causes of inflammation, and the want or neglect of the means suited to obviate this disposition.

THOUGH a particular description of this disease is purposely omitted, it will comport with the objects of this exercise, to introduce the following brief sketch of its pathognomonic symptoms, from Rees' Cyclopædia.*

“THE symptoms vary a little in different cases, apparently according as the uterus itself or its particular appendages are disordered. In general the patient complains of pains in the loins, extending round the margin of the pelvis, to the groin, on one or both sides, and shooting down

* Vide Rees' Cyclopædia, voce Hysteralgia.

the thigh to the knee, or, in more severe cases even to the foot. Sometimes the pain is more strictly referred to the uterus itself, or its neck, and the loins are scarcely affected; and sometimes it is fixed, in one side, above the ilium, as if seated in the ovarium. In one case we have seen the disease confined apparently to the ovarium and ligaments of one side, in which there was great soreness of the part, where the round ligament passes to the pubes. The stomach is frequently disordered by sympathy, and the patient complains of nausea, flatulence and other symptoms of indigestion; and, occasionally some degree of febrile action attends the complaint."

In the foregoing sketch, this disease is represented to be, as it undoubtedly is, originally, a local affection, and in its most simple form; but it is almost always accompanied with circumstances, which, if not essential to its character, are so often present, as to hold a conspicuous place in the diagnosis, and require particular attention in the method of treatment. Phlogistic diathesis, and general inflammatory action, if not present at the commencement, are commonly induced by the local inflammation: the parts in pain are generally tumefied; other sympathetic affections are observable beside a disordered stomach; there is in most cases, some degree of the "*animus, nec sponte, varius et mutabilis*"*

* Cullen's *Synopsis Nosologiae Methodicae*; genus 63; Hysteria.

of hysteria ; which probably led Dr. Sydenham to class this complaint among "hysterical diseases :"* the morbid action of the heart and arteries is also, for the most part, of a sympathetic nature ; hence, the fever is, strictly speaking, a sensitive or hectic fever. I know it has been called by very respectable authority, an "irritative" fever ;† but I am persuaded it was an inadvertence. Some may think it mere trifling to bestow words on this point ; but to me it seems of some importance to determine whether the fever in this disease be "irritative" or sensitive ; idiopathic or symptomatic. In my opinion it is a sensitive or hectic fever which generally attends, at least, after a few days ; not only from considering the character of the fever itself ; but because it is consequent to a primary local affection ; and, I am happy to find myself supported in this opinion by Mr. Burns.‡ It will not be denied, however, that the fever, during the first stage of the disease and previously to evacuations, is often a "febris sensitiva irritata," or a phlegmasia ; for the writer is clearly of the opinion that it is such ; and he is, therefore, disposed to maintain, contrary to the opinion of some, that the disease is often of an inflammatory nature. Dr. Thomas asserts that "no inflam-

* Epistle from Dr. Sydenham to Dr. Cole, § 69.

† Medical Com. to the Massa. Med. Soc. Vol. 2. p. 2.—New England Journal, Vol. 3. p. 328.

‡ Burns' "Obstetrical Works," New York edition, page 199.

matory tendency prevails in the system in this complaint :”* a declaration that excites *no* surprise, when it is considered that it comes from one who acknowledges at the same time, that he had never seen more than one case of it. Whatever may have been the character of the disease in Europe and other places, all the cases of it which I have seen, with no more than one exception, have been attended with circumstances of inflammation ; at least at the commencement.

THERE are sometimes some other circumstances of complication, which, as being less constant and important, will meet with no attention on the present occasion. I shall, however, briefly animadvert on a few other opinions relating to the nature and causes of this disease, which do not correspond with my own ; and from which I am constrained to dissent.

1. THE late Dr. Denman, of whose character and writings I entertain a most exalted opinion, and whose description of this disease I consider for the most part very judicious ; speaks of a certain “ paleness” of the whole surface of the body, and of “ every vein seeming to be scantily supplied with blood ;”† but according to my observation, the surface is generally suffused with redness, at least it is so in the face, and in the early stages of the disease, and the veins

* Modern Practice of Physic, Miller’s edit. page 613.

† Introduction to the Practice of Midwifery, Chap. xix, sect. 3.

are turgid: this latter circumstance is obvious, even though paleness at the same time pervade the surface.

2. THIS disease has been represented by some, as being attended with circumstances of general weakness; and it has been said that the pulse is "generally feeble;" but in most of the cases which I have seen, circumstances have been such as to require blood-letting and other antiphlogistic measures; especially in the early periods of the disease.

3. WHILE it is sufficiently evident, and generally admitted among writers, that the proximate cause of this disease consists in an inflamed state of the internal and external iliac glands; it is not, in the writer's opinion, so clear, "that the absorption of vitiated matter from the uterus," or any other part, is the cause of this inflammation; for beside that the disease has been often known to occur when no circumstance indicating a depraved or vitiated secretion from the uterus, had preceded; the writer believes it has affected the male sex; or if it have not, it certainly has occurred in females, unconnected with parturition either immediately or remotely; as will be more particularly stated under the next head. This supposition of the absorption of vitiated matter being the cause of the inflammation of the iliac glands, is still more exceptionable, when it is considered that this vitiated matter is also supposed to act in the

same manner as absorbed poisons, when introduced into the system by inoculation. It is deemed of some importance to invalidate this supposition, which Dr. Denman espouses with considerable confidence ; inasmuch as it does, perhaps, consistently enough with its truth, lead merely to a palliative method of treatment. Dr. Denman's language is, "having formed this opinion of the cause of this disease, and reasoning by analogy of its effects, in the method of the treatment, without aiming to cure the disease in the first instance, I take the symptoms for my guide, and endeavour to relieve these by all the means in my power." Again he says, "if my opinion of the cause of the disease be just, the hasty dispersion of the swelling of the glands, if it could be effected, though it might lessen or wholly remove the swelling of the limb, would ultimately prove a great disadvantage, by allowing the absorbed *virus* to escape, and thus pervading the whole body, a disease primarily local would become a general one of the most dangerous kind." Accordingly, under the influence of a false analogy and an erroneous train of reasoning, Dr. Denman advises a method of treatment which is merely palliative ; and to say the least of it, very ill adapted to the nature and circumstances of the disease as it has uniformly fallen under the inspection of the writer, or of his brethren with whom he has conversed upon the subject. The writer recollects to have seen

no case that required, or would admit the patient to be "supported by cordial medicines," nor "by a liberal use of wine," nor of "opiates" (which are the medicines recommended by Dr. Denman,) till after blood-letting or some other evacuations, or both: neither is the Doctor's method of treating the limb much more to be imitated; and well may he notify his reader, that "not much permanent benefit" is to be expected from it.*

4. As this disease has commonly been preceded by parturition, it has been ascribed to a metastasis of the milk; and hence several of its names which are significant of this circumstance;† but that this opinion is unfounded, is evident from the consideration that if the disease have never occurred in the male sex, which the writer believes is not the fact; it has affected females whose circumstances were in every respect, widely remote from pregnancy or parturition; and it has been known to succeed abortions, where the secretion of milk did not supervene. Mr. Trye says expressly, that this affection "is not peculiar to women who have suffered parturition;" and speaks of a case in which it came on nearly in the manner described by Mr. White, "in a person who had suffer-

* Introduction to the practice of Midwifery, chap. xix, sect. 3. pp. 279, 280. New-York edition, 1802.

† As, *Depot de lait*:—*Oedema lacteum*:—*Hysteralgia et Ischias à sparganosi*, &c. &c.

ed greatly from a retention of urine and inflammation of the bladder.”* The late Dr. Ferriar is said to have entertained a similar opinion. Dr. Thomas mentions a case which he had under his care when he wrote, “in an aged woman, and of course unconnected with parturition.”† The writer himself has known one well marked instance of the disease succeed an abortion after a pregnancy of only ten weeks: he had under his care, last February and March, a young lady aged eighteen, in whom the disease appeared wholly to proceed from sympathy with, or continuous inflammation from, hæmorrhoides cæcæ: the circumstances of this case will be briefly related in the sequel.—
Case 5.

My ideas of the pathology of this disease are summarily comprised in the following paragraph:

In certain persons labouring under phlogistic diathesis, certain causes produce an inflamed state of the iliac glands; this may be owing merely to inflammation communicated from the rectum, the uterus, and its appendages, the prostrate gland, the vesica urinaria, or other neighbouring parts; or it may proceed from the direct impression of some cause on the

* Essay on the swelling of the lower extremities, &c. p. 45, London edition, 1792.

† Modern practice of physic: Miller's edition, p. 612; note at the bottom of the page.

glands themselves, but to whatever it may be owing, it gives occasion to an obstruction of the lymph returning from the lower extremities, and thereby to all the circumstances of the limb peculiar to the disease; and to all the sympathetic and chronic effects which constitute the other phenomena of it.

THOUGH I have hitherto spoken only of the iliac glands as being the seat of this affection; facts are not wanting to prove that the inguinal and femoral glands also, if not equally, are often, and perhaps commonly, as much concerned as the former; but this will not impair the correctness of the pathology of the disease suggested, nor essentially vary the method of treatment.

It is obvious that I consider this disease to be always seated originally, in and about the pelvis: it is deemed necessary to make this remark as I go along; because it has been supposed by some, that the diseased condition of the inguinal and iliac glands, may be owing to inflammation communicated to them from inflammation primarily begun in some part of the extremity.

[It may be asked; if simple inflammation of the inguinal glands in certain conditions of the system, give occasion to phlegmasia dolens, why does not bubo, which is an inflamed state of the same glands, produce the same effects?—I conceive it is not difficult to give a satisfactory answer.

ANOTHER question may be proposed to those who advocate the opinion of the absorption of vitiated matter being the cause of this disease, viz. If the inflammation of the lymphatic glands which gives occasion to phlegmasia dolens be owing to the absorption of vitiated matter from the uterus and vagina; why does not the inflammation of the same glands in bubo, which proceeds from the absorption of the matter of a virulent gonorrhœa or chancre, give occasion to the same?

MANY such questions might be proposed; but it is not the business of this exercise to state or answer them.]

If the scheme of pathology which I have introduced be correct, the whole treatment of this disease will turn on the accomplishment of the three following indications, viz.

FIRST. *To take off the phlogistic diathesis of the system, and resolve local inflammation.*

SECOND. *To subdue sympathetic action, arterial and nervous.*

THIRD. *To remove the chronic effect of the disease.*

To point out the means of fulfilling the first indication, it will be much to the purpose to introduce the following paragraphs from Mr. Trye's Essay.

“WHEN subsequent to delivery we meet with a patient complaining of a soreness in one of the iliac regions, and upon examination we find

a great fulness and hardness in that region, accompanied with increased uneasiness in turning of the body, and in drawing up the leg and thigh on that side, fever having preceded, or being still present, we may for a short time try the effects of warm fomentation of the belly; and in case it be not already sufficiently open, administer a laxative clyster. If ease and a removal of the fulness and soreness in the flank be not by these means quickly obtained, we apply to the most sore part of the iliac region six or seven leeches, or even a greater number, if the patient's condition will admit the loss of much blood. As soon as the leeches are taken away, we administer a mixture of Ipecacuanha and tartar emetic, given in such quantity as to produce full vomiting. If the mixture have not the additional effect of procuring a few stools, it should be followed by a gentle cathartic.

“As soon as the bleeding occasioned by the leeches has ceased, we lay a blister plaster upon the pained part.

“AFTER the use of these means the pain and soreness in the flank will abate, and the swelling subside, and in a short time be entirely removed. But if any pain or hardness remain after the discharge from the blister has ceased, let leeches be again applied, and the consequent bleeding be succeeded by a second blister. In the trials, which I have made of this treatment,

the complaint has been completely removed before the healing of the second vesication.

“I have not had occasion to say any thing about the swelling of the leg and thigh, because this swelling has subsided fast enough as the soreness and fulness in the belly went off. However, it may be useful to wrap up the leg in bathed cabbage leaves, and, perhaps, to make a few punctures with a lancet into the cellular substance of its integuments.”*

THIS method of treatment presupposes not only a moderate form, but an early period of this disease; and under these circumstances it is believed to be perfectly adequate to a cure. It is particularly well adapted to the circumstances delineated in the quotation heretofore made from Rees' Cyclopædia: and I am fully persuaded that by far the greater proportion of cases of this disease, if taken in season and treated according to the foregoing method, would yield in a few days. But we are not always so fortunate as to be called when circumstances are so favourable: the disease, perhaps, has already subsisted for some time, and become complicated. At first merely local, and unaccompanied with much phlogistic diathesis, general inflammation, or sympathetic action; from the want of seasonable and proper medical aid, it may

* Essay on the swelling of the lower extremities, &c. pp. 12, 13, and 14. London edition, 1792.

have assumed a serious aspect. A high degree of inflammatory action, and of nervous irritation may have supervened; and a diseased condition of the system so complicated, may be succeeded by consequences which will still require the unremitted assiduity of the skilful physician. Under such circumstances it will be necessary to do something more than what is pointed out in the quotation from Mr. Trye.

IF there be any considerable degree of general inflammatory action, it will be adviseable to TAKE BLOOD from the arm. It is believed there are but few cases of this disease in country places, especially in new settlements, that would not be relieved by this evacuation. The circumstances which in this disease indicate bloodletting, are, thirst, furred tongue, a hot, dry, skin; turgid superficial veins, even though they appear so only on the back of the hands, while paleness pervades the surface elsewhere; severe pain, and a tense or hard pulse, even though it be at the same time small. It cannot be too urgently inculcated, especially on the younger part of the profession, that there are frequent cases of disease of a febrile nature, attended with a small pulse, which is at the same time hard or tense, in which no expedient is so salutary as the detraction of a few ounces of blood, or the operation of an emetic, or a cathartic; and in which wine, opium, bark, and other stimulants and tonics, would produce very unhappy effects. In-

deed it is often necessary in the treatment of diseases, to take blood, when the state of the pulse seems absolutely to contra-indicate the evacuation. In such cases a very frequent circumstance by which I am governed in deciding on the propriety of the operation, is a turgidity of the veins on the back of the hands, the arms being at the same time, free from compression.* In considering the case related by Dr. Wyer, in the communication already referred to, in which he was so highly interested ; who can doubt the great advantages that would have resulted from bloodletting, when it is stated that “ the pulse was seldom below an hundred and twenty, and very hard ? ” And yet we do not read that the operation was resorted to.—Cases will be stated in the sequel, which will evince the utility of bloodletting and other evacuations in the treatment of this disease.

WITH a view to accomplish the same purpose, viz. to take off inflammatory action, general and local ; it may be necessary to repeat the emetic and cathartic, and, perhaps, more than once ;

* It is to be noted, however, that a turgidity of the veins on the back of the hands, accompanied with a small pulse, is often owing to a torpid state of the chylopoietic viscera, and to collections of fecal matter in the alimentary canal. In such cases emetics and cathartics are to be employed previously to bloodletting ; by which, perhaps, the latter will be rendered unnecessary. But a turgidity of the veins on the back of the hands accompanied with a small pulse without turgidity of vessels in any other part, are frequent signs of plethora ; and particularly indicate bloodletting.

especially the latter. It is well known to practitioners that these medicines are powerful means of diminishing arterial action, and of resolving local inflammation when situated in parts remote from the seat of their immediate action. This they probably effect, by abstracting a portion of the stimulating contents of the vessels, both serous and lymphatic; and by exciting increased action in the whole system of absorbents.

ANTIMONIAL, MERCURIAL, and CAMPHORATED SUDORIFICS in small doses, and frequently repeated, are to be esteemed useful auxiliaries to the preceding remedies.

As it is not in the power of many country practitioners to avail themselves of the use of leeches in the treatment of this disease; the next expedient to which we may resort, with a particular view to the local affection, after fomentation, is BLISTERING, as recommended by Mr. Trye. Blistering in this disease is one of the most useful prescriptions. As soon as it is found that fomentation and the remedies heretofore recommended will probably prove ineffectual in arresting the progress of the disease; or, if it have already become severe before the physician is called; in addition to what has been recommended, without consuming time in the employment of fomentations, an epispastic is immediately to be applied to the part *most in pain*, and to every other part in succession, as the pain may shift or increase: and, if the extremity be al-

ready in *any degree tumefied*, (without regarding the epispaetic,) it is to be immediately enveloped in a spiral bandage, at least from the toes to the knee ; but if the tumefaction extend above the knee, the bandage is to be continued to the nates.

If blistering have ever proved useless or injurious in this disease, it has been, probably, at an advanced period of it ; but even then it may be employed with great advantage, if a bandage be used at the same time.

I know of no writer who has recommended the employment of the bandage in this disease, till its use has become necessary to remove the chronic effects of it ; but it is of the *first utility*, applied as soon as *any tumefaction* commences. The reasonableness of this expedient will at once be admitted, when it is considered that a very great share of the distress arising from the condition of the extremity is altogether owing to the lymphatic distention of the soft parts.

THE early employment of the bandage in this disease, was once objected to by an eminent practitioner to whom it was proposed ; from the apprehension that the inflamed state of the limb would not admit of it ; but this objection is altogether unfounded ; for the writer has repeatedly applied it when the limb was highly inflamed ; and it has invariably produced an immediate alleviation of the pain and distress.

THE early use of the bandage prevents, in some measure, the sympathetic effects of the disease; but more especially, the enlargement, debility, and consequent awkwardness of the limb, spoken of by some writers, as remaining for life or for a long time; and thereby subjecting persons who have been unfortunately visited with this disease, to great inconvenience: it also prevents suppurations; which is an important object in the treatment. The writer has, indeed, known persons who have for a long time been afflicted with the consequences just named; but they were those to whom the bandage had never been recommended.

THIS defence of the early use of the bandage in this disease, is not speculative; it is founded on facts which have repeatedly occurred under the writer's observation; and he, therefore, feels justified in speaking with some confidence on the subject: but, it is to be distinctly understood, that the foregoing remarks relate only to a spiral bandage *uniformly* applied.

IT is intended to say little more of EMBROCATIONS, LINIMENTS, UNGUENTS, CATAPLASMS, CAMPHORATED OIL, &c. &c. than merely to condemn their employment in this disease. Who ever knew them do any good? In the writer's opinion they always do harm, by promoting effusion, distention and pain. From this condemnatory sentence, however, perhaps, ought to be exempted, the UNGUENTUM HYDRARGYRI, which,

as possibly promoting the action of the absorbents, may prove beneficial, if the surface be anointed with it every morning previously to the reapplication of the bandage ; but the use of the unguent should by no means supersede the employment of the bandage.—Can any one name a more powerful means “ of rousing the action of the absorbents,” as one writer on this disease expresses himself, than a well applied spiral bandage ?*

I have never in any case of this disease, had recourse to puncturing the limb, as recommended by Mr. Trye ; neither can I persuade myself that it is ever necessary or useful.

If the pain, tension, and soreness of the hypogastric, inguinal, or iliac regions, or a dysury which sometimes attends, should require any thing more to be done than what has already been suggested, it will be a frequent use of mild, cooling laxatives and enemas, together with the application of cloths moderately wet with tepid vinegar and water ; and, perhaps, further vesication.

THE intention of this indication will be promoted by a mild, thin diet ; a recumbent posture ; and as little motion as possible.

I HAVE been more full and particular in pointing out the means of accomplishing this *first* indication ; because if it be seasonably and success-

* New England Journal, &c. Vol. II, page 227,—top line.

fully executed, there will be little or no foundation for the *second* and *third*.

THE object of the *second* indication is,

To subdue sympathetic action, arterial and nervous.

EVERY practitioner who has seen severe cases of this disease, must have observed, that it is sometimes characterized by certain sympathetic affections which demand particular attention. Though the inflammatory action of the system may have been effectually taken off by the remedies heretofore recommended; yet that condition of the heart and arteries which Mr. Charles Bell calls, "the constitutional sympathy, with a continued low degree of local irritation,"* may still remain. This condition of the heart and arteries, though not of itself attended with any immediate danger, is gradually wasting the vital powers; and, perhaps, gives occasion to, or, at least, is accompanied with, other circumstances of a more serious nature, and ought to be removed. The principal of these circumstances are, beside all the inquietude which ordinarily attends a state of fever; extreme anxiety, pervigilium, inappetency, and that peculiar mobility of mind which has been considered of an hysterical nature. In fact, morbid excitability, nervous and vascular, is now to be combated.

* Operative Surgery; Hale and Hosmer's edition, Vol. I, page 20. Hartford, Con.

Under these circumstances OPIUM becomes not only admissible, but highly necessary and useful; especially if combined with CAMPHOR, IPECACUANHA, or an ANTIMONIAL: but while inflammatory action in any considerable degree remains, the writer is disposed to maintain that opium is altogether inadmissible. The inspissated juice of the CONIUM MACULATUM is not restricted in its use, like opium; and is, in these cases, an invaluable medicine. CASTOR, camphor, SPIRIT OF NITROUS ÆTHER, VALERIAN, and the fetid GUM RESINS, may be employed to much advantage, under these circumstances, as nervines, and antispasmodics; or, in other words, with a view to remove morbid excitability. To produce their full and proper effects, castor, camphor, and valerian, ought always to be given in substance, not only in this disease, but in others, in which they may be prescribed.—An infusion of the HUMULUS LUPULUS, or common hop, makes an excellent drink in these cases; and its tincture would undoubtedly serve a valuable purpose; but the writer has never employed it; nor the digitalis purpurea, having no confidence in it. Castor and camphor combined, and with, or without CALOMEL, NITRE, ipecacuanha, or opium, according to circumstances, is a composition of superior efficacy in answering this indication.

THE diet, now, may be more or less generous according to the degree of fever, and the state

of the stomach ; but rest and a recumbent posture, are, for the most part, still to be enjoined.

IT is the object of the *third* indication,

To remove the chronic effects of the disease.

THESE effects are, general debility, weakness, tumefaction, and immobility of the extremity : for the removal of all which, it is believed, nothing better can be proposed or pursued, than as much exercise, particularly riding in a carriage, as is practicable ; a suitable diet, and the continued use of the spiral bandage. The cure, however, will in some cases, be greatly expedited, by a frequent employment of some gentle laxative : and it is, probably, with this view, that Mr. Burns recommends a “ liberal use of a solution of cremor tartari.” It is not to be doubted that frictions, together with cold bathing, general and topical, may be of great use in removing the chronic effects of this disease.

THIS performance terminates with the history of a few cases, illustrative of the efficacy of the method of treatment herein recommended.

[CASE I.

is one which I treated as I did all others which came under my care previously to the year 1804 ; and on what Mr. Burns calls “ general principles.”

APRIL 15, 1803, I waited on Mrs. B. of an excellent constitution, and good health, in parturition of her first child. Nothing unusual oc-

curred in her travail ; but her pains, with which she had been teased eighteen hours, under the superintendence of an uninformed, though prudent midwife, were now very short, frequent, distressing and unprofitable. I gave her two grains of crude opium, which diminished the morbid sensibility of the system ; increased the uterine efforts ; and rendered them more profitable, and effectual. In a few hours, she was comfortably brought to bed. I did not see her again till the sixth of May following ; precisely three weeks from her confinement. I now learned that she had had but a poor getting up so far ; and had been somewhat costive. She was in a mild febrile state, complaining of pain, tumefaction, &c. in the whole of one of her lower extremities ; but the pain was most severe in the calf of the leg. To be brief ; she was labouring under a moderate form of phlegmasia dolens. I directed an infusion of senna, salts [sulp. soda] and sem. cor. to be taken for a cathartic ; and left liquid laudanum to be taken at night only, and in such doses as to procure rest ; and laxative pills to obviate costiveness in future. The limb was treated with discutient applications, such as flannel, mullein or burdock leaves, wet with tepid vinegar and water, camphorated spirit, &c. &c.

MAY 10, I visited her again ;—the febrile state had subsided ; but the local affection was much the same. I now gave her an emetic of

ipecacuanha and emetic tartar, more from a regard to the condition of the limb, than the state of the stomach; to be succeeded by the use of an infusion of common bitters, such as gentian, orange-peel, chamomile flowers, &c.; and directed the continued employment of the laudanum and laxative pills.

THURSDAY, May 12th, I saw her again; and found her so well as to need no further medical attention.

I have waited on Mrs. B. in several parturitions since; but she has never experienced a recurrence of phlegmasia dolens. She has repeatedly told me that the extremity affected as above related had ever continued larger than the other; but gave her no great trouble.

I knew nothing of the use of blistering and bandaging in this disease when this case was under my care: and it is now related principally with a view to exhibit a specimen of my method of treating such cases previously to the year 1804.

LET not the critical reader condemn this case as unworthy of record: it is at least as important as many cases of the disease related by other writers; and will serve to exemplify some variety, not only in the circumstances of the disease, but in the method of treatment.

CASE II.

will be stated as it was communicated in a letter to a venerable physician who was consulted

on the occasion ; with his answer. This is the case before alluded to, which particularly called the writer's attention to this subject.— Page 98.

“ *Berwick (Doughtysfalls,) Sept. 11, 1814.*

“ DEAR SIR,

“ SIX weeks ago last Saturday, Mrs. H. was brought to bed, after a favourable travail, with a moderate sized, healthy child. During the first three weeks of her confinement, every circumstance common to the puerperal state went on very well ; she became comfortable, able to sit up most of the day, and to take, for the most part, such food as was provided for the family. But about the close of the third week, she was seized with pain in the right sacro-iliac region, extending to the hip, leg, and foot ; accompanied with considerable tumefaction. The pain was occasionally so severe, as to prevent sleep, unless opium was given ; and excited thirst, and other circumstances of moderate fever. The excretions of every kind had been regular and natural ; but soon after the commencement of the complaint, the lochial discharge became more profuse than before. I directed a mild, thin, diet ; and cooling drinks and medicines ; paying particular attention to the alimentary canal, by giving, at first, an emetic, and by obviating costiveness, which the opium readily induced ; by the use of sennâ, salts (sal sod.) laxa-

tive pills, &c. I applied various embrocations to the limb, such as linimentum volatile; solution of mur. am. or of common salt, in vinegar, camphorated spirit, tincture of cantharides, &c. &c. wrapping it in the mean time in burdock leaves and flannel. During this course, I introduced a few of the pil. hyd., with an intention gently to affect the salivary glands; but owing to some fallacy with respect to their strength, they produced a severe salivation; which continued above a fortnight. I also applied, most of the time, a bandage to the foot and leg; which she bore with apparent great advantage. Under this treatment she again recovered a comfortable state of health, being able to sit up most of the day, and to walk the room sometimes; but on Thursday evening the sixth instant, the left extremity began to be affected in the same manner, and seemed to be running the same career. Last Sabbath, the inflammatory state of the system appeared so considerable, that I took about half a pint of blood from her arm: the blood was sizzly, and the evacuation has evidently afforded relief; the pain being mitigated, and the febrile symptoms less.—Mrs. H. is a person of a spare habit; of a delicate constitution; and often complaining of ill health.—The disease at present is almost wholly confined to the left sacroiliac region, inguen, thigh, leg, and foot; which are affected with pain, tumefaction and soreness, though not very severe; but anodynes are in-

dispensably necessary to procure sleep. She nurses, and affords a sufficiency of milk ; and has a tolerable appetite for light food. There is no lochial discharge at present ; and no uneasiness on that account. She is able to sit up in bed most of the time.—I daily apply to both extremities a spiral bandage ; which appears to be very beneficial. The left extremity is enveloped in mullein leaves wet with vinegar, previously to the reapplication of the bandage. The tumefaction in the feet appears to be œdematous ; but in the leg and thigh, inflammatory ; and the inflammation seems to be deep seated ; for the surface is of a natural colour and temperature. The applications keep the surface, for the most part, in a free perspiration.

“ I CONSIDER this affection as an instance of ‘*Edema lacteum*,’ of which I have never met with any account in books, except Motherby’s Medical Dictionary ; though I have several times seen cases of it in practice. Messrs. White and Trye are said to have written particularly on the subject ; but I have never been able to procure the treatise of either. Knowing myself to be unacquainted with the real nature of the disease, and consequently, of a proper method of treating it ; and believing you, sir, to be able to give me such information as I need ; I presume to address you on the occasion ; begging that you would be so kind as to write me by the mail, as soon as may be convenient ; giving such directions

and advice as you may think proper. Your kind attention will much oblige

Your most obedient and
humble servant,

RICHARD HAZELTINE.

“ Ammi R. Cutter, M.D.”

IN a few days I was obligingly favoured with the following answer.

“ *Portsmouth, 16th. Sept. 1804.*

“ DEAR SIR,

“ I RECEIVED yours of the 11th instant, and have attended to Mrs. H.’s case, which you state very clearly to be one of those often met with after delivery. My method of treatment has been very much like yours—blistering the part and using volatile or saponaceous liniments mixt with tincture of opium when the pain was severe—giving mild laxatives (if costive) and sometimes I have used fomentation or vapour bath. Recovery is often tedious; but they all do well that have come under my observation. The circumstance of one limb being attacked, after the other, is very common; but not so frequently for the disease to begin in the hip;—there can be no doubt but the case is truly puerperal; and that you will find the same success in treating the last limb as you did the first.

I am, Sir,

Your most obedient servant,

A. R. CUTTER.

“ Dr. Richard Hazeltine.”

THIS was the most severe case of this disease that I ever saw ; and its importance in this discourse, will, I presume, justify a statement of some additional facts and observations connected with it.

1. BESIDES the internal exhibition of mercury, the Ung. Hyd. was freely applied to Mrs. H.'s lower extremities ; but not while she was in a salivation. The unguent appeared to do no good without the bandage. Notwithstanding what is said by some in favour of the use of mercury in this disease, I am firmly persuaded that it is never necessary or useful, but injurious, beyond its mere cathartic effects, or those of a very mild alterative.

2. THOUGH I had never read or heard of the use of the bandage in this disease ; and though no one of several physicians whom I consulted, named it ; after reflecting on the nature of the local affection ; and the probable effects of the spiral bandage ; the urgency of the distress of the patient induced me to try it ; and its application was immediately succeeded by a mitigation of the pain.

3. AT an advanced stage of this case, from the emaciation, paleness, and debility of the patient ; an aged physician who was consulted on the occasion, proposed to administer the cinchona : and though I entertained no confidence in the prescription, I gave it a fair trial ; but with very unpleasant consequences, even after only one

day's exhibition. I am persuaded that the opium which was given to assuage the sufferings of the patient during the progress of the disease in the *right* extremity, kept up such a degree of inflammatory action in the system as to give occasion to the attack of the *left*. I am confirmed in this opinion from the fact, that on opening a vein, while the blood was flowing, the pain abated, and continued less severe ever afterwards. Perhaps there are cases of this disease in which the circumstances are such as to require the use of the bark, opium, wine and other cordials, and nourishing food ; but I must confess I have never seen such.

4. NOTHING appeared to give any relief in this case, till after bloodletting and the application of the bandage.

5. THE continued employment of the spiral bandage, and gestation in a chaise, were of singular service in this case, in removing the chronic effects of the disease. It is true, by the advice of others, the patient had recourse to a great variety of means to remove the tumefaction and debility from her lower extremities ; but without any advantage, till in the succeeding spring, she was informed, by one of her own sex, who had also been a sufferer from the disease, of the efficacy of a *urinæ suæ haustus* for the purpose. She gave it a trial ; and derived some real benefit from it. She drank, for several weeks, perhaps, half a tea-cupful at a time, almost every

morning, fasting ; and found it prove considerably laxative, and sometimes nauseating.

6. MRS. H. continued the use of the bandages the greater part of the time for a year ; and such was the liability of her lower extremities to swell, that on getting up from a very severe fever in the spring of 1812, she was obliged to wear bandages three months : she was under the necessity of wearing them again about two months in an advanced pregnancy in the year 1813 ; since which, she has had no occasion to apply them, though her extremities are often swollen.

CASE III.

THURSDAY, P. M. August 13, 1807, I was called to Mrs. H. in travail of her sixth child. Her pains were regular ; and on the rupture of the membranes, which was not premature, and the evacuation of the liquor amnii, the face of the foetus presented. After the discharge of the waters, she had but few pains before the child was expelled ; but nothing proceeded hastily. The placenta did not readily yield ; and I thought proper to wait, perhaps, three fourths of an hour, before it was, with considerable effort on my part, *entirely* extracted. No unusual hæmorrhage ;—no dolores secundariæ, succeeded ; but pretty soon after getting to bed, she complained of a very distressing sensation at the extremity of the os coccygis. This, however, was

soon relieved, by the pressure of the hand of an assistant, and the application of flannel wet with vinegar.

FRIDAY and Saturday, Aug. 14 and 15. As comfortable as common for the time—no dejection. I ordered an infusion of senna, salts, [sulph. sod.] and sem. cor., which was taken, and produced several motions.

MONDAY, A. M. Aug. 17. She had complained for the last 36 hours, of pain beginning in the right inguen, and extending through to her back, down into her thigh, with some uneasy sensation, even to her heel. The pain was occasionally severe. There was nothing unusual in the quantity or quality of the lochial discharge; no fever;* no heat; no thirst; clean, moist, tongue; no swelling in the pained parts;† frequent micturition; milk natural; skin soft. I ordered stupes to be applied to the inguinal region and other pained parts, wrung out of a decoction of discutient herbs in vinegar; and if these should not produce ease, to apply an epispastic. I put her on the use of strong antimonial wine in doses of ten or fifteen drops, every three or four hours; and left pills composed of opium, camphor and tart. ant., to be

* It may be remembered that fever is not a constant characteristic of this disease, according to the quotation formerly introduced from Rees' Cyclopædia.

† Mr. Trye says tumefaction does "not always" attend: Essay, page 7.

taken at night. This course removed every complaint in three or four days.

SOME may question whether the foregoing was a real case of this disease ; but in my mind there is no doubt of it : and I believe there are many such cases, which, occurring under the care of skilful practitioners, by some such simple expedients, are easily removed ; and are, therefore, not thought much of ; but which, were they to occur in places where proper advice could not be readily obtained, would become severe. I have known several such mild cases, and on having recourse to a cathartic, fomentations, and an antimonial, or to fomentations alone, the complaints have been speedily removed. If it be correct to consider the foregoing a real case of this disease ; it will confirm the opinion of its local nature at the commencement.]

CASE IV.

Mrs. L. A. was subject to epilepsy ; and accustomed to frequent bloodletting ; without which the epileptic paroxysms very frequently recurred. May 3d, 1808, I waited on her in her sixth parturition. She was delivered, after twelve hours' favourable travail, of a full grown, healthy child. She had a remarkably good getting up, till the 6th of June ; when, from imprudent exposure to cold, she was seized with

acute pain in her right side, accompanied with fever; for which she was liberally bled, purged, and blistered; and took antimonials, crem. tart., pulv. seneka, calomel, &c. &c. In a few days, she so far recovered of this illness, as to be able to ride abroad, two or three miles; but on Tuesday the 14th of June, forty-two days after lying-in, she was attacked with severe pain in her left inguen, which extended through the pelvis on the same side, and down the inside of the thigh and leg to the heel, and anterior part of the foot; accompanied with tense tumefaction, redness, and soreness. She was sensible of no precursor of this scene of distress, except passing a whey-coloured, turbid urine, in smaller quantity, and more frequently than common, during that day.

WEDNESDAY, June 15th, P. M. I saw her—in a high fever, with a quick, frequent, tense pulse; great thirst, keen distress; the limb much swollen and tender to the touch: and she had been constive for several days preceding. I bled her freely; directed vin. ant. to be taken every two hours; gave calomel and other laxatives, to be assisted by enemata, till the intestinal canal should be freely opened:—ordered a large epispastic to the *part most in pain*, which was the lower and inner part of the thigh; and to be re-applied if the pain should shift; and to envelop the whole limb in burdock leaves wet with weak vinegar,

to be confined with a bandage applied as forcibly as she could bear it, without inconvenience. I left anodyne pills, to be given after the operation of the laxatives, if the pain should continue severe; and fetid pills, if certain nervous symptoms should continue, which I believed to be of the hysterical kind, and of which she had occasionally complained for two or three of the preceding days.

FRIDAY, P. M. June 17th, I found her not much better, fever not so high, however, nor pain so severe; her tongue continued coated, and she was still costive: the pain had shifted from the lower to the upper part of the thigh; and had been followed by the epispassic; and the vesications in both places were complete. The pain had since moved to the inguen; to which part I ordered a new application of the epispassic. I gave her an emetic of ipecacuanha and tart. ant.; ordered the vin. ant. to be continued; and left a portion of senna, salts, and coriander seeds, for an infusion, to be taken the next morning.

SUNDAY P. M. June 19,—the emetic given on Friday, and the laxative yesterday morning, both operated according to expectation; and I have the pleasure to find my patient in every respect much better: the pain, swelling and soreness much less; the lochial discharge (or some other) which had never ceased, and had been here-

tofore, constantly natural, to day became somewhat fetid,—ordered the vin. ant. to be continued in nauseating doses ; advised to promote, as much as possible, the discharge from the vesicated surfaces ; and to continue the application of the burdock leaves and bandage, to the limb.

AFTER this her recovery was very rapid and perfect : and in a month or six weeks, the use of the bandage was discontinued ; and not a vestige of the disease remained.

CASE V,

is of comparatively recent date, and very interesting, as it is an instance of the existence of this disease, when not preceded by abortion, parturition, or any morbid condition of the uterine system.—Miss M. L. a young lady aged eighteen years ; of a slender constitution and delicate health ; of the purest morals and most amiable disposition ; after exposure to cold on the 6th of last February, was attacked on the 7th, with the ordinary symptoms of synocha. These symptoms progressed mildly for ten or twelve days, and at length yielded in some measure, to the usual treatment in such cases ; or were rather all suspended, except the febrile action of the heart and arteries, by hæmorrhoides cæcæ. The affection of the rectum continued quite severe for another period of ten or twelve days ; then gradually disappeared, and was soon succeeded by pain, tumefaction, and

tension in the right inguen, extending through to the sacro-iliac region of the same side, and down the right extremity to the foot. The limb tumefied to a third larger than its natural size; was very tender to the touch; and contained many, of what the attendants called "bunches;" perhaps what Mr. Burns denominates "bumps."* This metastasis of the local affection was accompanied with a remarkably increased frequency of the pulse, from about an hundred, to upwards of an hundred and thirty beats in a minute, and by a no less remarkable mobility of mind. This morbid condition of mind, consisted of a very pleasing flow of ideas; and a disposition to be constantly talking and laughing: and the patient indulged the disposition almost incessantly; but her felicity was often interrupted by painful sensations in the affected limb. Her discourse was by no means incoherent or impertinent, such as attends delirium; but it was desultory, amusing and pleasing; consisting of charitable and friendly observations on the characters, conduct, and employments of people with whom she was acquainted; and on the kind offices of her relatives and others, towards herself. Some other circumstances characteristic of phlegmasia dolens, were

* "Principles of Midwifery;" Buchanan's edition; New-York, 1810; p. 205. These "bumps" had appeared in her superior extremities and elsewhere, in the anterior periods of her sickness; indicating a disposition to inflammation.

observed; but I need not name them: let it suffice, that after minute attention to the phenomena, I did not hesitate to consider the case an unequivocal instance of the disease. The diseased condition of the system was now fixed; and was treated with various cathartic medicines, the most useful of which were, repeated doses of jalap and calomel, with or without nitre, according to the heat of the surface; pulv. camphor. and castor, with or without nitre; spirit of nitrous ether; vin. ant., and alkaline solution, taken into the stomach: and spirituous and acetous fomentations; camphorated spirit, anodyne liniment, which, by the by, in my opinion, was of no service; with the spiral bandage, which was of superior and immediate efficacy in the case, applied to the limb.

Neither was the disease in this instance connected with, or influenced in the least by, the catamenial efflux; for the patient experienced a regular visitation of this nature, the week preceding the commencement of her indisposition; and not another during her confinement.

{My respected auditors will indulge me one moment longer, while I narrate the leading circumstances of a case, which though not intimately related to the disease which I have been considering, is, nevertheless, so nearly allied, particularly as it respects the utility of the spiral bandage, that it cannot be deemed greatly impertinent to introduce it here.

CASE VI.

Mrs. F. the mother of seven or eight children, was subject, during her pregnancies, to remarkable varicose distention of the veins of the lower extremities: I never knew any other person suffer so much from this cause. In February, 1812, I waited on her in parturition, under favourable circumstances. During the greater part of her preceding pregnancy, notwithstanding the most diligent employment of means suited to obviate unpleasant consequences, the varicose enlargement of the veins had been very troublesome. A few days after her confinement, the varices, instead of disappearing as formerly, became painful, inflamed, and finally suppurated. This took place in several of them. At first I endeavoured to prevent this process, by the employment of saturnine lotions, poultices, and other resolvent applications: but this plan proved altogether ineffectual it was not even palliative. Suppuratives were evidently indicated, and applied, and procured the most ease; but abscess, and ulceration indisposed to heal, were the consequences. New suppurations and ulcerations were taking place every day or two. In this state of things the use of the spiral bandage recurred to my mind; and being applied from the toes to the nates (for so extensive were the varicose distentions; and on both extremities;) no more of the varices inflamed; and in a few days they wholly disappeared, and the ulcerations healed.]

THE END.