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"Je prends le bien où je le trouve."

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Practical Observations on Cutaneous Diseases, No. 3—Erectile Tumours: their Pathology and Treatment, with Cases—Ligation of Primitive Carotid Artery, &c. By H. F. Campbell, M. D., Demonstrator of Anatomy in the Medical College of Georgia.

The great frequency of erectile tumours renders it proper that our observations should be made public, even though we add but little of novelty to what is already known on the subject.

Aneurism by anastomosis may occur at any age; and though ordinarily a disease of but trivial importance, it at times, either by neglect, or from its locality, presents a case of the gravest nature, and worthy the most serious surgical consideration.

The term, vascular or erectile tumour, denotes a diseased formation of the tissues of a part, in which the increase in its vascularity is the chief characteristic. Now, though in the beginning, this increased vascularity forms but one of the prominent features of the tissue, later, it either entirely monopolizes the whole structure of the part by causing the removal of its parenchyma, or by a process, to be described, produces changes in the tumour altogether peculiar, rendering its structure truly erectile, like that of the corpus spongiosum penis, &c. The tumour, in these cases, is formed almost entirely of blood-vessels, whether principally venous or arterial, may be readily determined by its colour and appearance.

That form of this tumour designated, by Bell, Anastomotic Aneurism, proceeds entirely from the arteries, and consists in a dilatation of their smaller ramifications, which enlarge in such a manner as to
form a circumscribed, pulsating tumour, generally deep under the surface of the skin, though it may occur in almost any of the soft tissues of the body.* With regard to the formation of these tumours, there exists a contradiction among pathological anatomists, i. e.—

† Hasse, ‡ M. P. Rayer, and a few others, stating that the intervascular cellular tissue is, in a great measure, removed, while § Mr. Erasmus Wilson, whose dissections and authority are highly reliable, contends that, this tissue is developed and enlarged by the telangiectasis, with the growth of the tumour, and always constitutes an important element in its anatomy.

Reasoning from an attentive observation of rather a limited number of cases, I am disposed to believe that both of these very adverse conditions occasionally obtain in these vascular growths, and that the anatomical condition of the intervascular tissue may, with propriety, be considered a characterizing feature, by which we may divide these tumours into two distinct classes: the pulsating and non-pulsating erectile tumours. In the first of these, the dilatation of the capillaries, being very rapid, far outstrips the development of the intervascular cellular tissue, which latter does perhaps, as stated by Rayer and Hasse, become absorbed or otherwise removed, thus affording little or no resistance to the arterial diastole, and allowing a thrill to be communicated to the finger, when applied, like true pulsation. In the non-pulsating erectile tumours, the exact converse of the above obtains; here, the dilatation of the vessels has been slow, constituting for a length of time nothing more than a simple hyperaemia; that is a degree of increased vascularity, only adequate to the rapid growth of the part. In this, the vessels go on enlarging gradually, and always preceded in their dilatation by the increase in their investing tissue, which becomes indurated by pressure of the surrounding parts; and thus, the pulsation of these small arterioles

* It is denied by some, that the aneurismal tumour described by Scarpa, occupying the place of the superior apophysis of the tibia, is really of this nature.

† "Whenever erectile tissue is developed, the cellular texture or parenchyma of organs is ere long removed, and the tumour consists exclusively of vessels closely interwoven and intimately communicating with each other.

‡ "Theoretical and Practical Treatise on Diseases of the Skin."

§ "As far as my observations have gone,—and I have dissected many vascular naevi,—the vessels are enlarged in calibre with corresponding hypertrophy of their coats, enlargement of their meshes, with hypertrophy of the intervascular tissue."—[Practical and Theoretical Treatise on the Diagnosis, Pathology and Treatment of Diseases of the Skin, p. 254.]
is completely nullified, by the resistance therein presented. In a word, the first is a fibro-vascular tumour, in which the vessels are predominant, producing appreciable pulsation, while in the latter, the fibrous tissue prevailing precludes it. The first is eminently a vascular tumour, with some fibrous tissue—the second a fibrous tumour, with much increased vascularity.

The pulsating variety, for a time, may be reduced by pressure and the emptying of its vessels, while compression produces but little or no reduction, even temporarily, in the non-pulsating form. And if this be continued for a time, as treatment, it tends much to increase them in both size and hardness, by adding to the irritation and effusion of coagulable lymph in their cellular tissue.

Both these forms of erectile tumour are subject to variations in size, colour, density and general appearance, still preserving their distinctive marks through all these changes. They are both frequently subject to hæmorrhages, though, in the pulsating variety, these are more immediately dangerous on account of their greater vascularity. Neither of these tumours is often the subject of treatment, yet both occasionally require attention, and are sometimes the source of much peril to the patient and embarrassment to the surgeon.

As an instance in each of these varieties, the two following well-marked cases may not be devoid of interest. Although the first, from the location of the disease and treatment required, may belong more legitimately to the surgeon than the dermatologist, yet from the anatomical structure of the morbid tissue, and also from the fact that such are treated of in works on this subject, I have felt justified in adducing it, as illustrative of the position here assumed.

Case I.—Richard, a free man of colour, aged 21 years, had from early childhood been known by his parents to have a very small tumour on the left side of his tongue, near the apex. This tumour had never given any trouble, remaining stationary in size till within a year or two previous to my being consulted. Attention was then called to it by its rapid enlargement, darker colour and strong pulsation, which continued to increase, till in a short time, by its bulk and extreme sensibility, it materially interfered with mastication and enunciation. During the last two years, it had bled frequently, and of late, the hæmorrhage had been so profuse as to threaten the patient's life. When I first saw him, he was pale, anaemic and emaciated to the proportions of a skeleton, as much from starvation as
depletion, he not being able to take any thing but cold gruel, on account of the enlarged condition and great sensibility of the tongue, as well as its liability to alarming bleeding, if impinging upon. The tongue itself was occupied, on the left side, to the median line, and even encroaching on the right of it, by a strongly pulsating, nodulated tumour of a dark red hue. This filled entirely the buccal cavity on that side, and pressed outward against the teeth, which, by absorption of its tissues from pressure, had caused a deep ulceration from which the bleeding occurred so frequently. Upon pressure, the tumour could be readily much reduced in size, by evacuating its vessels of blood, but this was an experiment of some hazard, on account of its active haemorrhagic tendency. The base of the tongue also participated in the enlargement, especially at its under surface, and from the continued irritation, the neighboring glands of the mouth were much swollen and painful. The case had been considered cancer of the tongue—had been treated as such, and I was consulted for that disease, and indeed, the whole appearance of the patient strongly simulated that of the carcinomitous cachexia.

The ulceration on the surface of the tumour was oblong in shape, and covered with dark coagula of the haemorrhages it gave out. The patient had been using astringent washes, to check the bleeding, and at present was under no other treatment. The day after my first visit to this man, I was called to him, in haste, to restrain the profuse haemorrhage from the ulcer, which had caused repeated syncope, and brought him to the extreme of debility. His condition was the following:—Haemorrhage very profuse, and only ceasing during the relaxation of delirium, which supervened whenever he attempted to rise; pulse almost imperceptible at the wrist; patient of course much alarmed at his condition.

On consultation with Drs. J. A. and P. F. Eve, ligation was determined upon; and as the most convenient and practicable, we chose the Primitive Carotid of that side, both on account of its more easy access than the external carotid or lingual, and further, because pulsation in it was more appreciable in the exhausted condition of the patient. I performed the ordinary operation in the lower part of the anterior superior surgical triangle, making an incision of nearly three inches, which extended somewhat below the omo hyoid muscle. The needle and ligature were passed without difficulty, the artery separated from its accompanying nerve and vein, and tied with a piece of saddler's silk. No blood was lost at the wound of
the operation, and the \textit{haemorrhage from the tumour ceased immedi-
ately.}

Day after the operation. Pulse, though much improved, still feeble and accelerated on any trivial exertion; tumour on tongue somewhat smaller and quite dark; ulcer covered with clotted blood; little or no pain in the tongue. Prescribed as diet, cold gruel and cold chicken soup.

Fourth day. Dressed the wound, which had healed by first inten-
tion, to within an inch of the ligature—a little healthy pus under the plasters: pulse much improved; tumour considerably flattened; in ulcer, no apparent change. Diet, as before.

Fourteenth day. Wound in the neck entirely closed, with the exception of a small aperture that gave egress to the end of the ligat-
ture,—this was thrown off on the twenty-fifth day—no \textit{haemorrhage followed:} the noose was entire on the thread. There had been no absorption of the ligature, but it had divided the remaining coat of the artery. A few hours after, I was called in haste to the patient, and found he had lost a small quantity of blood from the wound, though I think it most probably came from the very vascular granu-
lations around the orifice made by the ligature. This healed rapidly without further accident or mishap. The tumour on the tongue had entirely disappeared—the tongue was of its natural colour and vol-
ume, except that where the deep ulceration had existed, there was a depression and whitish cicatrix—speech and mastication were perform-
ed with facility, and the restoration of the organ seemed complete. General health of the patient better than it had been for several years previous.

For nearly a year after the operation, the patient continued free from any return of his disease. At the end of that time, he com-
plained of some pain, and there was also slight tumefaction on the opposite side of the tongue. He did not reside in this State, and it was somewhat over three months before I again saw him, during which time (it is by no means strange to relate), he had been under the treatment of various \textit{Charmers, Cancer Doctors, and Conjurers.} When I did see him, his condition was fully as bad as when he first applied to me. The tumour now occupied both sides of the tongue; having passed from right to left, filled nearly the whole mouth, and had several small ulcerations upon its surface which bled frequently and profusely.

I proposed the ligation of the other common carotid, to which the
patient, but reluctantly, acceded. On consultation, the measure was abandoned as inexpedient. This miserable being died, a few months after, entirely worn out by successive hæmorrhages, starvation and hectic irritation.

Remarks.—Reflecting upon the origin, progress, and termination of this case, it is perhaps sufficiently apparent that, in its commencement, it was one of simple anastomotic aneurism of the ranine artery; and its symptoms—viz., its pulsation, occasional flaccidity, yielding to pressure, its active and profuse hæmorrhages, and also its rapid increase, clearly characterize it as belonging to the pulsating variety of these erectile tumours. Its appearance on the opposite side of the tongue, its rapid growth there, and the facility with which it recurred in its original locality, may find an easy explanation in the disease having extended to the inosculating ends of the ranine branches, previous to the operation. After the ligation of the left artery, the impetus of the circulation being augmented, these already predisposed branches were readily dilated, and the disease thus fully established. The recently obliterated branches of the opposite side were, with facility, re-opened,* and thus the disease re-established on the right side. The great rapidity with which this second dilatation took place, resulted from the fact that, the whole tissue of the organ was already inclined to that kind of degeneration, by the previous recent existence of the same disease in the part. And for this, we find a still more satisfactory explanation, as well as for the malignant ulcerative tendency of the tumour, in the observations of † Rokitansky on this subject. "There is an affinity," says he, "between aneurism and cancer. The aneurismal diathesis is never extinguished; and frequently when, from some cause or other, one aneurism dwindles away, a new one immediately forms, either in the same artery or in a remote one. Frequently, too, the aspect of the patient and the decay of the organism bear the impress of cancerous cachexia." This last assimilating general characteristic was preeminently existant, in the case above related.

The second case differs materially from the foregoing, though evidently in its generic characteristics it is pathologically the same.

* A thing by no means impossible, after the observations and examples related by Stilling, and others, on Thrombus.
Case II.—Eliza, a colored woman, aged 27 years, belonging to Mr. A. W. W., of Burke county, had, for many years, a small indurated tumour in the cicatrix of the umbilicus, which she said was the result of pressure from the end of a corset-board. This remained apparently stationary for years, and gave no uneasiness or trouble, save the inconvenience its presence occasioned in the arrangement of her dress, &c. About three years previous to the application of her master to me, her menstruation became irregular, and occasionally she was subject to attacks of hysterical lethargy,—the tumour at each menstrual period became fuller and much firmer, till at length, during one of these, it discharged from a minute opening on its surface, a small quantity of blood. This discharge, and the progressive increase in the tumour, continued up to the time that she was brought to me.

When I saw her she was quite thin, and of an unhealthy complexion—with but little appetite; bowels constipated; pulse natural, though feeble. She was of the nervous temperament: her menstrual discharge was almost entirely absent. The tumour at the umbilicus was of the size of a large walnut, dense and resisting to pressure, and had upon its surface several small pits from which, on pressure, there oozed a small quantity of darkish blood. Her menstrual period had just ended; and, by her estimate, she had lost nearly a gill of blood by the tumour during the five or six days, and said that she had had one of her hysterical attacks during the time, or just before the discharge commenced. During her next menstrual period, she discharged from the tumour nearly four ounces of blood, after which it shrank considerably, and became much softer to the touch, though still quite firm and resisting. The discharge per vaginam was but inconsiderable. The case had been treated by compression applied to the tumour, but with no reduction in its size whatever: indeed, it was found rather to aggravate the disease than otherwise, insomuch that, when I examined it, she had on a contrivance by which the contact even of the clothes was prevented.

Removal of the tumour being determined on in consultation, the patient was subjected to the following treatment, previous to the operation, in order to restore as far as possible the tone of the general health, as well as that of the uterine system. The bowels were kept well open with comp. cath. pills, or an occasional dose of the comp. tinct. of jalap, and as an emmenagogue, the following prescription was put in requisition—viz:
R. Of Gum Myrrh, pulv.  
Fœtid, "  
Aloc. Soc. "  
Canthar. Hispan. "  
Sulphas Ferri, "  
Syr. Simp. q. s. to make 24 pills.*

Of this, one pill was taken in the morning and at bed-time, till slight burning was experienced during micturation, when they were discontinued for a day or two, and again resumed, and continued till the supervention of the next menstrual period, at which time her general health was sufficiently improved for the performance of the operation.

The tumour was removed in the presence of Dr. P. F. Eve, and of my brother and associate, Dr. R. Campbell, of this city, by the application of a double ligature through its base, drawn sufficiently on either side, as entirely to destroy the circulation in it, and in four hours after I completed its excision with the knife. Very profuse haemorrhage was the immediate result, but this was readily arrested by compression and the application of creosote, after which the wound healed rapidly. One or two applications of the actual cautery were necessary to destroy a few vascular granulations that seemed disposed to organize upon the cicatrix, but further, no after-interference was required. After the healing of the wound no discharge occurred from the umbilicus, and the uterus gradually resumed its function of menstrual elimination. She has had no hysteric symptom since, and now (six months after the operation) enjoys excellent health.

Upon dissection, I found the tumour to consist of a congeries of very minute blood-vessels ramifying through a remarkably dense cellular structure; in this there were but few cells, and the walls of these were not dilatable, but hard and resisting. The pits on its surface, as far as I could discover, did not communicate with any of these cells, but had the appearance of being superficial. On desiccation the tumour has become much reduced in volume, though those cells not destroyed have not become obliterated, but still remain open, proving the inextensibility of the intervascular cellular tissue.

* A prescription, of my own combination, I believe, which I here take occasion to recommend as an efficient emmenagogue, in all cases where there is no organic lesion of the uterus, as engorgement, &c. I have found it particularly beneficial, where the irregularity depended upon an atonic condition of the uterine vessels.
In the foregoing I have endeavoured to shew the difference, so far as my own observations have gone, in the pathology, &c., of those two forms of erectile tumour, and in the above cases, I hope a pertinent illustration will be found to have been adduced. They were both very plainly of this order of morbid growth; and yet, that, in many points, they very essentially differed from each other, further comment is not needed, to elucidate.

From what has been shown in dwelling upon my first case, I should perhaps regret that the right carotid artery had not been ligated as well as the left;—the signal success of the first ligation, the long immunity after, from the disease, amounting for a time to complete restoration, all impel the conviction that, much benefit would have accrued from a second ligation—perhaps either entire relief, or a much more considerable protraction of life. Or would not ligation, with complete excision of the diseased tissue, have been more successful?

Case second requires but little or no comment; the tumour's vicariously eliminating the menstrual discharge is by no means singular, as such cases occur frequently, as also the influence of this uterine derangement on the nervous system;* but my object in the foregoing has been more, to discuss the pathological condition of these external developments, and to urge the determining cause of difference between their varieties, than to adduce any thing new or before undiscovered, on a subject that has so long occupied many of the ablest and most distinguished of our profession.

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ARTICLE XXIX.

Resection of a portion of the Upper Maxillary Bone, for a Sarcomatous Tumour of the "Antrum Highmorianum." By P. M. Kollock, M. D., of Savannah, Ga.

Jenny, a negress, aged 50, presented herself to me about the latter part of December, 1846, to be treated for a swelling of the right side of her face, at that time about the size of a hen's egg, extending from about the junction of the malar bone with the upper maxilla, to the teeth, involving the alveolar process. On raising up the soft parts

* The well known case of Hysteria, caused by a subcutaneous tumour of the mamma, and relieved by its removal, may possibly bear some analogy to this, so far as the nervous symptoms extend.—[Vide. Warren on Tumours, p. 40.]
of the cheek, there was exhibited a vascular swelling of the gum above the teeth, elastic to the touch, and apparently containing a fluid. The molar teeth remained, but were all loose. On extracting one or two, a pretty free haemorrhage ensued, and a trocar passed easily through the alveolar process into the antrum, without encountering any bone.

The tumefaction of the gum extended into the roof of the mouth several lines beyond the palatine raphe. At this part the tumour was more firm; but a sharp instrument could be passed into it without encountering any bone, and produced free haemorrhage also.

About one inch of the alveolar process in front, extending from the median line, and containing the two incisors and the canine tooth of the right side, remained sound. This was likewise the case with the gum in the roof of the mouth, extending from the alveolar process backward about one half inch; but the gum on the outside, above the teeth named, looked very vascular, and contained one or two small prominent points resembling tubercles.

A lancet thrust into the most prominent part of the tumour, on the outside, over the molar teeth, and which seemed to fluctuate, gave issue to blood, and not pus.

A temporising treatment was pursued for a few weeks, consisting for the most part, in the administration of a solution of hydriodate of potash.

Neither the patient, nor any one who has known her, can give any very distinct account of the origin and progress of this disease; but it seems probable, from all that can be ascertained, that it had been progressing to the condition in which I found it when first consulted by her, for some years. Nor can it be ascertained that it was the result of the operation of any external cause or accident.

Having watched the progress of the case for three months, and having obtained the opinions of all the medical men of Savannah, who are conversant with surgical cases, and also being convinced that the disease was extending, and involving other parts, I determined (notwithstanding the frequency of failure in such cases to eradicate the disease) to remove, as far as practicable, en masse, the portion of the upper maxilla which seemed to be involved in the disease, cutting into sound parts on every side; and in order to accomplish this, I foresaw the necessity, as well as the difficulty, of including a part of the palatine process of the left side, (the diseased part extending beyond the raphe.)
Accordingly, on the 18th of March, 1847, at 12 o'clock, M., in the presence of Drs. Habersham, Richardsone, Arnold, Tufts, and several other physicians and students, I proceeded to the operation in the following manner:—

The incision through the soft parts was commenced a little outside of the external canthus of the eye, at the junction of the malar with the upper maxilla, and carried down in a slight curve to the angle of the mouth, in front of the orifice of the duct of Steno. The flap, consisting of the whole thickness of the cheek, and including the ala of the nose, was dissected up and turned over the forehead, one or two small arterial branches requiring ligation. An incision of an inch in length, was extended from the commencement of the first, backwards, parallel with the zygoma, and the parts turned back, so as to expose the zygomatic fossa. Finding that the lip and ala nasi could not be sufficiently elevated, another incision was dropped from the columna nasi through the median line of the upper lip, and the right half of the lip and ala nasi were then turned up sufficiently to expose the nostril. The two incisor teeth of the right side were then extracted with straight forceps, the gum in front divided with the scalpel, as also the soft covering of the palatine vault, one or two lines beyond the margin of the tumour, and the velum pendulum palati separated from the palate bone. A small saw was now applied to the alveolar process formerly occupied by the first incisor tooth, and the thick part of the bone divided. A very strong pair of bone-nippers, with sharp points, was now applied, and the palatine process, together with the septum narium, divided.

Owing to the necessity of extending the incision beyond the palatine raphe, for the purpose of completely encircling the tumour, this part of the operation consumed more time than is usual. The bone-nippers were next applied to the nasal process of the upper maxilla, then just below the junction of this last with the malar, and the incision extended through the anterior wall of the antrum, just below the infra orbital foramen, and backwards to the tuberosity of the maxilla. The remaining attachments of soft parts were divided with the scalpel, and a slight blow with a chisel completed the separation of the remaining bony attachment behind, which enabled me to remove the whole mass.

There was little or no haemorrhage from deep seated parts. The actual cautery was applied to several suspicious points. The only vessel of any importance, which required a ligature, was the labial, which was divided by the incision through the middle of the lip.
The parts were exposed for an hour, when the cavity was filled with lint, and the flap united at the edges by 9 or 10 points of twisted suture. The patient was put to bed, and soon there occurred haemorrhage from the nose and mouth to rather an alarming extent; but this was arrested by stuffing more lint into the cavity through the mouth, and applying cloths wet with cold water to the cheek.

At 6 o'clock, P. M., I visited the patient, and found her as comfortable as circumstances would permit; pulse pretty good.

E. Gruel, with brandy; and laudanum to procure rest.

19th, 20th, 21st.—Patient has been doing well. The incision through the soft parts has almost entirely healed by the first intention—it has been dressed altogether with cold water. There has been some swelling of the face, which has been reduced by the cold applications. There was some febrile exacerbation on the 19th, which subsided after the bowels were moved by an enema.

Her diet has consisted of beef soup and arrowroot. Laudanum freely given to procure rest and allay pain.

22d, 23d.—Continues to improve. As the weather became cooler, and the cold applications unpleasant, simple serate was substituted.

There has been considerable fætor from the wound in the mouth. The lint was removed from the cavity on the 22d, and fresh lint wet with sol. chlor. sod. substituted. None of the pins have been removed. The swelling of the cheek has subsided. She takes arrowroot and soup, with a little wine; laudanum to quiet nervous irritation.

24th.—The pins were all removed to-day, and the whole tract of the incision, with the exception of one or two very small points, found to have united very neatly by first intention. Adhesive strips were substituted for the pins, in order to support the parts. The general treatment, and dressing for the inside of the mouth, were continued.

April 7th.—The patient has continued to improve—parts involved in the operation nearly all healed. She takes mush, &c., walks about, speaks with great difficulty and almost unintelligibly.

May 13th.—Jenny has continued to improve in health. The parts on the inside of the mouth are pretty well healed. A thin cartilaginous plate has been formed, like an arch, beneath the soft part of the cheek, which supports them admirably, uniting itself to the palatine process at the line of incision, and preventing the falling in of the cheek!
The opening between the mouth and nose is very much contracted, but not sufficiently to prevent the passage of food into the nose, which she finds rather annoying.

A semi-transparent, reddish, granular mass has been thrown cut from the mucous membrane lining the remains of the cavity of the antrum beneath the orbit of the eye, which has given me some uneasiness, lest it should prove a nucleus for the regeneration of the disease. But I am in hopes, from its healthy appearance, that it is only an effort of nature to fill up the remains of the cavity, and promote, as much as possible, the convenience of the patient. The patient's articulation is improving, so that she can be more easily understood when speaking.

June 6th.—I had an opportunity of examining this day the subject of the case above detailed. I find pretty much the same appearance of the parts as when last examined. The parts within the mouth are well cicatrized; the granular mass in the upper part of antrum bears very much the same appearance—it does not completely fill up the cavity. I cannot believe that it is any part of the disease for which she underwent the operation. She has contrived to obviate the inconvenience resulting from the deficiency of the roof of the mouth, by stuffing in cotton. I recommended to her a piece of sponge as a substitute. I have no doubt that the defect might be very much relieved, by an ingeniously contrived gold or silver plate. She masticates very well with the teeth which remain in the maxilla of the left side.

The tumour which was removed by this operation, is sarcomatous; but in some respects, resembling brain, particularly since it has been immersed in spirits. When incised, the surface is smooth, and is similar to the incised surface of brain, which has been hardened in alcohol, interspersed here and there, with minute bony spiculae.

The subject of the operation has returned to her former occupation (not very laborious) in the country; and from present appearances, may reasonably hope to be remunerated for her fortitude in submitting to it;—and modern surgery may, without much presumption, number the case among its triumphs.

Note.—While we sincerely hope our friend may realize his expectations regarding the non-return of the disease, the effects of which he has so skilfully extirpated in this case, we cannot divest ourselves of the apprehension that it is malignant in its character, and may in the end destroy life. Of eleven operations on the jaws, in our practice, there has been a return in every instance where malignancy was clearly determined.—[Ed.]

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ARTICLE XXX.


Mr. D. M., a sturdy, well-proportioned Irishman, remarkable for strength and activity, enjoyed almost uninterrupted health up to about his fiftieth year, when he began to suffer some inconvenience from frequent but slight attacks of colic, especially after any error in diet, or during moderate torpor of the bowels, for he was never troubled with such a degree of intestinal inaction as would be called constipation, neither was he subject to diarrhœa. Under this condition of the bowels, almost perfectly healthy as to action, the colic symptoms gradually increased in violence until he had to call in medical aid. The writer, who was the family physician, being sick at that time, a neighboring "Thompsonian" was sent for, whose steam soothed for a while, but whose pungent preparations of pepper and other fiery compounds aggravated the pain. Failing to get relief from these remedies, a physician was called in, under whose treatment he was relieved for a time. On all subsequent attacks I was with him, and by the use of anodynes, cathartics, sinapisms, warm bath, &c., preceded sometimes by venesection, the paroxysms passed off in the course of a few hours. Still slight and frequent twinges would generally recur before many days had elapsed, harassing the patient and keeping him in constant dread of his frequent torture. The paroxysms which were sometimes excessively violent, came on at irregular periods of from one to three months. During the intervals various remedies were used, being such as were suggested by the conflicting pathological views of the case, to-wit, tonics, derivatives, alteratives, &c., and among the last mercury, which was given until ptyalism was induced, but without any manifest benefit. A year or so after this, when in one of his best intervals, jocund, happy and hopeful, improved in feeling and in flesh, (for his constitution was yet as elastic as a boy's) he fell into temptation, and neither conscience nor consequences restraining, he yielded, and came out worsted. A few days revealed to him the existence and nature of his new malady. He commenced the use of Bals. Copaiva with some unimportant adjuncts, and in two or three weeks was cured of both gonorrhœa and colic, or rather, permanently cured of the former and perfectly relieved of every twinge of the latter, for more than two years. But this may be viewed as a spontaneous change—the
result of natures efforts—as an instance of the post hoc and not of the propter hoc. Let the progress of the case decide the doubt. After this long exemption, the symptoms gradually returned with increasing violence, until they became as distressing as at any former time; when under my advice, he resumed the use of the Balsam, and continuing as before, a like period of immunity ensued; and he is now so fully assured of the benefits derived therefrom, that, without being urged to it by a medical attendant, he resumes the remedy on the slightest indications of his returning malady, and always with long, but varying periods of exemption, and has now remained for several years secure from violent seizures.

Now, what is the nature of this case? What is the disease? where its seat? and what its pathology? It would consume too much time and space, tire my unaccustomed hand, and be unacceptable to the reader, to show or attempt to prove that it is not neuralgic, nor from biliary calculi, &c., &c. But is it bilious colic? I think not. It is true the patient had a liver, as all of our patients have, and it is a fine thing, a matter to be rejoiced over, that if we get a patient we know he has a liver. This hydrargyric target, scape-goat of the viscera, great hiding place of all manner of ills and errors,—yes, this grand, magnificent organ being where it is, and doing what it does, has relieved many an Æsculapian from a world of embarrassment, and it does it so easily, so rationally, and so invisibly, that there is neither doubt of the truth, nor appeal from the decision. The thing is done on this wise: if after due searchings and explorations we fail to find the disease elsewhere, we know, as a matter of course, it must be in the liver. And I believe it is an admitted fact among the fraternity, that it is always right to find a disease before we cure it, on the same high and philosophic ground, that it is right to catch a hare before we cook him.

But dropping bagatelle, I proceed to the investigation. The liver has been accused of a great many sins that it never committed; but, like other organs, it may sometimes be at fault—it may be disorder-
ed in structure or function, and when so, its secretion may be redundant, deficient or vitiated. Evidence of these or other morbid conditions should appear, before we locate disease there. It is not enough that the patient is sick, and we know not what else ails him, to justify us in pronouncing it "liver disease," any more than it is, to pronounce every fever congestive that terminates fatally. It is not enough that we can puke or purge out bile, for it is no more
evidence of diseased liver, that bile flows copiously under certain excitation in the stomach or bowels, whether food or physic, than that the salivary glands are diseased because they secrete copiously when excited. I have admitted that the liver may be at fault. Well, suppose it is diseased and pours out an acrid secretion, the intestines, though in a healthy condition, are fretted by it, and resent the morbid influx, by taking on a dysenteric, diarrheal or colical action, this sometimes occurs; but, by the way, these effects are not sufficient evidence that the primary disease is seated in the liver. But on the contrary, suppose the intestines are out of order, (say the mucous membrane,) and the liver pours into them its accustomed healthy secretion, is it any more strange that they should resent it, by showing colic or something else, than that healthy tears should smart an inflamed eye, or healthy urine an inflamed urethra? Before proceeding further, however, that I may not be misunderstood, I would say, whatever organ may be primarily affected, in any case, the contiguous ones, or those more intimately associated in office or sympathy, and even the system at large, may become more or less involved in the progress of the disease. But in the case before us there were no symptoms indicating extensive diseased action, and I believe the primary, the chief, and perhaps the only disease, was a morbid irritability of the mucous membrane of the intestinal canal, confined probably to the colon, evidently there was no liver disease, or it came without a single one of its numerous retinue; there was no bilious tint of skin or eyes, no enlargement, hardness, or tenderness of the epigastric or hypochondriac regions, no pain in the shoulder or other remote part; he could lie on either side or back with equal comfort; no cough, no melancholy, and indeed, not to dwell longer on the symptoms, there was no evidence at all of hepatic derangement, and although his digestion continued good, he had to be careful as to his diet, more in reference to the effects on the colon produced by the residuum of digestion, than from the impression made during that process on the stomach and small intestines. That the stomach, liver and the other associate organs, more immediately concerned in digestion, were in a healthy state, is further rendered probable by his resiliency from the debility induced by severe attacks, and his keeping in a healthy fulness of habit, under the almost constant harrassings of disease. And again, these views, as to the seat and nature of the disease, are further corroborated by the effects of remedies, particularly those like the Balsam, which have
long had an established reputation in affections of the mucous membranes.

I claim to have made no discovery in this case; but was led, as before stated, to the use of an old remedy, in a disease which had not before been treated by it, so far as I know; although administered frequently (if my pathology is correct,) in diseases of a kindred nature. I do not pretend to say, for I do not believe it is adapted to any large proportion of colic cases, but there are doubtless those occasionally occurring in every one's practice, in which bals. copaiva and similar remedies would be found useful.

I am aware that I have not positively established the truth of my views or the correctness of my position, but if the one is correct and the other untenable, I nevertheless flatter myself, that the facts will interest the medical public.

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**ARTICLE XXXI.**

_Febris Typhoides, as at present prevailing in the Alms House and Prison Hospitals of New-York._ By Chas. T. Quintard, M. D., of Athens, Clarke county, Ga., late Assistant Physician to the Alms House and Prison Hospitals of the City and County of N. York.

The New-York Journals have of late been filled with accounts of the rapid spread of the Ship and Typhoid Fever, in those parts of the city where poverty, vice, and filth encourage the development of disease. The hospitals are crowded: at the Quarantine there are more cases than have ever before been known; at the New-York hospital it is the same; while at the Bellevue Institution there are so many cases that temporary buildings have been erected for the accommodation of the convalescing patients. The number of patients treated in Bellevue, from January, 1846 to January, 1847, was 4132; the deaths, 521 or $12\frac{7}{10}$ per cent.

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Foreigners</th>
<th>Natives</th>
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<tbody>
<tr>
<td>Remaining January 1st, 1846</td>
<td>236</td>
<td>307</td>
<td>533</td>
<td>288</td>
<td>244</td>
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<tr>
<td>Admitted during the year...</td>
<td>1906</td>
<td>1691</td>
<td>3691</td>
<td>3000</td>
<td>600</td>
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<tr>
<td>Total,......</td>
<td>2132</td>
<td>2001</td>
<td>4132</td>
<td>3288</td>
<td>814</td>
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<tr>
<td>Discharged and died,......</td>
<td>1833</td>
<td>1894</td>
<td>3727</td>
<td>1880</td>
<td>747</td>
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<tr>
<td>Remaining January 1st, 1847</td>
<td>209</td>
<td>206</td>
<td>505</td>
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ADMISSIONS.

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<tr>
<th>From England</th>
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<th>From Scotland</th>
<th>From Germany</th>
<th>From United States</th>
<th>From State of New-York</th>
<th>From Other Countries</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>2202</td>
<td>85</td>
<td>470</td>
<td>151</td>
<td>416</td>
<td>83</td>
<td>3600</td>
</tr>
</tbody>
</table>

In January, 205
February, 237
March, 267
April, 264
May, 291
June, 309
July, 355
August, 326
September, 359
October, 332
November, 281
December, 342

Total, 3600

Of the whole number of deaths that occurred during the year, 31 were from Acute Dysentery: 24 of Congestion of the Brain; 20 of Puerperal Peritonitis; 168 of Phthisis Pulmonalis, and 58 of Typhoid fever—or 301 deaths out of the total 521.

<table>
<thead>
<tr>
<th></th>
<th>Discharged</th>
<th>Died.</th>
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<tbody>
<tr>
<td>January,</td>
<td>245</td>
<td>30</td>
</tr>
<tr>
<td>February,</td>
<td>204</td>
<td>31</td>
</tr>
<tr>
<td>March,</td>
<td>243</td>
<td>46</td>
</tr>
<tr>
<td>April,</td>
<td>261</td>
<td>60</td>
</tr>
<tr>
<td>May,</td>
<td>198</td>
<td>44</td>
</tr>
<tr>
<td>June,</td>
<td>294</td>
<td>50</td>
</tr>
<tr>
<td>July,</td>
<td>267</td>
<td>50</td>
</tr>
<tr>
<td>August,</td>
<td>250</td>
<td>47</td>
</tr>
<tr>
<td>September,</td>
<td>303</td>
<td>40</td>
</tr>
<tr>
<td>October,</td>
<td>352</td>
<td>49</td>
</tr>
<tr>
<td>November,</td>
<td>203</td>
<td>36</td>
</tr>
<tr>
<td>December,</td>
<td>286</td>
<td>38</td>
</tr>
</tbody>
</table>

3106 521

The Resident Physician, in his report, rendered January, 1847, states “that a large number of ship or Typhoid Fever cases have been admitted, many of them in a dying condition, and while quite a number have died; still the proportion of recoveries has been great and the fever has not generally been marked by the contagious character usually assigned to it.” In consequence of the state of some parts of Europe, Ireland in particular, emigration increased so rapidly towards the spring, that the cases of Typhoid fever exceeded the amount of all the other diseases in the Institution, and while the number of deaths from Jan. 1846 to Jan. 1847 amounted to 58, there have been half that number dying weekly of this disease. The contagious character of the disease is well marked, and this we presume comes from the fact that a great number of passengers are
crowded into the ship-holds, from which the malaria generates a poison of greater intensity and of a decidedly contagious character. At one time it was difficult to obtain nurses willing to superintend the wards, and when we remember that the nurses at the Bellevue Institution, are taken from among the convicts at Blackwell's Island, we cease to be astonished at the fatality of the disease. Several nurses and orderlies died, and of the attending physicians, Drs. Stone, Reilay and Van Buren contracted the disease. The latter gentleman fell a victim to it. At the Bloomingdale Hospital, three of the physicians have likewise died, among whom was Dr. Farrer of Virginia. So soon as Dr. F. was taken, he was removed from the hospital to the city, and attended by Professors Revere and Pattison. Prof. Revere contracted the disease, and he too fell in the midst of his usefulness. In the lower part of the city, where a large number of emigrant boarding houses are kept, the disease has been very abundant, and has spread to the neighboring streets of the city. Of its nature or character we are unable to speak. That this fever is contagious we are assured of by the fact that it can be communicated by vessels being in the neighborhood of the patient, or by passing through the wards where it exist, as well as by breathing constantly the atmosphere by which they are surrounded. Its action is of course modified by the peculiarities of the constitution, of those exposed to the atmosphere, depraved by the matter of the miasm on ship board, but the poison appears to be as contagious from a mild case as from a very severe one, and the disease is as readily contracted.

PART II.—REVIEWS AND EXTRACTS.

ARTICLE XXXII.


Of the twenty Medical Periodicals of our country, this one has the best claims to the title it has assumed. American it is by seniority, by its size, and by its worth. Indeed, if we are not mistaken in our estimation of it, this Journal merits a more extended and significant appellation. Since the lamented death of Dr. James Johnson, the able and distinguished editor of the Medico-Chirurgical Review; and
the more lamentable fall of Dr. Forbes, of the British and Foreign Medical Review, to a recommendation of homœopathists, hydropathists, &c., of the day, we have no hesitation to pronounce the American Journal of the Medical Sciences, to be by far the most valuable now published in the world. The Edinburgh Medical and Surgical Journal is not to be compared to it. Of the same date, and both Quarterly, the Edinburgh has thirteen original articles, and but twelve selected; while the American numbers twenty-five in one department, and about one hundred in the other. The Dublin Quarterly Journal of Medical Science we prize most of those now published in Europe; but still we deem it inferior in the character and value of its communications, as also in its reviews and selections, to the one now under consideration. We know of no French or German, and still less Italian or Spanish medical periodical that we would exchange for the American.

This is the only medical Quarterly of the United States. Published originally twenty-nine years ago, and subjected to the control of different editors, it has always preserved the highest character among medical practitioners in every State of our wide spread Union. And notwithstanding the ability with which other similar works have been conducted and are now managed, it still retains undiminished its enviable reputation.

The first part of each number is devoted to original communications, memoirs and cases; then follow its review department and bibliographical notices; next a quarterly summary of the improvements and discoveries in the medical sciences; and lastly, American intelligence. Each No. contains about 256 pages, but frequently much more. Connected with the Journal is another publication, called the Medical News and Library, issued monthly, containing 20 pages of the re-publication of some foreign standard work of the profession, and eight pages of recent medical intelligence. This is as an avant-courier of the larger and more important Journal; and both are furnished to subscribers for $5.00 per annum, invariably in advance.

The April No. of the American Journal of the Medical Sciences, although received a month or so ago, contains so much interesting matter in the original department, that we propose at present to condense from it such intelligence as no doubt will be profitable to our readers.

The first article in it is from John Forsyth Meigs, M. D., Lecturer
on Obstetrics, and Diseases of Children, in the Philadelphia Medical Association, &c., and is entitled, "History of seven cases of Pseudomembranous Laryngitis, or True Croup; with remarks on the treatment, and on the distinction between it and the other laryngeal affections of children." The father of the writer of this communication was graduated in Franklin College of this State in 1809, and having taken his medical degree in the University of Pennsylvania in 1817, commenced the Practice of Medicine in Augusta. He subsequently moved to Philadelphia, where he soon after married, and is now the distinguished Professor of Obstetrics, &c., in the Jefferson Medical College. The son seems to be following closely the professional footsteps of his illustrious father, and the name of Meigs promises to be long associated with the profession.

After claiming the attention of the profession, if for no other reason, on account of the fatality of croup, Dr. Meigs, Jun., proceeds to a minute and no doubt faithful narration of his cases. We give the first:

Case I. D——, girl aged 3 years. Called first on the night of January 1st, 1845. Dr. Godon, of this city, was in attendance when I arrived, and we attended the case together. The child had had cough for three days, gradually increasing in violence and frequency, and changing from a dry hack to the peculiar shrill cough of croup. The parents were not at all alarmed until the evening I was called upon, at which time the case first assumed the features of croup.

When I arrived the case appeared to be one of mild croup. The respiration was not stridulous, except during a forced inspiration, or just before and after coughing. The cough was loud, frequent and characteristic, the voice very hoarse. The temper was scarcely changed, and the inflammatory symptoms very moderate, showing that the local disease had made but little impression on the constitution as yet.

On account of the gradual approach of the attack, and the hoarseness of the voice, it was agreed upon by us to treat the case actively, as we feared it would prove to be membranous croup. The child was bled to the amount of five ounces from the arm: it was put in a warm bath, and an emetic administered.

The next day there was no decided improvement, and a number of leeches were applied to the throat. From this time to the ninth day, when the child died in a state of asphyxia, the treatment consisted in the employment of emetics of alum, of large doses of calomel with Dover's powder, of decoction of Seneca, and in the application of a blister over the larynx and trachea.

On the sixth day a decided amelioration occurred. This improvement followed the use of an emetic of alum, which had been preceded by considerable doses of calomel. The action of the emetic
brought away a large quantity of very viscid glairy phlegm, intermingled with portions of membranous looking matter, which we believed to be pseudo-membrane, enveloped in recently exuded fibrine. She expectorated for some time after this a good deal of the same kind of substance. It may be well to remark, however, that though the breathing and general condition of the patient improved at this time, the voice remained very weak and hoarse, and the cough retained its smothered sound. The case soon resumed its course, and notwithstanding resort was had to the same means, death occurred in a shape of the most distressing asphyxia.

At a post-mortem examination, the larynx and a few inches of the trachea were found occupied by a false membrane of moderate thickness and consistency, beneath which the mucous membrane was inflamed and reddened. The parts about the rima glottidis were swelled and thickened, so as to have contracted considerably the size of the orifice. This contraction was independent of the pseudo-membrane, and from the appearance of the parts we were convinced that it was the result of a chronic inflammation, dating from some time previous to the attack of croup. As the child had just recovered from a severe and long-continued hooping-cough, we felt satisfied that the contraction of the orifice had been caused by inflammation developed in the progress of that disease; and moreover, we could not but think that this complication was a chief cause of the death of the child, by preventing the ready expulsion of the contents of the larynx, after they had been softened by the action of our remedies.

Of the seven cases two proved fatal.

We find the following remarks made on the different forms of laryngeal affections in children:

Before passing to the subject of the treatment employed in the above cases, we are desirous of making a few observations upon the divisions made by different authorities, of the laryngeal affections of children. We are prompted to do this, by the hope of attracting the attention of our medical brethren in this country to the necessity of making a correct distinction in their diagnosis of these different affections.

After a careful study of some of the highest authorities on these points, we are induced to believe that the descriptions given by MM. Barthez et Rilliet, in their work on diseases of children, are the most accurate. These gentlemen describe first, pseudo-membranous laryngitis, of which the cases reported in this paper are instances. They next consider spasmodic laryngitis, the same as the stridulous laryngitis of Guersent and Valleix. This disorder is very common throughout the United States, and is the one to which the term croup is familiarly applied. It is the disease which commonly attacks children previously in good health, suddenly, during the night; which is generally cured by an emetic; and which seldom lasts more than a
few hours, or one or two days. It does not come on slowly and insidiously like pseudo-membranous laryngitis; it is not accompanied with exudation of fibrine, and lastly it is a disease of really little, though apparently of very great danger. It is not the laryngismus stridulus of the English authors, though the two are classed under the same head by Williams, in *Tweedie's Library of Practical Medicine*, and by Dr. Condie in his work on Diseases of Children.

Both MM. Riliet et Barthez and M. Valleix, are very careful in drawing the distinction between the two diseases, the pseudo-membranous laryngitis or true croup, and spasmodic laryngitis or false croup. Indeed the difference is so marked, that we are surprised it is not made out by all recent writers. Those who fail to make the distinction, seem to think that both diseases are the same in the commencement; that they are characterized by the same pathological features in the early stages, and that after differences depend on fortuitous circumstances of age, of epidemic influence, of treatment, &c.; whereas they are two widely different and distinct diseases, presenting a different array of symptoms, running a different course, and requiring a different treatment; one, so fatal as to have led some to deem it incurable; the other, very seldom leading to a fatal termination. In one, the chief pathological element is spasm, determined by a very moderate degree of inflammatory affection of the larynx in most cases; in the other, there is violent inflammation of the mucous membrane of the larynx, trachea and even bronchia, with effusion of fibrine and consequent formation of false membranes.

The peculiarity in the treatment of croup offered by Dr. Meigs is the emetic property of alum. This, he says, was first used in Philadelphia, by his father. The dose is a tea-spoonful of the finely pulverized sulphate of alumina mixed with honey, syrup, or molasses, and repeated every ten to twenty minutes, until full emesis is produced. One dose, however, is generally sufficient. The reader will recollect how powdered alum is prized by Velpeau for common sore-throat. No doubt there is something specific in it in anginose affections. He also alludes to the fact of the recommendation of the *turpeth mineral*, the sub-sulphate, or yellow sulphate of mercury, by Dr. Hubbard of Maine. He gave it one case, (three grains diffused in syrup,) which produced free emesis in a few minutes, followed by relief, but the child subsequently died from the violence of the attack.

This is a highly creditable article for a young man of eight years standing in his profession.

The next is a deeply interesting article on the *poisonous properties of the Sulphate of Quinine*, by Wm. O. Baldwin, M. D., of Montgomery, Alabama.
So much has been published in our Journal on the subject of this heroic article of the modern materia medica, and the opinions expressed concurred in so generally by the profession in this section of our country at least, that individually we have nothing to add at present. For it will be perceived that though Dr. B. entitles his article, "Observations on the poisonous properties of the Sulph. Quinine," he entertains and publishes the same views respecting its proper dose, mode of administration, &c., which we have for some time maintained and taught. It is proposed then to quote this article without comment, where it cannot be condensed.

Everything calculated to throw additional light upon the modus operandi of a remedy which occupies such a conspicuous position in the therapeutics of the age, as does the sulphate of quinine, must be received with some degree of interest by the medical profession at large. Under this conviction I propose to narrate some facts and experiments relative to the nature of quinine as a poison. Though an unfortunate one, it may yet be stated as a fact, that in our medical periodicals we much oftener meet with reports of cases showing the successful application of particular remedies, or modes of treatment, than such as illustrate their pernicious influence or misapplication. Through this means, however, we have in a few instances been advised of the baneful effects of quinine in producing deafness, amaurosis, haematuria, violent gastralgia, sudden prostration, delirium, epilepsy, palsy, &c., and in a few instances death is reported to have occurred, under circumstances so obvious as to leave no doubt of its being the result of the poisonous operation of quinine. Yet these have been so completely obscured by the reports of those individuals who declare their entire conviction of its harmlessness, under all circumstances, and when given in almost any quantity, that the former seems to have made but little impression upon the mind of the profession in regard to its dangers. In none of our systematic works do we find the subject treated of with anything like gravity. In Orfila, and even in Christison's work on Poisons, where the noxious properties of many very simple substances (and among them common table salt) are dwelt upon at length, quinine is not mentioned as a poison, nor are any of the preparations of cinchona.

A case is then given of a negro girl about six years of age, to whom her master gave 8 grs. of quinine in the course of three hours. She was laboring under remittent fever, and during the previous treatment of the case, had taken repeated doses of the sulphate, but in smaller quantities. * * * * * * * * * *

Shortly after he gave her the last dose her skin became dry again, succeeded by restlessness. About 6 o'clock she had a convul-
sion. After this he noticed that the pupils of her eyes were dilated, and soon discovered she was totally blind. When asked if she knew her mother, and other persons who were placed before her in a bright light, her eyes would wander about—she apparently endeavoring to fix them on some object—and then she would reply “I can't see them.” The dilatation of the pupils, blindness, restlessness, convulsions, &c., continued until 8 o'clock, when she died. The convulsions were described by Mr. E. as being of a most violent character, but notwithstanding she retained in the intervals perfect possession of her mental faculties, and an unusual degree of pertainess for children of her age.

I was not prepared to make a thorough post-mortem examination, and therefore made a partial one, only of the stomach and bowels. Found considerable vascularity in portions of the small intestines and stomach, the former containing secretions of a yellowish and greenish substance, intimately blended with mucus—no worms. Pupils enormously dilated.

A review of this case leaves no doubt, upon my mind, of the direct agency of the quinine in producing death. The quantity given immediately before death (grs. 8), would not of itself (I am disposed to think) have produced the fatal result, separate from the agency of that which had been given previously, but at the time these last portions were given, it must be remembered that the system was still charged with the quinine to some extent, for up to 4 o'clock that morning it had been regularly introduced into the stomach, at intervals, for nearly two days. The accession of fever which should have taken place on the 4th was prevented. Now it is very sure that the patient either died from the effects of the quinine, or that the paroxysm of fever which had been arrested or suspended on the 4th, came on on the 5th and killed her. The latter could not have been the case, for we find her an hour or two before she commenced taking the quinine (the second time) in a warm, free and diffused perspiration. The most conclusive evidence, however, to my mind, that the quinine did kill the patient, is the characteristic train of symptoms which immediately followed its administration, and preceded death: the extreme restlessness, dilatation of the pupils, blindness and convulsions. The exacerbating feature of the disease had been broken up, after which there was nothing to forbid the hope of her recovery, and, apart from the effects of the quinine, there was certainly nothing in her condition to account for her death at that time.

* * * * * * * * *

Symptoms which followed the ingestion of large doses of quinine into the stomach of dogs:—restlessness generally preceded all other symptoms, as was indicated by the animal changing its position often, and constantly moving from place to place. Vomiting, or, in those cases where the esophagus was tied, efforts to vomit succeeded. Purging was noticed occasionally, but in no instance except where the medicine was taken by the stomach. Then came on muscular
agitation, or tremulous movements of the body and extremities, with a constant motion of the head, resembling somewhat paralysis agitans. In attempting to walk, the dog would totter from side to side and fall, or if he maintained his feet would walk in a direction different from the one which he seemed to desire. When under the full operation of the poison, the power of locomotion, or even the power of standing in the erect position was lost altogether, the extremities apparently completely paralyzed. This state was accompanied with more or less excitement of the vascular system; the pulse increasing in frequency and rising from 110 to 160, and in one instance even as high as 240 per minute. Great oppression of the breathing was present, and sometimes frothing at the mouth. The dyspnea in all instances was excessive, sometimes panting, at others slow and laboured, resembling in a most striking manner an acute attack of asthma; countenance expressive of great distress and anxiety. The pupils of the eyes were invariably dilated, and generally to an enormous extent, leaving but a small ring of the iris perceptible, and vision, as well as could be judged, was entirely lost. Convulsions were observed in every case (except one), which was watched to its termination, where the dose given was sufficient to produce death, and in one or two instances where the medicine failed to produce this result. Furious delirium was present in one case, as was manifested by the dog barking and biting at every thing about him. Sometimes a profound coma would ensue, accompanied with slight muscular agitation, slow and heavy breathing, terminating in death in a very few minutes after the poison had been taken, and in a few instances the subject seemed as if stunned by some sudden and powerful blow or violent fit of apoplexy. This latter effect, however, was only observed when it was given to young dogs (half grown and under) through the jugular vein or peritoneum. Its effects upon puppies seemed to be proportionately much greater than upon dogs fully grown.

The time required to produce death varied very greatly with the quantity given and the age of the subject, as well as the mode and manner of its administration, and in some instances it varied considerably when the dose, mode, and all other circumstances of its administration were supposed to be equal; for whilst in some instances fifteen or twenty grains produced the uniform and peculiar train of toxic symptoms, succeeded by death in a very short time; in other instances it required these quantities doubled and repeated until 120 grains had been taken, and a much longer time to produce the same results. This fact is in accordance with my experience relative to its remedial action upon the human subject, showing that it is governed more, perhaps, in its modus operandi by inherent idiosyncrasies, or created predispositions, than any other remedy. The modes of giving it adopted, were by the stomach, the cavity of the abdomen, and by the jugular vein. When given by the stomach it produced vomiting, and was thrown back generally before a suf-
sufficient amount to produce death could be absorbed. By dissolving and largely diluting it with water, a sufficient quantity was absorbed to produce death, in this manner, in one instance. In almost all of the experiments with it by the stomach, however, the esophagus was ligatured. When dissolved and given by the stomach its first effects were observable in about twenty minutes, sometimes shorter or longer, and death resulted in from one to thirty-six hours, usually in four or six. An empty stomach facilitated its operation greatly. When injected into the peritoneum in full doses (40 grs.) its effects were appreciable in from four to six minutes, and death occurred in from thirteen to thirty minutes. When injected into the jugular vein (in giving it by this mode great care was taken to prevent the admission of air), its first effects were manifest in a space of time so short as to be almost inappreciable; not more than a few seconds after the nozzle of the syringe was withdrawn, and death occurred in one or two minutes. In all instances, except one, the quinine was dissolved in water by the addition of sulphuric or other acid in quantities barely sufficient for this purpose.

When the experiment went far enough to produce amaurosis, short of death, the vision was regained after a time. In one instance the dog remained totally blind for two weeks, and afterwards regained his vision slowly. This is also a feature in the second case reported in the commencement of this article. The man regained a very useful degree of vision after a short time. From these, as well as other cases of the kind reported, it would seem that amaurosis from this cause is not likely to be permanent.

Though it operated much more promptly when injected into a vein or the peritoneum, yet I did not observe that it operated with more power or force: that is, I did not discover that a given quantity administered in this way would produce death more certainly than when given on an empty stomach. 28 grains injected into the cavity of the abdomen in one instance, and 20 grains injected into the jugular vein in another, failed to produce death, yet these quantities did produce death in other instances, as well when given by the stomach, as by these modes.

The post-mortem appearances were equally uniform with the symptoms before death. The most prominent and characteristic appearances were the dark, fluid and dehydrinated condition of the blood, and the congested state of the parenchyma of the lungs, resembling very much red hepatisation. The vessels of the membranes of the brain were engorged, so also were the liver and kidneys in a few instances. The stomach and bowels were vascular and highly injected in patches. The membranes of the spinal cord were more or less vascular and, in one instance, a semi-fluid coagulum of blood was found in the upper half of the theca vertebrales. This was probably owing to the subject being very young, and the convulsions being more violent and frequent than in any other instance.

Thus it seems clear that quinine is a poison, and one which may be
made directly fatal to life, and if these experiments upon the dog, in themselves, are not conclusive of that fact, which the concurrent testimony of toxicologists would justify us in believing, they at least become so when it is remembered that the symptoms which its exhibition gave rise to, are not only strongly corroborated by, but were almost identically the same with those observed in the human subject, in the few instances were poisoning from this substance is known to have been produced. There is not a symptom noticed in these experiments which has not, at one time or other, been observed in its operation upon the human subject, and the two cases of poisoning in the human subject reported in the commencement of this article, where the same striking and peculiar assemblage of symptoms which followed its administration, were so completely identical with those observed in the dog, most clearly establish the fact that the manifestations of its poisonous operation, at least upon the dog, are identical with those observed in the human subject, or at any rate do not differ more than they do in different instances on "man and man."

Its operation as a poison, as well as a remedy, is certainly peculiar, and it seems difficult to assign it to any particular class of poisons, differing in some respects from all of them. It appears to resemble in its action, more closely than any other, those of the "second class" of Orfila, or the class of "narcotic poisons." It does not seem to possess any hypnotic properties; in this it differs from most of the substances included under this head. I do not mean to touch the much agitated question of the mode of its remedial operation, but desire to speak of its poisonous action only; and, on this head will only add, farther, that its operation seems to be principally upon the nervous system, as is clearly demonstrated in the derangement of the senses of vision and hearing, and respiratory functions, as also in the general muscular agitation, convulsions, &c. As it has been detected in the urine there can be no doubt but that it enters and mixes with the circulating masses of the body, and through this means exerts a direct influence upon the nervous system, which, as we have seen, is eminently excitant when given in quantities calculated to destroy life.

As yet I am aware of no antidote which will, with any certainty, negative the injurious effects of quinine. I have given the sulphate of morphine to patients rendered very restless and uncomfortable from a high state of quininism having been induced, but cannot speak with any confidence as to its effects. I have not known it to produce an immediate alteration in the state of the patient's feelings, but have witnessed an improvement in the course of a few hours, and in no case do I remember to have seen the patient get worse under such circumstances; but how far this may have been dependent upon the suspension, or partial withdrawal of the quinine (which generally takes place under such circumstances), and how far upon the morphine, it is difficult to say. This, however, at best, can only
be a partial antidote, palliating the effects of the poison, and of course can in no wise alter its medicinal, poisonous or chemical qualities or constitution. And, did we possess an agent of the kind, whose properties would render speedily inert those of the quinine, it would avail us but little; for, it is not a substance of that character which would be likely to be administered with the wilful intention of destroying life, and an antidote will, generally, only be wanted when the physician finds he has pushed his remedy too far, and its injurious effects are already being manifested, and, in that case, the medicine has already passed the limits where an agent of the kind could reach it.

As it is altogether likely that quinine is absorbed, and enters into combination with the circulating fluids of the body, and in all probability produces its impression upon the system in this way, its operation is thus a remote one, and the means adopted to prevent or relieve its injurious effects should be such as are found available in combating the poisonous impressions of other substances, supposed to act through the same medium. Thus, if symptoms arise during the administration of quinine calculated to create alarm, or to excite suspicions of its poisonous influence, it would be well to premise all treatment by the administration of a full and prompt emetic, in order to free the stomach of any remaining portions, which may not have been absorbed. The next step, then, should be to eliminate as rapidly as possible, that portion which has reached and mingled with the fluids of the body, and for this purpose, it has been recommended in other instances of an analogous character, to augment the natural secretions of the body.

This mode of treatment, which is based altogether upon the inference that the poison is absorbed and enters the circulation, and recommended as applicable or efficient only to poisoning from substances deemed to act in this way, seems to be a most reasonable one. I have certainly never witnessed or heard of any injurious, or seriously unpleasant effects from quinine, when the functions of the skin and kidneys were being actively performed during its influence—especially the former. For this purpose, the copious administration of warm diluent drinks, and hot pediluvia, or warm bath, would seem advisable. When the state of the pulse is such as to justify it, blood-letting, it would seem, is another channel through which the quinine may be abstracted from the system, not only by freeing the system of so much as may be contained in the quantity of blood actually drawn, but as assisting also in promoting the secretions of the skin and kidneys.

I am of opinion, that its poisonous effects may generally, if not always, be avoided by proper attention to the mode of its administration. A very common mode of administering it, and one very much insisted upon by patients generally, on account of its disagreeable taste in any other way, is in the form of pills. And, it is a practice with apothecaries, and with physicians who are in the habit of dispensing their own medicines, to keep a quantity of pills constantly
on hand. These, when made from a mass, formed by the addition of gum arabic, or common paste, get very hard before they are used, and when given under such circumstances, I have known them to pass through the bowels entirely undissolved. And, when combined with substances calculated to keep them soft, or even when prepared as administered, they may, and no doubt do occasionally become entangled or enveloped in flakes of mucus or other contents of the stomach and bowels, and thus pass off undissolved, and without effect, or they may meet with some obstruction in the bowels, and be retained. When this is the case—that the medicine is not dissolved, or absorbed regularly, nor yet does not escape from the bowels, from some cause or other, and still being introduced into the system at irregular intervals—a large quantity in this way may collect, until suddenly meeting with a solvent, (as first supposed by Briquet,) its whole force is spent upon the system at once, and it thus becomes the cause of serious mischief, when, if the same quantity had been given in such a way as to insure its timely absorption, such a result would not have happened. Of all the forms of giving it that of the pill seems to me to be the most decidedly objectionable, and should never be adopted in cases of much importance, where it can be avoided. Another very common mode of giving it is by suspending it in syrup, mucilage or water. This is certainly less objectionable than that of the pill, though not equal to that of the solution, made by the addition of some acid in quantities barely sufficient to dissolve it. I prefer sulphuric acid to any other. This mode of giving it has been recommended by Briquet, on account of its safety. In my estimation, it possesses a most decided preference over every other mode of administering it, and is the only one from which we can with certainty expect the timely and full effect of the medicine.

When the stomach is in a condition to bear it, its absorption and activity can be greatly facilitated by largely diluting it with warm water. When dissolved and diluted in this way, even when given in what may be termed "heroic doses," provided the quantity to be taken is divided and given at intervals of one, two or three hours, its deleterious effects may always be avoided and the remedy persisted in with safety in the absence of any manifestation of its influence, which we should never feel safe in doing when giving the "insoluble de sulphate," whether in the form of pills or powders; for, in the former case we will always be advised of its unfavorable influence early enough for a timely withdrawal or modification of the dose. When given in this way, a given quantity seems to produce a greater effect and in a much shorter time, than even a larger quantity when prescribed in either of the other forms; so that besides being a much safer mode it is a more economical one, both as regards time and medicine; and, the reason seems entirely obvious, for by dissolving and diluting it largely in this way, besides being dissolved ready for the absorbents, it is brought in contact with a much larger absorbing surface, and many particles which otherwise might lodge about the
contents of the alimentary canal and thus pass off with them, in a state of solution would readily be taken up and appropriated by these vessels.

This mode of giving quinine cannot be urged too strongly, for besides being a saving of a valuable and costly drug, and a preventive of its poisonous effects, it will be found of great assistance in prescribing it generally. In cases requiring much delicacy and discrimination in their management, and where the propriety of the prescription is a matter of debate with the physician himself, and he wishes to be made sensible of the effect of the first dose of his remedy, in order to determine upon its continuance, it becomes a matter of great moment that the medicine should be administered in that form in which it will be most certainly and speedily appropriated by the system, and its operation made manifest to the physician.

In a practice of nearly ten years in the South, the greater part of that time I have employed the sulphate of quinine, as a principal remedial agent, not only in Southern fevers, but in Southern diseases generally. Accustomed as I have been to witness the most satisfactory results from its exhibition, and familiarized as I thought I was with the minutest impression which it was capable of making upon the animal economy, I was prepared to believe every report in its favour, and had almost fallen into what I fear is becoming to be a popular error—that, "if it does no good, it will do no harm." I say this much by way of showing that I entertained no prejudice to it as a remedy, or anxiety, or even willingness, that it should be found to possess properties which might tend somewhat to circumscribe its useful application. On the contrary, I entertained a fondness for it, not equalled by my attachment to any other remedy. And, though occasionally my enthusiasm in regard to its virtues was somewhat abated, and my confidence in its inodiousness was somewhat equivocal, as it failed to produce the results anticipated, or as some unlooked-for symptoms were developed under its administration and influence soon farther experience would restore my former admiration of its sanative powers, and dispel all fears of the probability of its having exerted an injurious influence: attributing its failure to meet the indications which it was designed to fulfil to negligence in its administration on the part of the nurse, and the unlooked-for symptoms which occurred under its operation as an awkward or anomalous manifestation of the disease itself.

Notwithstanding this acknowledged partiality for it, I have never administered it in the enormous doses prescribed by those who boast of having given their thirty grains, repeated every half hour until 240 grains were introduced into the system, or their several ounces in the treatment of one case of fever. I have very rarely given more than ten grains at a single dose. My usual mode having been to give from four to six grains, and repeat at intervals of two, three or four hours, until 24 or 36 grains had been introduced into the system (in adults). Occasionally I have given it in larger doses, but
these cases have been extremely rare, believing that the quantities specified above, given in one intermission or remission at the proper periods, and aided by suitable auxiliaries, could accomplish, ordinarily, all that the remedy was capable of, and these enormous doses, to say the least of them, unnecessary. Sometimes, owing to want of time, I have given from 20 to 24 grains at one dose, but in such cases have never repeated it in the same dose.

Second to none other, quinine must ever hold the first rank in our materia medica, in the treatment of Southern diseases. I am accustomed to witness its peculiar and almost wonderful influence in arresting certain forms of diseases, but yet that it has gone far beyond its proper bounds, and is now being used too recklessly and indiscriminately, I feel most fully persuaded, and that it may be directly and fatally poisonous I am entirely convinced.

From all that I can gather, I am disposed to think from fifty to eighty grains of a pure article of quinine, given in solution at one dose, will produce death nine times out of ten, in healthy adults, and occasionally even smaller quantities. How far its operation may be modified by morbid action is a matter for consideration at the bedside.

Dr. Baldwin concludes this valuable paper, which should be read by every practitioner of medicine, by relating a case wherein 96 grs. of quinine taken by an adult in two hours, produced exhilarating effects resembling those of the protoxide of nitrogen.

Montgomery, Ala., is remarkably blessed with a number of highly scientific physicians. There are no less than three regular contributors here to the American Journal of the Medical Sciences—men of decided abilities and great professional zeal. And besides these, (Drs. Baldwin, Sims and Boling,) we have a personal acquaintance of several others in this small town, now, however, become the capitol of the State, who enjoy distinguished reputation for skill in the healing art. The 3d Art. in this No. of the Journal, is by J. Marion Sims, M. D., and is the honest narration of a case of tumor of the antrum. The operation for it was twice performed, but however skillfully done, proved, as is too often the case, not to be effectual. We are exceedingly pleased with the candor and free confession of what the author considers to be errors, with which this communication is marked. It augurs well for the profession, and comes with good grace from a highly promising young surgeon.

We next have an article on Laceration of the Perenium, by John P. Mettauer, A. M., M. D., L. L. D., of Virginia. The details of two
of seven cases, six of which were completely cured, are here related. The leaden suture is preferred, and every case of this loathsome affliction is considered curable. The character of Dr. M. as a surgeon is too well known to need remark from us.

We pass over several articles, which time and space will not allow us to dwell upon; including a case of the sudden formation of Hydrodrops Pericardii, to the extent of two quarts of limpid water; and another similar one of hydrocele, by Dr. S. Jackson of Philadelphia, formerly of Northumberland; and we close with a brief notice of Blood-letting from the Jugular in Diseases of Children. This is by Dr. Hildreth of Zanesville, Ohio, and known to the readers of that Journal by his numerous valuable contributions to it. After alluding to the general neglect of letting blood from the external jugular, he says, I would make this operation the rule instead of the exception, in many of the acute affections of children under two or three years of age; and also in older subjects, in certain diseases of the brain and trachea. He declares, (and what will readily be admitted,) that venesection is here more simple, safer, and more efficacious in arresting certain acute diseases of early life, than by opening a vein in the arm. His apparatus for bleeding from the jugular consists of a cup, a compress and lancet, and with the aid of one assistant. The child being secured across the lap of the nurse, the operator confines its head between his knees, compresses the vein with the thumb of the left hand, makes the requisite opening into the vein, and by pressure with the edge of the cup regulates the flow of blood. The compress may be applied for a few moments, and then replaced by a piece of court or adhesive plaster.

When we consider how difficult it is to bleed from the arm of certain children, the necessity under many circumstances for the abstraction of blood from them, and then remember how simple the operation is when referred to the external jugular vein, our thanks are due to Dr. Hildredth for calling our attention to the subject.

On the Application of Ligatures to Arteries. By G. J. Guthrie, Esq., F.R.S.—(Medical Times.)

[After an admirable set of practical lectures delivered by Mr. Guthrie, at the Westminister Hospital, on this subject, he gives us the following conclusions, as being a bird’s eye view of his extensive
experience on one of the most important subjects connected with 
surgery.]—Braithwaite's Retrospect.

1. The Hunterian operation for the cure of an aneurism is not 
applicable to the treatment of a wounded artery, inasmuch as the 
wound of the artery communicates with the external parts, and noth-
ing intervenes to prevent blood flowing from the wound in its side, or 
from its cut extremities.

2. When a large artery is divided and bleeds, the wound should be 
enlarged if necessary, and a ligature placed on both the divided ends; 
but if the artery be only injured and not quite divided, the ligatures 
should be applied, one immediately above, the other below the injured 
part. The artery may or may not be then cut across, at the pleasure 
of the operator, but the limb or part should be placed in a relaxed 
position. A bandage should not be applied, and the edges of the 
wound should be simply brought together by adhesive plasters, which 
do not extend completely round the limb.

3. No operation is to be performed on any artery unless it bleeds 
at the moment of its performance, inasmuch as hemorrhage once sup-
pressed may never return.

4. The intervention of muscular fibres, or of whole muscles, is not 
a sufficient reason for tying the artery at a distant part. They must 
be divided, if it be possible, to the extent required for a due exposure 
of the injured artery and its accompanying veins and nerves.

5. If the wound pass indirectly to the principal artery, from the 
back of the thigh for instance to the femoral artery in front, or from 
the outside of the arm to the humeral artery on the inside, the sur-
geon may (on satisfying himself of the part likely to be injured, by 
the introduction of a probe) cut down on the vessel opposite that 
supposed to be wounded, by the most simple and approved method. 
When the artery is exposed, the probe will point out the spot at 
which the vessel has in all probability been wounded. Pressure 
made below this spot on the artery, will cause it to be distended and 
to bleed, if the flow of blood be not prevented from above; the artery 
is then to be secured by two ligatures, and the lower one should if 
possible be applied first.

6. The tourniquet should never be applied in an operation for 
aneurism or for a wounded artery. Compression by the hand in the 
course of the wounded vessel is allowable.

7. The blood from the upper end of a divided artery, or that near-
er the heart, is of a scarlet arterial colour.

10. The blood from the lower end of a divided artery, or that which 
is further from the heart, is of a dark or venous colour, when it hap-
pens to flow immediately after the division of the vessel. At a 
subsequent period it may assume more of the colour of arterial blood, 
but it rarely does so for several days after the receipt of the injury, 
and always flows, or at least until a very late period, in a continued 
stream.

11. This regurgitation or flow of blood from the lower end of a
divided artery is a favourable sign, inasmuch as it shows that the collateral circulation will probably be sufficient to maintain the life of the extremity.

12. The collateral circulation is in almost every instance capable of maintaining the life of the upper extremity when the axillary artery is divided, and the colour of the blood which flows from the end of the artery, on its being divided, is not always as dark as in the lower extremity, and it sooner resumes its arterial colour.

13. The collateral circulation is not always capable of maintaining the life of the limb when the femoral artery is injured. The best assistance which art can give is to rub the foot and leg in the gentlest manner, between the hands of one or two strong young women, for several hours, or even for the first three or four days; relaxing this process very little, even during sleep. When the vein is divided at the same time, or rendered impervious, the limb usually mortifies.

14. The collateral circulation is sufficient to maintain the life of an extremity in almost every case in which an aneurism has existed for eight or ten weeks, although it may be incapable of doing this if the principal artery have been suddenly divided, without any previous disease having existed in the part.

15. The theory and the operation for aneurism are never to be applied to the treatment of a wounded artery, which has caused a diffused or circumscribed aneurism, whilst the external wound communicates with the artery, unless it be impossible or impracticable to tie the bleeding vessel.

16. When an artery has been wounded, and the external opening has healed for weeks and months, so as to give rise to a diffused or circumscribed aneurism, it may be treated according to the theory of aneurism occurring from an internal cause, if the case will permit it without danger, although with this difference, that as the artery is sound the operation may be performed close to the tumor. If any doubt exist as to the capability of the collateral circulation to support the life of the lower extremity, when the external iliac is secured by ligature, the operation should be performed at the injured part by opening the swelling and enlarging the wound, as in the case of a wounded artery.

17. When a circumscribed or diffused aneurism which has formed after a wound has been opened, whether by accident or design, it is placed in the situation of a wounded artery, and should be treated as such. If the aneurism has arisen from disease of the vessel, and the wound or opening into it cannot be permanently closed, the limb is in a worse state than if the artery had been wounded by accident; because a ligature or ligatures placed on a diseased artery are little likely to be successful. They are liable to all the difficulties and inconveniences attendant on the old operation for aneurism. If a case of the kind should occur in a popliteal or femoral aneurism, situated at or below where the artery passes between the triceps and.
the bone, amputation, if it can be done low down, will be the best remedy. If the aneurism should have formed higher up, and the opening can be closed with any prospect of its healing, a ligature may be placed upon the artery above it; but on the recurrence of hemorrhage which cannot be restrained by moderate pressure, the artery must be tied below, or recourse had to amputation. It is, however, to be observed, that amputation under these circumstances, when resorted to as a third operation, rarely succeed.

18. When an artery is wounded with a simple fracture of a bone, or with a comminuted fracture of the smaller bones, with an external communicating opening, both ends of the artery should be secured, and the limb treated in the usual manner.

19. When the bone broken is the femur, and the artery divided is the femoral artery, the operation of amputation will generally be advisable. It will always be so if the fracture is a comminuted one, or the shaft of the bone is extensively split.

20. When the broken bone injures the artery and gives rise to an aneurism, the treatment is to be first of the fracture and then of the aneurism, as soon as circumstances render it advisable or necessary to have recourse to the operation for aneurism, and which can only be after time has been given for the collateral branches to enlarge, so as to maintain the life of the limb.

21. When mortification takes place in addition to, or as a consequence of, a wounded artery, amputation should be had recourse to forthwith.

22. The place of operation should be in almost all cases at the seat of the original wound; but there may be an exception, viz.—

23. When the injury has been a mere cut, just sufficient to divide the artery and vein immediately below Poupart's ligament, and mortification of the foot supervenes, amputation should be performed below the knee, or at the part where the mortification more usually stops for a time.

This rule is founded on the observation, that great efforts are made by nature to arrest mortification a little below the knee. Sometimes they succeed; when they fail, death is almost inevitable. The advice to amputate at this part is founded on the fact of its being infinitely less dangerous, when done there, than on the thigh, independently of saving a joint.

24. When mortification has continued for several days, and is spreading without having once stopped, the constitution of the patient being implicated as marked by fever, amputation should not be performed until the mortification has been arrested and the line of separation has been well formed. In many cases, where there is great weakness or of irritability of constitution, it will be advisable to defer the operation to a later period, particularly if there be hope of the patient's becoming stronger and more tranquil.

25. If the mortification has once stopped and then begins again to spread, it will never again cease to extend, and amputation may give some chance of life.
26. Amputation of the arm should never be had recourse to, in consequence of a wound of the axillary artery, unless mortification takes place.

27. When mortification takes place after the operation for aneurism, the surgeon must be guided by the state of the patient's constitution, in resorting to or refraining from amputation.

28. When hemorrhage takes place from the surface of a stump, the artery should be tied at the part from which the blood comes in the first instance, if it can be easily done. If this should not suffice, the artery must be tied higher up, just at such distance as will afford a fair hope of its not having been affected by the derangement of the stump, which has led to the failure of consolidation in the extremity of the artery, and yet not too high to admit of the junction of any large collateral branches. If the bleeding proceeds from several small vessels, and cannot be arrested, the principal trunk should be tied above the diseased part, and the patient removed to a purer atmosphere, without which, the operation rarely succeeds in any case.

29. When an aneurismal tumour mortifies, it is unnecessary and improper to tie the artery above the tumour, because it will be obliterated if the mortification be arrested by the efforts of nature, which the operation may interfere with, and even prevent, whilst, if the mortification spreads, it will be a matter of superorogation, and only hasten the patient's dissolution. When an aneurism inflames, is opened by ulceration, and bleeds profusely, it is a proper case for amputation, if such an operation can be performed.

Congestive Fever. By Thomas Barbour, M. D.—(Missouri Medical and Surgical Journal.)

The term congestive fever is objected to, on the ground that it rather expresses a concomitant, than the true cause of the peculiar phenomena which distinguish the disease. By this title I mean to designate that peculiarly malignant modification of intermittent or remittent fever, which is characterized from its incipiency by strongly marked symptoms of deep internal congestion, and in which the ganglionic system of nerves seems to be especially implicated. Its universal occurrence in localities and seasons which are favorable to the production of malaria, and its co-existence with all the common varieties of malarious fevers, conclusively demonstrate, that it is caused by some concentrated poison which is generated by the decomposition of organic matter.

It requires but a superficial observation of the phenomena of this disease to be convinced that this cause, whatever it may be, makes its primary impression upon the nervous system; and that all of its characteristic symptoms are the immediate sequences of diminished nervous sensibility. The suddenness of the attack, the numerous indications of nervous derangement, and the rapidly fatal tendency
of the disease, conclusively show, that the brain and the whole nervous system—the main springs of life—are almost overwhelmed in the very first assault of the enemy.

The impression made upon the nervous system is proportionate to the intensity of the poison applied; and the effects on the constitution are various, according to the relative force of vital resistance; hence, whenever it prevails, there is every gradation of the disease, from the slight manifestations of congestion, to the most malignant cases, in which the vital forces are completely overpowered. This leads me to the consideration of the pathology of congestive fever, which I will point out in a few words.

The whole nervous system being oppressed by a powerful morbific poison, as necessary consequences, all of the vital functions over which it presides, as respiration, circulation, secretion, &c., become greatly impaired; the capillary circulation throughout the entire system becomes much impeded; and there is a centripetal movement in the circulating fluid, in consequence of which the pulse becomes weak, and the general surface cold and contracted, whilst the internal organs become gorged with blood.

The phenomena dependent upon internal engorgements are various, according to the seat and extent of the congestion. When the brain is the chief seat of congestion, the countenance appears contracted, oppressed, and besotted; there is pain or giddiness, or a sense of heaviness in the head; and there is a strong tendency to coma and insensibility. When the lungs and heart are principally congested, there is a great praecordial oppression; the respiration is short, hurried and oppressed; and there is generally a peculiar livid appearance in the face; the pulse is irregular and oppressed; and there is general coldness of the surface. When the abdominal viscera are the chief seats of congestion, there is a sense of great heat and oppression in the region of the stomach, attended with great thirst, and a constant disposition to retching and vomiting; there is also indescribable restlessness; sometimes the bowels are torpid, but most generally they are very loose—thin, serous discharges passing off in enormous quantities, which contribute rapidly to prostration and death. Autopsy usually reveals the true source of all the foregoing symptoms. The various organs are found more or less gorged with blood; which was the cause of their oppression and embarrassment during life.

With this brief view of the pathology, I pass on to the consideration of the symptoms of congestive fever. The premonitory symptoms, which are, generally, of short duration, are those which commonly precede other forms of fever, such as languor and lassitude, a sense of weariness, and general uneasiness, loss of appetite, and disturbance of the stomach and bowels. Next to these succeed chilly sensations—alternated by flashes of heat, soon after which the patient has a regular paroxysm, characterized by a protracted cold stage—the system, most generally, being unable to recover its natural temperature before the occurrence of the second paroxysms.
The type of this fever corresponds with the double tertian of the old authors, being subject to quotidian paroxysms, but on each alternate day to an increased aggravation of the symptoms. Thus, on the third and the fifth days, the paroxysms are usually very severe, and followed by a protracted cold stage, from which the system reacts very slowly. The anxiously looked-for hot stage is rarely or never fully developed, even in what might be called mild cases. But, instead of it, the temperature of the whole surface is greatly diminished and irregular—the extremities being much colder than the trunk. The pulse becomes exceedingly weak and quick; the respiration is short, hurried, and difficult; the patient complains of a painful sense of heat and weight in the epigastrium, accompanied with insatiable thirst; there is uncontrollable restlessness; the patient tosses himself from side to side, and often rises up, as if to relieve the oppression of the lungs; there is either pain or giddiness, or sense of weight in the head; and the countenance looks contracted, pale, anxious, and often livid; the tongue is generally moist; and the bowels, in a large majority of cases, are loose, and the dejections serous.

The above sketch presents a tolerably correct delineation of the symptoms of ordinary congestive fever, as they present themselves at an early period of the disease.

They are, however, subject to considerable modification, according as the brain and spinal marrow, the lungs, or the abdominal viscera are the chief seats of congestion; the most prominent symptoms in each case being particularly referable to the chiefly engaged organs.

If the condition above detailed is not soon removed by the recuperative efforts which nature makes to throw off the oppressive load under which she is laboring, aided by proper remedial agents, there is a rapid tendency to fatal collapse. This usually occurs either on the third or the fifth days, when, as has been remarked, the paroxysms are unusually severe. This condition is marked by all the symptoms, which indicate profound congestion. The extremities, and, indeed, the whole surface, become as cold as ice; the whole body is bathed with cold clammy sweat; the skin loses its elasticity, resuming, very slowly, its natural situation, when pinched up; the pulse is very quick, and scarcely perceptible; the thirst is insatiable; and there is uncontrollable anxiety and restlessness; the respiration becomes shorter, more hurried, and oppressed; and there are strong marks of diminished sensibility, as a disposition to lethargy, and even to coma, with great muscular prostration. If unchecked, these symptoms increase with a rapid pace, and soon terminate in death.

But congestive fever does not always follow the regular course above described. Sometimes, instead of suffocated excitement, after the first or second regular paroxysms, there is full and violent reaction, and the stage of excitement continues for twenty-four, thirty six, or forty-eight hours, with little or no remission, when the system, seeming to be exhausted by the violence of the excitement, rapidly sinks into collapse.
This modification generally occurs when there are internal inflam-
mations, as indicated by pressure over the epigastrium, the right hy-
pochondriac region, or over some portion of the bowels.

In other instances, the first regular paroxysm is succeeded by the
strongest marks of deep congestion, and complete collapse of the
powers of nature.

So far as my observation has extended, this last modification
almost universally occurs either in aged persons, of feeble and broken
down constitutions, or in those who have debilitated themselves by
the use of harsh purgatives, or by the use of a too common remedy
among southern planters, the emeto-cathartic salts and tartar, which
most generally causes great gastric and intestinal irritation, which
induces a rapid fluxionary movement in the circulating fluid towards
the chylopoietic visceræ, which causes inequality of the circulation,
and rapidly prostrates, by the copious serous discharges which ensue.

We now come to the most important part of our subject—the
treatment of the different modifications of congestive fever. What
are the leading indications of treatment in this disease, founded on
the pathological views which have been taken of it? The great ob-
jects at which we should aim in the use of therapeutic means, are—
first, to restore the lost balance of the circulation; second, to coun-
teract the tendency to a recurrence of the paroxysms; and third, to
restore the suspended secretions.

What are the best means of fulfilling the first indication, namely,
the equalization of the circulation? There is great discrepancy of
opinion among medical men in relation to this. We are informed
by Armstrong, that the hot vapour bath, or the common hot bath,
with bottles of hot water to the feet and hands, &c., together with
calomel and opium, dry brandy and hot ginger tea, are incomparably
superior to any other agent for the promotion of reaction.

With due deference to such distinguished authority, I would re-
mark, that whilst I do not doubt the efficacy of the above treatment
in the congestive diseases of the great metropolis of England, my
experience convinces me that it is, in a large majority of cases, alto-
gether inadequate to the removal of the malignant congestive fever
which is incident to unhealthy localities in southern climates.

In the first cases of congestive fever which I ever saw, I confident-
ly relied on the treatment of Armstrong, because I knew of no better
practice, and because it seemed to be altogether consonant with rea-
son to give internal stimulants, and apply external heat. The con-
clusion to which my observations have led me is, that this treatment
is adequate to the restoration of the lost balance of the circulation,
only in those cases which are occasioned by common causes; or in
the mildest cases of congestive fever. In all the worst cases of this
disease which have come under my notice, the hot bath and most
diffusible stimulants have done injury rather than good, the patients
appearing, generally, more relaxed and oppressed after they had been
used. The remedy which I estimate above all others, in the treat-
ment of congestive fever, is the affusion of cold water. My own comparatively limited experience, and the ample experience of many intelligent practitioners in the South, sustain me in the declaration, that the affusion of cold water upon the naked body is capable of producing the most beneficial effects; and in a large majority of even the most malignant cases, of inducing the most complete and permanent reaction. I acknowledge, that when I first used this potent and novel agent, I rather distrusted its propriety, because I could not very well understand how cold, applied to a surface already as cold as ice, could effect any good purpose. But no sooner had I tried it, and witnessed its effects, than I became convinced of the erroneous view which I had taken of its modus operandi, and which had deterred me from adopting it sooner. So well am I assured of its invaluable efficacy as a powerful excitant to the nervous system, that I now feel no more hesitation in its adoption than I do in the use of the lancet in inflammatory affections; for the principle upon which it operates is just as obvious to my mind.

Who would hesitate to dash cold water on a patient who was over-whelmed by the effects of opium? Surely no practical medical man would, if he knew its efficacy. Why? Because it is known to be capable of arousing and sustaining the oppressed nervous system, by the stimulant impression which it makes upon it. Why, then, should there be a doubt about its applicability to a disease which we believe to be dependent upon a poison which oppresses and paralyzes the whole nervous system? The analogy, as regards the condition in the two cases, is perfectly just; and the principle on which the remedy acts is identical. That this is the fact, its almost universal effects abundantly testify.

The modes of application which I have adopted are the following: Have a broad plank placed upon two chairs, at a convenient distance apart, and place two vessels of hot water on each side, corresponding with the feet and hands; then strip the patient, and lay him on his back on the plank, with his extremities in the hot water, and having at hand twenty or thirty gallons of spring water, or, what would be better, water made colder by ice or salt; pour the water from a pitcher, in a full and rapid stream, over the chest and abdomen. The advantage of this mode is, that the cold is directly applied over the most common seats of congestion, whilst the circulation is invited to the extremities by hot water.

The second mode which I adopt, particularly in cases where the brain and spinal marrow are the chief seats of congestion, is to place the patient upon a blanket upon the floor, and cause him to turn upon his side, and dash cold water as forcibly as possible over the head and down the spinal column. This method is often the most effectual, because its influence is more immediately felt by the great nervous centres. Having applied the water, the patient should be quickly wiped and placed in bed, and be covered with two or three blankets. I have sometimes had the patient surrounded with hot stones, or bot-
tiles filled with hot water, after being placed in bed; but I am now satisfied that it is improper to do so, on account of the relaxing influence of the heat, and the debilitating effects of the copious perspiration induced by it. Instead of heating the patient, I cause him, as soon as he has received the cold dash, and is placed in bed, to be extensively and forcibly rubbed, either with dry mustard flour, or salt, or with spirits of turpentine.

The effects of the cold dash are frequently permanent, and complete reaction takes place, followed by rapid convalescence. In many instances, however, the effects of the first affusion subside, and the patient relapses into his former condition of coldness, restlessness and insensibility. In such cases, it is proper to repeat the affusion, until complete and permanent reaction takes place, which may be confidently anticipated in a large majority of the worst cases, provided it is applied sufficiently early.

Unfortunately for the reputation of this invaluable remedy, it is deferred too long, and most generally resorted to only as a dernier resource; in consequence of which, the system loses all susceptibility of its impression; or some vital organ or organs become irreparably injured, and hence its use proves abortive.

There is no just reason why its adoption should be delayed. If it is capable of producing such salutary effects in the latter periods of the disease, when the vital principle is almost extinguished, how much more triumphant would be the success attending its use at an early period, when the vital organs, most generally, are not seriously injured, but only burdened with an undue quantity of blood, and when the susceptibility of impression is but little impaired.

Next in importance to the cold affusion, with a view to the establishment of healthy reaction, are opium and sulphate of quinine. My usual practice is to give, at once, 100 drops of common laudanum; or the same proportion of the following compound tincture, which I estimate very highly:—R. Gum opii, gum camph., cort. cinnam., ol. caryophyl, ad one oz.; capsic. pulv., half oz.; Hoffman’s anodyne liquor, one pint. Macerate for twenty days, and filter. The above portion may be repeated once or twice, according to circumstances, at intervals of two or three hours; after which I make use of sulphate of quinine, in combination with morphia and calomel, according to the following R. :—Sulph. quiniae, one drachm; hydrarg. prot. chlorid., half drachm; sulph. morphiae, grs. ii.; m. ft. chart. xii. One to be given every hour or two, until full reaction is induced.

Some practitioners, especially in the South, make use of enormous doses of calomel—as 50 to 200 grains—and repeat them often, with the view of unlocking the liver and inducing reaction. My own experience is opposed to calomel in such large doses. I am satisfied that small portions, as three to five grains, repeated every two hours, are better calculated to fulfil the indications for which it is given. When administered in large doses, it is apt to induce copious watery discharges—a consequence which might be very reasonably expect-
ed, when it is remembered that the liver and bowels are in an engorged condition, and of course not possessed of their natural susceptibility of impression; hence, such large quantities become a source of great irritation. It is very doubtful whether calomel, in any doses, is capable of producing its specific effect upon the liver, so long as it continues gorged with blood; and when reaction takes place, and this viscus becomes disburdened, small portions much more certainly affect it, because they are much less apt to pass off by the bowels. As auxiliaries to the above means, I generally apply cups along the course of the spine, over the epigastrium, right hypochondrium, or chest, according to the indications; and follow them with large sinapisms. When there are strong marks of cerebral congestion, a blister over the cervical portion of the spine is often productive of good effects.

In regard to the propriety of general blood-letting in this form of fever, there is much diversity of opinion: some, guided by the plausible speculations of Mackintosh, regard venesection not only as a safe means of cure, but an indispensably necessary one to relieve the various internal organs that are oppressed by an undue amount of blood; others, guided by the lights of their own observation and experience, consider the use of the lancet not only of doubtful efficacy, but hazardous in the extreme. My own impression is, that general blood-letting is very rarely necessary, and that in most cases it is highly unsafe and injudicious, during the cold stage, on account of the great depression of the nervous system, and consequent tendency to collapse.

When complete reaction is established, what course of treatment should be pursued? If the reaction is moderate, which is usually the case, all that will be necessary, generally, will be to administer alternate portions of blue pill, in combination with opium or morphia, to promote the secretions and control nervous excitement, and quinine to sustain the weakened powers of nature, and prevent the recurrence of the paroxysms, to which there is always a great liability. The following prescription is well calculated to fulfil the indications of treatment:—R. Mass., hydrarg., sulph. quinæ, each a half drachm; sulph. morphiae, one grain; ft. pil. xvi.—two to be given every three hours. If the blue pill does not act gently on the bowels, a seidlitz powder may be given occasionally; or the bowels may be evacuated by means of stimulating enemata. Should the reaction become violent, it will be necessary to moderate vascular excitement, as the organs which have been gorged with blood, and consequently weakened and irritated, are strongly disposed to inflammation, which would be difficult of removal, on account of the inability of the system to bear depletions to any great extent. In such cases it is generally sufficient to apply cups over the various seats of congestion, administer calomel purges, and repeatedly use the cold or tepid affusion. If the above means prove to be inadequate, it may be proper to draw blood to a moderate extent from the arm; but this should be
done with great caution, as the power of resistance in these cases is so low, that not unfrequently high excitement is suddenly followed by great prostration. The pulse should be carefully watched, and upon the slightest manifestation of failure, the orifice should be closed, and some diffusible stimulant administered. As soon as the excitement begins to abate, the pills of blue mass, quinine and morphine, as above prescribed, should be given, and continued for several days, in order to excite healthy biliary discharges and prevent a relapse.

During the progress of the disease, as well as during convalescence, strict attention should be paid to regimen. It is very necessary to adapt the alimenta to the weakened digestive organs: rice, barley, or chicken water may be allowed, until the disease is arrested. During convalescence, chicken broth or well-boiled rice, with milk, will be appropriate. For drink, nothing is so grateful or salutary as simple cold water, it tending in an eminent degree to allay gastric irritability and general restlessness, which is usually so very distressing. With the same view, small pieces of ice may be occasionally swallowed.


At a late meeting of the Addison County Medical Society of Vermont, the undersigned were appointed a committee to ascertain the facts in the case of one of their members, the unfortunate William Cullen Warner, M. D., of Bristol, who deceased, suddenly, at Montpelier, October 11th, 1846, in the thirty-ninth year of his age, while he was a member of the Legislature.

On account of there having been considerable discrepancy in the published reports in relation to this melancholy event, the committee addressed letters of inquiry to the Hon. Daniel O. Onion, M. D., of the Vermont Senate, and to Charles W. Horton, M. D., member of the House, each of whom, they had learned, were present during most, if not all, the period of the sudden and tragical event. To the inquiries of the committee, each of these gentlemen have given prompt and satisfactory replies, which in substance are here subjoined.

1. In your opinion how much sulphate of strychnia was taken? To this Dr. Onion answers, "I think probably from one-fourth to one-half a grain. As he intended to take, and supposed he was taking, morphia, he would be likely to use the same quantity he was in the habit of using of that article, although there was no evidence at the time of the quantity taken." To Dr. Horton, who was called into the room immediately after the accident, Dr. Warner said, "Doctor, I have taken, by accident, an over-dose of morphine; help me if you can," at the same time handing him the phial enveloped in paper.

2. How soon after was any effect produced? Dr. Horton says, "It is my opinion, from facts subsequently ob-
tained from Gen. W. Nash, who occupied the same room with him, that he felt the effects in less than five minutes.

3. What was the first symptom?

Dr. H. replies, "constriction of the throat and tightness of the chest, with rigidity of the muscles in attempting to move." Dr. O. says, "He first complained of a want of air, and requested the window to be raised; whether it was from faintness or a constriction about the respiratory organs, I do not know, although I think the latter."

4. What symptoms ensued from the first till death occurred?

Says Dr. O., "When I first saw him, he was lying upon the bed in a complete tetanic convulsion; his head somewhat drawn back; his countenance completely livid, with some frothy matter issuing from his mouth, with frequent moans. The palpebra constantly in motion. This first paroxysm may have lasted some five minutes, which was succeeded by an interval of partial calm." "During this interval," continues Dr. O., "it was somewhat difficult for him to articulate with distinctness. He made several attempts to vomit in this interval, by exciting the fauces with his finger. There seemed to be some constriction about the throat, as it was difficult for him to swallow. This interval lasted perhaps five minutes, when another paroxysm commenced by a little starting and stiffening of the extremities, and immediately the whole body was thrown into a tetanic paroxysm, in appearance like the first, and lasted two or three minutes, when death ended the struggle."

"In about three minutes from the first paroxysm," says Dr. H., "the tetanus again returned, and in the space of two minutes death closed the scene, with terrible spasms of the entire system. The pulse remained unaffected till the last struggle. It is my opinion that the immediate cause of death was suspension (?) from spasm."

"His appearance," says Dr. O., "led me to believe that death ensued from asphyxia or suffocation. There must have been great congestion of the brain, which of itself might have proved fatal."

5. How soon after taking the article did death occur?

Dr. H. says, "From the best information which I could obtain, I should judge that death ensued in fourteen minutes." "The time from taking the article till death ensued," Dr. O. remarks, "could not have been over twenty minutes."

6. Did his mind remain clear till the last struggle?

"I think," replies Dr. H., "that he was perfectly conscious from the first to the last, except in the paroxysm of tetanus, from the following facts:—1. His appeal which he made to me, as noted in the first article. 2. On loosening his cravat, he requested me to unbutton his vest, at the same time desiring me to take out his gold watch and take care of it. 3. An emetic having been administered, he applied his finger to his throat to provoke a nausea. 4. And, from the last words he uttered, 'I fear, I fear, O God deliver me.'"

7. What means were used to prevent the fatal result?
Dr. H. says, "On witnessing the first symptoms, I left the room for the purpose of obtaining medicine. I procured an emetic of sulphate of copper and ipecac; but returning and finding him in a tetanus, I immediately dashed cold water on his head, face and breast, and used the most powerful friction on the extremities. He returned to a state of perfect consciousness. I then proceeded forthwith to administer the emetic, making use of diluents copiously. I sent a messenger for some vinegar and ground mustard, and another for a stomach pump. I used the ground mustard, in warm water freely, to all of which the patient submitted, seeming to be very grateful for the efforts which I was making for his relief. The means were used without any apparent effects." "When death had ensued, a number of the medical fraternity being present, we retired into an adjoining room, when the fatal bottle was produced, with the wrapper still around it. On removing this, it was found labelled 'strychnine.'" Dr. O. states, that "till this time, we were in ignorance of what he had taken." Dr. H. avers, "that here I wish definitely to state, that before the last paroxysm came on, I was fully convinced in my own mind that the fatal drug was not morphia, but strychnia, and I so declared to those present at the time."

From facts before the committee, derived from reliable sources, it appears that on the afternoon of the second day before the fatal accident, Dr. Warner called at an apothecary store in Montpelier, and asked for and purchased what he supposed to have been a bottle of sulphate of morphia. This was handed to him by the apothecary enveloped in brown paper and twisted at both ends. That on the fatal morning Dr. W. tore off the envelope surrounding the mouth of the bottle, and took a portion of what he supposed to have been morphia. He then proceeded to pour some of the supposed morphia into a small phial into which he had been in the habit of carrying sulphate of morphia, when he was suddenly arrested by the symptoms narrated. It is quite clear that he never entertained any idea of the fatal drug he had taken. "I am certain," says his afflicted brother, "that he never for a moment suspected that he had taken strychnia, and was wholly unconscious of the agency which had produced his awfully unprecedented sufferings."

Dr. W. had never possessed very firm health, and for about two years before his death he had suffered from an inordinate action of the heart, for which he had occasionally taken morphia. This affection of the heart had been the sequence of an inflammatory affection of the chest, which he had early in the year 1844.

The committee has taken considerable pains to ascertain the facts in this melancholy instance of death from a mysterious mistake. The mistake was certainly a singular and mysterious one, both in relation to the apothecary and the unfortunate man. It appears that Dr. W. asked for sulphate of morphia; the apothecary intended and supposed he had sold him morphia till after the fatal event, when he found, through mistake, he had given him, enveloped in a paper, a bottle of
sulphate of strychnia in lieu of morphia. This exposition of facts appears to be demanded in justice to the character of the deceased, to the apothecary and to the medical profession.

In a medical point of view, the case is one of much and deep interest, since it so clearly manifests the true and energetic character of this somewhat new medicinal agent. And in a medico-legal consideration, it may prove of immense importance. In the suddenness of the effects, and in the quickness of the fatality, from the use of strychnia, this case is probably without a precedent. Christison, Pereira, and several monographical writers, in the periodicals, have recorded some bad results, and some fatal cases, from over dosing with this agent; but no instance has fallen under our notice in the human subject in which its administration, either accidentally or otherwise, has so speedily and terrifically proved fatal.

"No poison," says Christison, "is endowed with more destructive energy than strychnia." "I have," he adds, "killed a dog in two minutes with the sixth part of a grain, injected in the form of an alcoholic solution in the chest. I have seen a wild boar killed in the same manner with the third of a grain, in ten minutes; and there is little doubt that half a grain thrust into a wound might kill a man in less than a quarter of an hour. It acts in whatever way it is introduced into the system, but most energetically when injected into the veins."

With the exception of prussic and oxalic acids, there is probably no agent possessing an equally destructive power. Strong prussic acid is well known to be sufficiently energetic to destroy cats or dogs, when properly administered, in less than a minute. And Pereira examined the body of a man who had accidentally taken oxalic acid in lieu of Epsom salts, and died in twenty minutes.

Jonathan A. Allen, M. D.
Erasmus D. Warner, M. D.
Wm. P. Russell, M. D.

Two Cases of Croup cured by Cauterizing the Larynx with a Solution of Nitrate of Silver. By Wm. N. Blakeman, M. D.—(New York Medical and Surgical Reporter.)

On the 10th November, 1846, I was called to see a child of Mr. A., about two years old, very fat, large for his age, and of leuco-phlegmatic temperament. I first saw him at 10 o'clock in the evening, five hours after the commencement of the disease, with a hot, dry skin, quick pulse, great restlessness, laborious breathing, and the hoarse barking or crowing sound peculiar to croup. The family had, previous to my arrival, given freely of Coxe's hive syrup.

I gave tinct. sang., comp. syrup scillea, with pulv. ipecac., which caused vomiting, but no relief to the patient. At 3 o'clock on the morning of the 11th, I gave six grains prot. chlor. hyd., and after
waiting two hours, began with the above mixture, to which I added
five grains of tart. antit.; more free vomiting was produced, and a
copious discharge from the bowels, at 8 o'clock, but without any miti-
gation of a single symptom. I then stopped using the above mixture,
and gave per-sulph. of mer., in doses of qu. grain, the second dose to
be given in half an hour after the first, and then at intervals of an
hour. The child drank freely of warm water, and vomited some
after each repetition of the medicine, but none of that peculiar, heavy,
glairy substance, which is the secretion of this specific inflammation.
At 5 o'clock, P. M., the remedies having done no good, and with the
symptoms of suffocation becoming alarming, I resolved to try the
effect of cauterizing the larynx with a solution of nitrate of silver, a
drachm to an ounce of water.

The application was somewhat difficult, and the dyspncea very
great. A quantity of the thick tenacious substance was brought away
by the sponge, &c., a large quantity by vomiting, which followed.
After waiting ten minutes, I made a second application, bringing
away a larger quantity of membranous matter on the sponge than
before, and a much more copious discharge accompanied the vomit-
ing, caused by the application.

The disease now seemed to be arrested, as very great relief was
apparent to all the family. The breathing was less laborious, the
crowing sound less sharp, and the child more quiet.

I saw the boy at half past 10 o'clock, same evening, five hours and
a half after the first application; he had improved in all the symp-
toms, breathing decidedly better, the barking sound heard only at
intervals, and he had asked for drink.

I now made a third application of the same solution, which brought
as before, on the sponge, some thick tenacious matter differing from
the first in being of a yellow colour. The boy vomited several times
after this application, each time throwing off a large quantity of the
same yellow-coloured, thick substance, so tough that it could be raised
from the bowl by the fingers. Soon after the vomiting ceased the
child was so much better he fell asleep, in which situation I left him,
with directions to be called if required before morning.

12th, 7 o'clock, A. M., I found him sitting on the bed calling for
food; he had slept pretty well, asking for drink occasionally, a slight
hoarseness left, for which he required no further treatment.

CASE II.—I was called on the 20th of January, at 12 o'clock at
night, to see a boy six years old, of sanguine temperament, and florid
complexion, who was taken about two hours before with croup. The
pulse quick, skin hot and dry, the breathing hurried and difficult, the
crowing noise loud, and the child very restless. I determined that the
remedy used last in the former case should be first in this. I
made two applications of the same solution used in the former case.
Some tough phlegm came away on the sponge, and free vomiting
followed, which relieved the patient so that he fell asleep.

21st, 7 o'clock, A. M. The boy has slept well all night, and says
he is quite well, only a little hoarse.
On the Action of Ammonia in Hooping-Cough. By R. H. Allnatt, 
M. D., London.—[Lancet, from Braithwaite's Retrospect.]

[Dr. Wachtl, of Vienna, recommends the employment of ammoni-
ated tincture of cochineal in hooping-cough. Dr. Allnatt thinks that 
the spasmodic action of the glottis which remains after the febrile 
action has subsided, arises from morbid irritability of the stomach, 
engendering a morbid secretion, which stimulates the exhalent ves-
sels of the trachea and bronchi to inordinate action. Dr. Allnatt 
adds:]

The excretions of the stomach in this state of disease, if tested, will 
be found, almost invariably, to be of extreme acidity, sometimes so 
intense, as to excoriate in their passage the oesophagus, and roughen 
the teeth, as effectually as would a dose of dilute hydrochloric acid. 
Emetics, so greatly extolled for their virtues in subduing the parox-
ysms of hooping-cough, act as temporary alleviants, by ridding the 
stomach of its acrid secretion; but the relief is transient, because the 
organ speedily resumes its disordered action. Many years ago, dur-
ing a temporary visit to a populous town in the west of England, 
while the hooping-cough raged as endemic to an alarming extent, 
many children falling victims to its attacks, I had an opportunity of 
testing the merits of practice founded upon the views I have taken, 
and the result fully justified my anticipations, as the cases, however 
urgent, were rapidly and permanently relieved.

Dr. Wachtl, by his ammoniacal mixture, is stated to have "cured 
nine cases in from three to eleven days," and I may fully believe the 
anSSERTION to be quite consistent with truth. The liquor ammoniae, the 
active ingredient of the formula, neutralized, in some degree, the 
acid matter with which it came in contact, and hence arose the bene-
fit; but we have other alkalies, less stimulating in their action, and 
much more effectual, than ammonia.

After preliminary purgation with calomel, (conjoined with antimo-
ny, if the febrile symptoms run high,) and an occasional emetic to 
clear the stomach, nothing in my experience is so efficacious as small 
and repeated doses of the carbonate of potassa. The following com-
bination has been extensively distributed to the poor in seasons when 
hooping-cough has raged as an epidemic, and I can attest the almost 
invariable success which has attended its administration—what por-
tion of the merit is due to the cochineal I do not know:—Take of 
carbonate of potassa, one drachm; cochineal, ten grains; boiling wa-
ter, half-a-pint. For an infant, one tea-spoonful to be taken thrice 
daily: the dose increased according to age.

In violent cases, much benefit will often accrue from the simulta-
neous employment of the following liniment, which is to be well 
rubbed, morning and night, over the whole course of the spine:—
Hartshorn and oil of amber, of each half an ounce. Mix for a lini-
ment.

White oxide of Arsenic had been obtained for destroying rats. The label and the paper containing it had been partially destroyed by the corrosive action of the Arsenic, and it had been poured out into a tea-cup, and put aside to be re-labelled at some future time. Subsequently, the family removed to another house, and, in the confusion arising therefrom, the Arsenic was placed near a tea-cup of the same color containing super carbonate of soda.

On the 25th of December, 1846, half a tea-spoonful of the Arsenic, probably about 80 grains, mistaking it for the super carbonate of Soda, was put into a pudding, the greater part of which was afterwards eaten by two persons. In less than half an hour, severe and distressing sickness came on, with vomiting and great prostration. Being alone in the house, and unable even to raise a window to call assistance, they remained for some time in this dangerous situation. Fortunately a sister, who had been absent, returned home, and in a few minutes afterwards I was at the house. Finding that Arsenic had been taken in so large a quantity, and knowing of but one perfectly effectual antidote, I at once proceeded to prepare a quantity of the hydrated peroxide of Iron, which I administered with an unsparing hand. In less than half an hour, decided relief was obtained, the retching and vomiting, though still kept up, occurred at longer intervals, and with less severity. The pain and faintness continued more or less during the night, yet the relief already apparent, induced me to continue the use of the antidote. The next day the vomiting occurred but once or twice, and in one only of the persons. In the meantime, however a new train of symptoms came on. The tongue was swollen, there was a burning pain and considerable inflammation in the throat, accompanied with great thirst, and in one of the cases with hiccongh, and much tenderness of the epigastrium. The evacuations from the bowels were dark and offensive, and attended with pain and tenesmus. There was for a long time great prostration of strength; indeed, neither of the persons have felt quite well until within a few days.

I am induced to make these cases public, not only to give additional evidence of the efficacy of the freshly prepared hydrated peroxide of Iron, as an antidote to poisoning by white oxide of Arsenic; but, also, since it is well known that the remedy is of little use except when freshly prepared, to urge it upon every medical man, not only to bear in mind how it is prepared, but actually to go through the manipulations, and prepare it, once at least, for himself. Then, when it is wanted, as it always is in haste, and when there is no time to look for specific directions, he can prepare it more dexterously, and with no doubts or misgivings as to its purity.

Lest there may be some one of your readers who has not a formula
for preparing the Hydrated peroxide of Iron, I subjoin that of the last edition (1845) of the U. S. Pharmacopoeia. It has been well suggested that the articles for making it should be kept in vials, in the proper proportions, ready for use at a moment's notice:—B. Sulphate of iron, oz. iv.; sulphuric acid, f. dr. iiiss.; nitric acid, f. dr. vi. or q. s.; solution of ammonia, q. s.; water, oil; dissolve the sulphate of iron in water, add the sulphuric acid, and boil the solution; then add the nitric acid in small portions, boiling the liquid for a minute after each addition, until the acid ceases to produce a dark color. Filter the liquid, allow it to cool, and add solution of ammonia in excess, stirring the mixture briskly; wash the precipitate with water until the washings yield no precipitate with chloride of barium.

In the foregoing case, I used no sulphuric acid. I did not filter the liquid, or wait for it to cool, nor did I stop to test it with chloride of barium; but washed it three or four times with water, poured it on cotton cloth, and administered it while hot. Doubtless the better plan would be to follow exactly the directions of the Pharmacopoeia.

Fever a Disease of the Spleen.

To the Editor of the Lancet:

More busied in the "sport of musing" than in the "labour of thought," a sentence in a past number of a contemporary suggests to me the following reflections.

Dr. Williams, of University College Hospital, lecturing on the subject of intermittent fever, in noticing the "poor, impoverished state of the blood," which attends the disease, adds, "It has been a matter of doubt (question?) among physiologists, as well as pathologists, how it is that disease of the spleen so peculiarly produces this anaemia." (Gaz., Oct. 24th, 1845.) In elucidation of this point, I may observe that it has been long a matter of conviction with me that the spleen is the laboratory of the hæmatosine of the blood. Harvey, indeed, disclosed how the blood is distributed; but philosophers appear very generally to have forgotten to ask themselves whence it is got?—where it is made? The heart pumps, the vessels convey, the lungs aerate, the liver and kidneys depurate, and chyle-milk renovates, the blood; but, de novo, where is it generated?—whence is it originally derived?—where is it that the chylous supplies are converted into red globules? Most certainly, to my apprehension, in the passage through the spleen.

There are those with whom it has been a favorite theory that fevers are disease of the blood. I believe that fevers are diseases of the spleen. Of this I think there exists adequate evidence. Of course I do not allude to symptomatic or nervous "fevers." A lesion of the function of the spleen vitiates its product—i. e., vitiates the manufacture of hæmatosine. I have even an idea that the rigors of ague have some relation to a crisis of puruloid secretion in the
A Case of Poisoning from Nitric Acid. [August,

splenic apparatus—a vitiation of the splenic process of the formation of the red principle. It would not appear difficult to account in this way for the translation of purulent deposits. I have an idea that the production of animal heat takes place whenever and wherever arterial blood becomes venous—viz., in the capillary transit; and that the splenic product, the haematosine of the blood, plays an important part in the process. If the functions of the spleen, then, be those not only of the generation of new globules, but also of the renovation or regeneration of the old, exhausted, or deteriorated red particles,—alike the renovation of the old, and the production of the new material of the elementary constituents of the blood, the haematosine, haematin, or cruorin,—it is easy to perceive in what way “disease of the spleen so peculiarly produces anæmia.” By the objectionable term “anæmia,” an absence of the red particles, the radical constituent of blood, is properly indicated. In the history of fevers, after a review of the facts which connect fevers with the spleen and the blood, it will not be difficult to come to the conclusion that fevers are diseases of the spleen, in reference to the functions of that organ as the laboratory of the elementary constituent of the blood, the haematosine.

I have the honor to be, Sir, your obedient servant,

Hamilton, Nov. 1846.

B. Haygarth.

A Case of Poisoning from Nitric Acid—vomiting of a considerable portion of the stomach, and yet no effusion into the peritoneum.

We find the following singular and most remarkable case recorded by Dr. C. F. Basse, of Heidelberg, and it is translated from the review department of the Archives Générales de Médecine of Paris.

A workman, aged 50 years, and addicted to drink, swallowed two ounces of nitric acid weakened with water. This he did on the 9th of May, 1845; and with the intention to kill himself. He immediately experienced dreadful pain in the mouth, pharynx and oesophagus, and vomited a portion of the poison. Several hours after this he walked to a hospital and solicited relief; but he was taken to prison, and an oleaginous emulsion given him. The next day, his sufferings having increased, he was transferred to a hospital, 36 hours after swallowing the acid. The mouth and tongue were lined with a whitish membrane; the pharynx and tonsils were considerably tumeled and injected; the epidermis of the lips, particularly the inferior, was marked by yellow lines; the respiration was difficult; thirst intense; pain in the epigastrium with retraction of the belly; pulse small and frequent. Treatment, antiphlogistic. The following day the patient was in the same state. Eight days subsequently, he commenced to have appetite. During the night of the 6th to the 7th of June, he vomited what he had eaten, and the nausea and desire
to emesis became constant. The matter vomited was very foetid and had a gangrenous odour, and with black fluid blood he ejected a broad piece of membrane a foot long, of a black color, pierced with holes of different diameters, of a fibrous structure and having a very thin epithelium. This membrane was recognized as the vascular and serous coats of the stomach. The vomitings were followed by very abundant blackish and foetid dejections. He continued in this state to the 1st of June, when he died.

Autopsy. Upon raising the left lobe of the liver, the anterior part of the stomach, from the oesophagus to the duodenum was found wanting. Its anterior wall was supplied by the concave surface of the liver, by the transverse colon, and some remains of the coats of the stomach. The posterior portion of the gastric organ was not destroyed, but its walls were soft and gangrenous. Notwithstanding this condition of the stomach, there had been no effusion into the peritoneum, because the liver adhered to the colon and the remains of this organ were agglutinated to the spleen and diaphragm. Thus a new cavity was formed, leading from the oesophagus to the duodenum. The oesophagus was deprived throughout its whole extent of epithelium, and the surrounding parts of the new sac or artificial stomach, were blackish, softened, and exhaled a foetid odour.

Here is an instance of the destruction of more than half of the stomach, without the escape of alimentary substances into the peritoneum. The patient too vomited a part of his own stomach, and lived a month and five days. This case strengthens M. Magendie's theory of vomiting—viz., that this function is owing to the influence of the diaphragm and abdominal muscles, and not to the action of the stomach, which is purely passive.

Conclusions Relative to the Structure and Functions of the Placenta.

By John Goodsir, Esq.—(Med. Gaz., from Braithwaite.)

[In vol. xii., p. 539, we briefly gave the opinions of Mr. Goodsir on this subject. In the following extract, however, they are a little more in detail:]

1. The placenta, as has long been admitted, consists of a foetal and a maternal portion intermixed. But the maternal portion, instead of consisting of a part of the vascular system of the mother only, includes the whole of the external cells of the villi.

2. The external membrane of the placental villi is a portion of the wall of the vascular system of the mother, continuous with the rest of that wall, through the medium of the placental threads and lining membrane of the placental cavity.

3. The system of the external cells of the placental villi belongs to the decidua, and is continuous with the parietal division through the medium of the cavities of the placental threads. This portion of
the decidua has been named the central division of the placental decidua, and the threads, decidual bars.

4. The function of the external cells of placental villi is to separate from the blood of the mother the matter destined for the blood of the foetus. They are, therefore, secreting cells, and are the remains of the secreting mucous membrane of the uterus.

5. Immediately within the external cells of the placental villi, there is a membrane which I have named the internal membrane of the villi. The membrane belongs to the system of the foetus, and in the external or bounding membrane of the villi of the chorion.

6. Inclosed within the internal membrane of the placental villi, is a system of cells which belong to the system of the foetus, and are the cells of the villi of the chorion. These are the internal cells of the placental villus.

7. The function of the internal cells of the placental villi is to absorb through the internal membrane the matter secreted by the agency of the external cells of the villi.

8. The external cells of the placental villi perform, during intra-uterine existence, a function for which is substituted in extra-uterine life, the digestive action of the gastro-intestinal mucous membrane.

9. The internal cells of the placental villi perform, during intra-uterine existence, a function for which is substituted in extra-uterine life, the digestive action of the gastro-intestinal mucous membrane.

10. The placenta, therefore, not only performs, as has been always admitted, the functions of a lung, but also the function of an intestinal tube.—[Anatomical and Pathological Observations.

Disputed Period of Gestation.

To the Editor of the Lancet:

SIR,—I should be much obliged if yourself, or some of your numerous correspondents, could throw some light upon this case, which involves the welfare, almost existence, of a young and at present a deserted child:

Two men, A and B, had intercourse, unknown to each other, with a young woman of delicate health; and after many years, she was delivered of a female child, nine calendar months and three days after sexual intercourse with A, and nine calendar months less five days after similar intercourse with B; or at the end of 279 days after intercourse with A, and at the end of 271 days after the intercourse with B,—that is, a period of eight days elapsed between the periods of intercourse with the two men; and the woman had no female ailment in the meantime, and it is not believed she knew any other man. She went her full time, had a good labour, and produced a fine healthy girl; had a plentiful supply of milk, and had better health during her pregnancy and suckling than at any other time. She, however, suckled her child too long, got excessively low and
nervous, it is believed worried herself as to which of the two men was the father of her child, and has since died.

During her last illness, she said that she always thought that the child must be the child of A., as she had once before miscarried by him, and had great affection for him, and her feelings made her think it was his; but that she did not know, as the time was beyond nine calendar months, (she entertaining the opinion that a woman could not go beyond nine calendar months.)

These circumstances have now become known to both A and B, and both refuse to maintain the child. A contends, that as the woman was not delivered until nine months and three days after connexion with him, it is physically impossible the child can be his. B contends that that has nothing to do with it; that 280 days, and not nine months at all, is the period of gestation; and that the child, being born at 279 days after the connexion with A, and only at 271 days after connexion with B, the probabilities were, that the child was the child of A, particularly coupled with the fact, that the woman had once before miscarried by A, and that she had stated, during her last illness, that her feelings told her it was the child of A.

There is no perceptible likeness of either of the men in the child, but a marked likeness of the mother.

Either of the men would maintain the child if he could be satisfied he was the father of it; and in the hope that you or your correspondents will kindly give such information upon the subject that may satisfy one of them, I remain, Sir, your constant reader,

London, April 1847.

Gilbert Smith.

PART III.—MONTHLY PERISCOPE.

On the frequency of the Pulse, &c., of the aged.—Dr. Pennock has instituted quite a number of observations on the pulse and respiration of the aged. The pulses of 170 men were observed, the aggregate of whose ages is 10,895, and that of the pulsation, 12,211. The respirations were counted in 146 instances, the total number of inspirations being 3045.

The medium age is therefore 64.09 years.

The medium pulse 71.83 per minute.

The medium respiration 20.51 " "

Ratio of respiration to pulsation, as 1 : 3.51

The pulses of 203 females was noted, the aggregate of whose ages is 14,326, and that of their pulses 15,838. The respiration was counted in 143 individuals, and its aggregate is 3,154.

The medium age is 70.57 years.

The medium pulse is 78.02 per minute.

The medium respiration 22.06 " "

Ratio of respiration to pulse, as 1 : 3.53
Case of Doubtful Sex.—Dr. Harris (Am. Journ. Med. Sciences) reports a case of doubtful sex, the subject of which is now living in Mecklinburg County, Virginia.

"Ned, a slave and house servant, wearing man's apparel, is about eighteen years of age and probably five feet eight or nine inches high; and though not corpulent, is rather robust than otherwise. His head is large, with a coarse masculine face, wide mouth, thick lips, feminine voice, and a chin entirely destitute of beard. His skin is soft and delicate, with upper and lower extremities well formed and rounded, with the exception of his feet, which resemble very much the males of the African race. Thus far, however, his general appearance presents nothing very remarkable, or anything to excite doubts as to his sexuality. His shining ebony skin and rounded limbs, are not uncommon with negro boys, trained up as house servants among the luxurious livers of the South. But on opening his vest and shirt bosom, there are presented two large and well developed protuberant mammae, having all the external characteristics of the breast of a healthy well-formed young woman. His neck, shoulders and chest partake likewise of this feminine character, having the soft and voluptuous outline of the female. On examining the external genital organs, which, by the way, are exhibited with marked reluctance, a strange and anomalous appearance is presented. The pubis is large, prominent, and covered with hair as in the female, and but for the conspicuous projection of a dwarfish-looking penis, about an inch long in the usual situation of that organ, the creature would at once be pronounced a woman. This penis is naturally formed in every respect, and eminently endowed, as he informed me, with virile sensibility. Immediately below it is a cleft or fissure running back as in the female organ, to the perineum, the sides of which are formed of thick folds of skin, resembling somewhat the scrotum, and shaded with long hair, representing tolerably well the external labia of the female. No testicles can be found. On separating the thighs the fissure is found to be from an inch to an inch and a half deep, smooth at the bottom and exactly in the situation of the vagina. The cavernous portions of the penis may be distinctly felt through the walls of the cavity near the bottom. The membrane lining it appears, in fact, to be only a continuation of the outward skin, but is more soft and delicate; without, however, any of the characteristics of the vaginal mucous membrane. Pressing the finger on the bottom it yields so readily, as to induce a belief that there is a cavity within, the outlet to which is merely closed up by the skin or membrane stretched
across the bottom of the fissure. But the anomaly does not stop here. This singular creature has been regularly menstruating for three or four years through the penis, attended in its inception and progress, by all the symptoms which commonly characterize the catamenia in young females. So well marked are the returns of this monthly discharge by the usual disturbance of the system, that the elder members of the family are never at a loss to determine when he is under its influence. As in most females in every station of life, there is likewise at such periods a shrinking from observation, and the constant exercise of a sleepless vigilance in preventing exposure. The amount or character of the discharge has never been clearly ascertained, but from his own imperfect account of it, and the evidences furnished by his linen, it differs not very materially either in quantity or quality from that of a young woman.

Statistics of Mortality following the operation of tying the Carotid Arteries and Arteria Innominata.—In the July number of the American Journal of the Medical Sciences, Dr. Norris has presented some interesting tables, which demonstrate that the dangers resulting from the ligature of these important vessels are much greater than is generally supposed. In thirty-eight cases in which the carotid was tied for the relief of aneurism, twenty-two recovered and sixteen died. Of these last, two died from inflammation of the sac; one from inflammation of the brain; five from hemorrhage; one from spasm of the glottis; two from apoplexy and congestion of the brain, and one from exhaustion. In four cases, the cause of death is not mentioned.

Of thirty cases in which the ligature was rendered necessary by wounds, fifteen were cured, and fifteen died. In eighteen cases, the ligature was applied previous to, or at the time of the extirpation of tumors. Of these six died. In forty-two cases the carotid was tied with a view to arrest the flow of blood to erectile tumors of the head or face, or of firm tumors of the jaw, maxillary sinus, or neck. Of these cases thirteen died. Of these, one died from ulceration of the tumor; four from hemorrhage; one from convulsions; one from inflammation of the brain; one from phlebitis of the internal jugular; one from lock-jaw; one from inflammation of the chest; two from long continued constitutional disturbance occasioned by disease, and one from apoplexy. In six cases the operation was performed for the removal of cerebral affections, all of which terminated favorably. In fifteen instances the ligature was applied according to Brad sor's method for the cure of aneurism, and four died. From these tables it appears that of one hundred and forty-seven cases in which the carotid was ligated that ninety-three survived the operation, and fifty-four died, showing a mortality of more than one-third. The ligation of the arteria innominata has been performed in eight cases, and in every instance the termination was fatal.
Treatment of Ulcers by Firing.

To the Editor of the Lancet:

Sir,—In consequence of having lately observed in your journal several communications relating to the use of the method called "firing," by Dr. Corrigan, I am induced to call the attention of your readers to another method of applying dry heat, which I have repeatedly witnessed in the practice of M. Malgaigne at the Hopital de Clinique.

This method is chiefly useful in procuring cicatrization of unhealthy ulcers of the skin, such as are left after the evacuation of the pus of buboes. The heat is applied by heating one of the numerous irons used for actual cauterity in the Paris hospitals, and holding it over the sore at such a distance as to produce an agreeable sensation of warmth to the part. In proportion as the iron cools, it is carried nearer and nearer, until, at last, it may be entrusted to the patient himself to hold, with instructions to continue approaching the iron to the ulcer as the iron cools.

I have not seen this method of treating obstinate ulcers employed anywhere else but in the wards of M. Malgaigne, although, from the excellent effects I witnessed from its use, I think it is deserving of being more generally tried. The first visible effect of the application is the assumption of a cleaner appearance by the sore, then a shining white pellicle of lymph spreads over the surface, and frequently within twelve hours of the first application, cicatrization has made some progress around the edges of the sore. In two cases I noted the complete cicatrization of unhealthy looking ulcerations resulting from large buboes in the groin, in eighteen hours.

Notting Hill, Jan. 1847. ROBERT BARNES, M. B.

Physical Sign of Pneumonia in the Apex of the Lungs.—Dr. Wm. Boling (American Journal) has suggested a sign by which the existence of pneumonia in the apex of the lungs may be ascertained. He says:—"This is a fine mucous or crepitant rhonchus, seemingly seated in the larynx, loud enough to be heard distinctly at the distance of two or three feet from the patient, and so persistent, that it is not removable, or but momentarily, by any effort to expectorate which the patient may make, while at the same time there are present none of the signs of bronchitis or laryngitis. Though it is exceedingly annoying to the observer to hear it, because it impresses him with the belief that it is distressing to the patient, and he looks with a feeling rather of impatience for an attempt, by an effect to expectorate, for its removal; the patient seems perfectly indifferent to its presence, which would not be the case were it really produced by the presence of a small quantity of tenacious mucus in the larynx itself. The sound, then, is only seemingly produced in the larynx, for on applying the stethoscope immediately under or just above the clavicles, it will be discovered to proceed from the apex of one or the other lung, which will be found the seat of inflammatory action. It would seem that the sound there produced in the pulmonary vesicles, must be conveyed
by the larger bronchial ramifications, numerous and superficial at this point, to the larynx, where, in consequence of the thinness of the tube, or rather the thinness of its covering, and its proximity to the surface, the deceptive impression of its production in this organ, from the presence of a small quantity of viscid mucus, is created.

It is the indifference of the patient to the presence of the sound, but still more especially its persistence, which constitutes its peculiar and distinctive feature, and upon which its value as an evidence of pneumonia commencing in the apex of the lung depends. In other affections of the lungs and air passages, more especially in bronchitis, we may have a somewhat similar sound produced in the larynx itself, by the play of the passing air through a small quantity of viscid mucus there collected; but under such circumstances, it is removable by coughing, or an effort to expectorate, and once removed may not return again, or only after a considerable interval, when a fresh collection of mucus has taken place. The patient, too, does not manifest the same indifference in regard to its presence, but the mucus producing it soon excites an effort for its removal."

Vomiting caused by relaxation of the Abdominal Parietes; bandage; cure.—M. Greppo relates the case of a woman whose abdominal parieties were considerably relaxed in consequence of pregnancy. Various remedies had been unsuccessfully employed against the habitual vomiting by which she was exhausted. M. Greppo applied a bandage, and the vomiting disappeared, but returned whenever the bandage was removed.

This fact demonstrates clearly the origin of certain cases of obstinate vomiting which are combated in vain by every imaginable method, and the efficiency of the most simple mode when it is addressed directly to the cause of the accident. How many errors would be avoided in medicine if the connection of symptoms with their causes could always be appreciated as clearly as in this case.

[Translated from Bulletin Thérapeutique, May, 1847]

Injection of Nitrate of Silver in Acute Colitis.—We frequently meet in very young infants with a particular form of diarrhœa caused by an acute and always superficial inflammation of the mucous membrane of the large intestine, the small intestine remaining perfectly healthy. This diarrhœa in its most simple form is ordinarily unattended by fever, and can generally be distinguished by particular signs from the catarrhal inflammation of the small intestine. Various remedies, particularly opium and its different preparations, are employed in such cases, frequently, it is true, with good effect, but they are almost always uncertain.

Professor Trousseau, appreciating the utility of the topical and substitutive medication whose action and power are always in some degree under the control of the physician, conceived the idea of employing in colitis this medication, by administering injections of the
nitrate of silver, so that it might come in immediate contact with the inflamed mucous membrane. The treatment has been generally happy, and meets every day with new success. It is important, however, that it should be employed with great care and not inopportunely, as for example in cases where the phlegmasia is confined to the small intestine. The following case shews the advantage of this treatment, and the course to be adopted.

An infant of 15 months was brought into the ward Sainte-Julie. The constitution was tolerably robust, and the health had been good until within the two last months, when it had been weaned and nourished by improper food. During this time it had been subject to diarrhoea; the evacuations were numerous, (8 or 10 per day,) of very slight consistence, of a deep green color, without any mixture of yellowish matter, and often preceded by violent colic; the abdomen was painful upon pressure, in the direction of the colon, and scarcely any fever existed. In this state the infant was brought to the hospital. The following injection was prescribed:—Cristalized nitrate of silver \( \frac{1}{4} \) of a grain; Water about a \( \frac{1}{2} \) pint. An injection of simple lukewarm water was first administered, and after it returned bringing away the matter which had covered the surface of the intestine, the injection of the nitrate of silver was given in an ordinary pewter syringe. On the first day the evacuations were reduced from ten to four. The injection was repeated, and on the second day there were only two evacuations, of a yellowish color and ordinary consistence, and the colic had disappeared. The patient left the hospital perfectly cured.—[Ibid.]

**Chlorate of Potassa, employed externally in Cancerous Ulcers.**—In our last number we mentioned the happy application which Dr. Hunt has made of the chlorate of potassa to the treatment of the gangrenous ulcers of the mouth of infants. Dr. Tedeschi has recently tried successfully the same remedy in a case of cancerous ulcer of the face. The following is his account of the application and of its results. A man aged 26 years, of a scrofulous diathesis, had upon the superior lip and the wing of the nose an ulcer of about one square inch in extent, with elevated and callous margins; the glands of the neck were engorged and painful. A great number of remedies, both internal and external, had been employed in vain—the flowers of zinc, the muriate of lime, the decoction of hemlock, the deuto-chloride of mercury, the red oxide of mercury ointment, the aqua phagedenica, the arsenical powder, &c. After three months thus uselessly expended, M. Tedeschi employed the chlorate of potassa in the following manner. He applied to the ulcer lotions made by dissolving 130 grains of the salt in about 5 ounces of water, continuing the internal use of emollient decoctions and of iodine preparations. In the course of a few days the ulcer presented an evident amelioration; the margins were less elevated, the suppuration became healthy, and in twenty days a good cicatrix was formed. The
glandular engorgements gradually disappeared, and in less than two months the cure was complete. This fact is of such a nature as to encourage new attempts.—[Ibid.]

Hemostatic Property of Secale Cornutum.—We have seen in No. 9 of the ward St. Lazare a man of 45 years of age, of a vigorous constitution, but laboring under considerable debility and even extreme anemia, in consequence of bleeding piles. According to the statement of the patient he had been much afflicted for several years with hæmorrhoidal tumors which were frequently protruded during defecation, and with the feces he discharged a sufficient quantity of blood to produce the exhaustion under which he was then suffering.

M. Martin Solon put the patient upon a tonic regimen, and after having employed unsuccessfully the extract of rhatany and other articles, he prescribed six, eight, and then nine grains of secale cornutum, to be taken four times per diem. The discharge of blood ceased immediately, defecation became more easy, and in three weeks the patient left the hospital perfectly cured.—[Ibid.

Introduction of Air into the Veins during the Operation of Tracheotomy.—The occurrence of this dreadful accident during an operation of tracheotomy is an unusual fact, to which it is important to call the attention of practitioners. A female, by occupation a mattress maker, and about 50 years of age, was attacked, in January, 1847, by vague pains and sensations of uneasiness, soon followed by pains in the larynx; deglutition was embarrassed, and a frequent cough brought up often small threads of blood. On the 8th of March, being attacked by an intense dyspnœa, she was admitted into the Hospital Beaujon, in the service of M. Bouvier, who, believing tracheotomy urgently necessary, consigned the patient to M. Robert. The respiration was exceedingly difficult and presented the characters assigned to oedematous inflammation of the superior extremity of the pharynx. Inspiration was long, sonorous, and excessively laborious. Expiration, on the contrary, was prompt and easy. The pulse was very small and frequent, the countenance pale, the skin covered with a cold and clammy sweat, and the anxiety of the patient was extreme. M. Robert believed it to be his duty to perform tracheotomy in all haste. A vertical incision having been made downwards from the laryngeal projection through the skin, the sub-cutaneous cellular tissue and the superficial cervical aponeurosis were divided; but at this moment an anastomotic branch between the two anterior jugular veins having been divided, a very acute sound of aspiration was heard in the wound while the patient was making an inspiratory effort, and immediately afterwards, during expiration, a considerable quantity of venous blood with many bubbles of air escaped with a gurgling sound from the left lip of the incision. M. Robert immediately applied his finger upon this point; but while causing the finger of an assistant to be substituted for his own, in
order that he might continue the operation, a new sound was heard, followed by the same reflux of venous blood, and immediately the patient, exclaiming that she was dying, became pale and remained almost inanimate. While an assistant compressed more exactly the tips of the wound, the surgeon hastened to finish the operation. The incision of the trachea having been made with all possible celerity, he introduced a canula into its cavity.

The patient continued in a state of syncope; cold water was dashed upon her face; she was exposed in a current of air, and exciting frictions were made upon her chest; after some instants she made a slow and protracted inspiration; a second followed after a short interval; the pulse revived, and the skin became slightly warm. During the entire day the woman preserved a certain degree of prostration, and it was only by degrees that these serious symptoms disappeared.

As we perceive, this case, which we have transcribed with all its details, can leave no doubt of the reality of the introduction of air into the veins. If the patient did not succumb, it was owing, doubtless, to the small calibre of the vein which had given admission to a very small quantity of air. The first introduction did not seem to produce much disturbance; the second caused very serious accidents; another inspiration would probably have made death inevitable. We have cited this interesting case in order to put practitioners upon their guard against a similar accident. The extreme difficulty of the respiration by accumulating the black blood in the veins increases their volume and renders the introduction of air very easy whenever an incision made into a greatly distended vessel empties it of the blood which it had contained before it has time to return to its normal dimensions. We would be almost tempted in such cases, when the respiration is so greatly embarrassed, to cut down to the trachea directly, in order to re-establish at once the respiration, and thus remove that congestion of the veins which has the double inconvenience of rendering their lesion more inevitable and of increasing the danger of the operation.—[Ibid.]  

Substitute for the Vapour of Ether to annul sensation during operations. By Dr DAVRILD.—At midsummer, when vegetation is at its height, solanum nigrum, hyoscyamus niger, cicaea minor, datura stramonium, luctua viroa, are gathered, and a sponge is plunged in their juice freshly expressed. The sponge is then dried in the sun, the process of dipping and drying is repeated two or three times, and the sponge is then laid up in a dry place.

When the sponge is required for use, it is soaked for a short time in hot water; afterwards it is placed under the nose of the person to be operated upon, who is quickly plunged into sleep, more or less deep, according to the susceptibility of his nervous system. The operation may then be proceeded with without any fear that the patient has any sensation of pain. He is readily aroused from the stupor by a rag dipped in vinegar, and placed to his nose.
M. Dauriol records five cases in which he has successfully employed this means of bringing about insensibility during operations.


The Action of Scammony.—M. Rayer has recently tested the action of this medicine in his wards at La Charité Hospital, Paris. He has decided that it is neither a drastic nor hydragogue purgative. In his hands its action was mild, it was easy of administration, and if any thing it rather proved itself chologogue, for the discharges were not serous, but yellowish from the increased quantity of bile. He gave it in from 4 to 30 grains in a single dose enveloped in unfermented bread, and at 4 o’clock in the morning. In cases of constipation or wherein purgation was indicated, it generally produced from two to seven evacuations in the space of three or four hours. It possessed no special effect over dropsies.—[Journ. des Connaissances Médico-Chirurg.

Death of the Mother—Delivery of the Child by the Cæsarian section: it lives.—M. De Pelayo, in the Anales de Cirugia de Madrid, says, that on the 8th February, 1847, he was called to a woman aged 30, who was in labour. During the progress of the case, she suddenly exclaimed I am lost, and died. Without delay, and assisted only by a female, the Doctor performed the cæsarian operation, and in five minutes after the death of the mother he extracted a small female infant. By blowing in its mouth and using frictions to the chest and spine, she began to breath, and eight days afterwards was doing remarkably well.

This woman was not married until the day of her accouchment, and her husband thus in the space of a few hours, passed successively through the positions of bachelor, married man, widower and father.—[Translated from Gaz. Médicale de Paris.

PRESCRIPTIONS.

For Constitutional Syphilis. By M. GIBERT, of the St. Louis Hospital.—Take, Iodide of Mercury 2 grains; Iodide of Potash 100 grains; Gum Arabic Powder 10 grains; Honey enough to make twenty pills. Dose—two pills before breakfast.

For Gonorrhœa. By M. Pons y Gulmara.—Catechu 2 drachms, dissolved in 5 ounces of distilled water. Inject into the urethra and retain it a minute and a half.

For Syphilitic Eruptions of the Skin. By M. Cazenave, of the St. Louis Hospital, Paris.—Protoiodide of Mercury 10 grains; Liquorice powder 30. Make twenty pilis. Dose—one to four pills in twenty-four hours.

Protoiodide of Mercury 2 dr.; Liquorice powder 4 dr. Make forty pills. To be given as above. He recommends this preparation of mercury as high as 4 grs. per diem. It should never be combined with opium.
MEDICAL INTELLIGENCE.

To our Readers.—In our next number we intend to begin the publication of such of the reports and other proceedings of the late National Medical Convention, as may be of interest to the Profession. This duty would have been sooner performed, but a corrected copy of the proceedings of that body, did not reach us in time to extract anything for the present number of the Journal. In our next we propose publishing the code of Medical Ethics which was adopted unanimously by the Convention, and which must prove of vast utility to physicians as embodying ample regulations for professional intercourse by which all differences may be adjudicated. We have many treatises on Medical ethics, but it required the adoption of a code suited to the profession in America, by some competent body to give efficiency to it. This has been done by the late Convention, and in our next number we will place their work before our readers.

Medical Miscellany.—By the Medical Collegium of Prussia, no apothecary in the kingdom can dispense any prescription of a physician containing a poisonous article, beyond its maximum dose, without the Doctor expressly states the condition requiring it—At a recent trial at Essex in England, it appears a man by the name of Bentley, had strangled at least twenty-four horses in various parts of that country. His object was gain, for though sold ostensibly to dealers in horse-flesh for dogs, yet they are often disposed of for human food.


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But 4 entire Fair days. It rained on 16 days. Quantity of Rain 4 inches and 5-10. Wind East of N. and S. 13 days. West of do. 13 days.