
From the wide-spread prevalence of this scourge, and its fatal tendency, I feel it a duty to contribute my might of experience on the subject. About the 20th of May, 1853, I saw the first cases of this epidemic, whose increase and spread were rapid and fearful, until about the middle of June, when it began to decline, and had pretty much ceased by the last of July. There were sporadic cases through the fall and winter, and some few cases became chronic, and lasted for months, until the disease wore itself or the patient out. It again commenced its ravages in the present year, about the first of June, and is yet, up to the present time (Sept. 20th), prevailing to some extent.

Symptoms.—The onset of the disease, in certain cases, was not unlike most acute diseases, preceded by premonitory symptoms of a disordered state of the stomach and bowels, wandering pains in the abdomen, or a sense of fullness, weight or oppression in the epigastric region; in other cases the attack was sudden and violent, in the form of a cholera-morbis, quickly followed by the bloody discharges. At other times the onset was no less rapid with bloody evacuations, mucous, or muco-sanguinolent matter, attended with tenesmus and tenesmata from the first. But a large proportion of cases were gradual and
slow, without a chill or even a sense of coldness; little or no fever—in fact, many cases had no appearance of fever from the onset to their termination, whether in recovery or death. In this latter class there was little complaint of pain in the abdomen or elsewhere. In some cases (particularly in the robust) the inflammatory symptoms ran high, attended with severe head and back ache; pain in the back was one of the most constant symptoms attendant on the disease. The discharges were sometimes scant, of mucus and blood, or blood and serum, resembling beef-brine, and these briny discharges were attended with more tenesmus and tormina than any other character of the discharge. Alternately with the above character of evacuations there would be passed fecal matters of various appearances, from pitch-black to a natural yellow. These dark discharges were very common and copious on the approach of convalescence, and were always looked upon as a favorable symptom. More or less soreness was always present in the abdominal region, more especially if pressure were made; sometimes tympanitis, though rare. The tongue was always more or less coated by a white, yellow, or brownish fur, with its tip and edges more or less red, or of raw beef appearance. This latter aspect of the tongue only existed where there were decided symptoms of gastritis or gastro-enteritis. I have seen no cases where the disease of itself ran into gastro-enteritis—only such as had undergone a rigid course of mercury. The present year we have had some cholera in this section, and many severe cases of flux were attended with decided choleric symptoms, such as cramps, cold sweats, great heat, and excessive thirst. In one case the rice-colored discharges supervened copiously. Another variety of cases occasionally met with, I denominated the bound cases, from the extremely small quantity of blood discharged; sometimes small mucous stools, slightly streaked with blood, once or twice in the twenty-four hours—the patient being obstinately bound unless under the influence of a purgation, at which time the stools were generally large and always dark. These cases were attended with the usual amount of abdominal pain, tenesmus and tormina. I attended one of this class of cases which proved to be very tedious; had all the characteristics of a common case of flux, save the bloody dis-
charges, no traces of which were ever seen in the evacuations, notwithstanding there were tenesmus, tormina, and almost continual abdominal pain.

The pulse in many cases varied slightly from the natural state; in others it was accelerated more or less, according to the amount of fever present. In many cases it was of a typhoid character; but in none did I find it full and strong or bounding, or what I really considered a bleeding pulse. The bound variety of dysentery, towards the decline of the disease in the summer of '53, greatly predominated, and so gradually emerged into a common bilious fever, that the diagnosis was not very easy in the onset of many cases. The epidemic the present season is more uniformly spread over the whole country, and less in certain localities, than in the summer of '53. Two or three cases of congestive chill also occurred in this section since the appearance of the epidemic dysentery—probably the first cases that ever occurred in McMinn county. Bilious colics, and inactions and congestions of the liver have been exceedingly common the two last seasons; also, congestive determinations of blood, carbuncles, &c. Horses, cattle and hogs, suffered to some extent, and some deaths from a disease to all appearance identical with the flux with which the people were suffering.

In giving a history and treatment of the Epidemic Dysentery that has prevailed among us the two past seasons, I shall confine myself to facts I observed myself, and leave the reader to his own thoughts and inferences. The disease has been wholly unlike any that ever prevailed in this section of country: strictly a typhoid flux—denominated congestive flux by one of our most eminent practitioners (Dr. Cooke, of Madisonville, Meriwether county). The fact is, the disease is both congestive and typhoid. It has not been confined to age or sex; but all have been equally obnoxious to the fell destroyer, from the infant at the breast, to the most athletic and aged of the land. In one case only were the bloody discharges followed by a very singularly looking white, glairy, tenacious discharge, which was accompanied by prostrating cold sweats, &c. Of the diagnosis of this disease nothing need be said, as it would be hard to mistake it for any other.
Prognosis.—When the discharges became less frequent, more scant, and mixed or alternated with fecal matters, more especially if they were of a dark, bilious character, it was always a favorable symptom, and more especially if they were accompanied with a fuller and slower pulse; but this was not always the case, for bilious discharges were in some cases occasionally seen throughout the entire course of the disease, which terminated fatally: such was generally the case when mercury was used freely in the treatment. In children, drowsiness and general languor, accompanied with cold extremities, indicated great danger; and in general the disease has proved much more fatal in children than adults. The most unfavorable symptoms in adults were a stubborn persistence in the discharges—these becoming more frequent, darker, red, and more offensive; sinking and softening of the pulse, wandering delirium, prostration, &c. In many grave cases, especially in children, the extremities were cold from the onset, which indicated great danger.

Treatment.—From the obvious symptoms of bilious derangement, I cautiously attacked the disease with small doses of calomel, combined with Dover's powders, and sometimes ipecac and sugar of lead, variously combined. But I quickly found that I was not only doing no good, but most certainly aggravating the complaint. I then tried, in succession, almost every remedy reputed to be a curative in dysentery, until the whole catalogue was exhausted, with but little or no benefit. I now determined to give opium and its various preparations a fair trial, before condemning that most excellent drug. It was used alone, both by the mouth and in the form of suppositories and injections, in large doses, from 1 to 3 grains, every two or three hours, according to the urgency of the symptoms, and large suppositories after every discharge. To my great surprise and gratification, it almost completely controlled the flux. Dr. Cheyne says, that had he to go over his practice again in dysentery, he would not hesitate to give opium in 4 or 5 gr. doses, as it was the opium that he did use that appeared to arrest the inflammation. Dr. Christison expresses the belief, that the cure of epidemic dysentery may often be effected by opium alone. (Cyclopaedia Pract. Med., vol. 1, p. 727.) This latter opinion coincides with my own experience in the present epidemic of
dysentery in this section of country. In addition to the free
use of opium, I found the warm bath and warm fomentations to
the abdomen, excellent adjuvants in the treatment of the more
grave cases. In some instances the hip-bath alone was used; in
others, the patient was repeatedly bathed up to the axilla, and
suffered to remain from fifteen to thirty minutes. In cases of
moderate severity, nothing was used but the opium, and some-
times that in the form of suppository. This drug was seldom
used any other way with children, after every discharge. If the
attack commenced with, or was preceded some days by a dia-
rhea, I commenced at once with the use of opium. If small
bloody discharges characterized the attack, I had the alimentary
tube cleared by a dose of oil or salts, before using opium. Af-
terwards it was sufficient to give salts or castor oil in small and
repeated doses to move off the contents of the upper portion of
the bowels. Notwithstanding there was manifest biliary de-
rangement in a majority of the cases, I do not believe in the old
doctrine of inaction of the liver, and congestion of the portal
circle being the cause of the disease. The disease, as it showed
itself in this country, was purely an idiopathic affection, and
called loudly for means to be directed to the local disease, of
which nothing was so happy in its effects as opium, and its pre-
parations. I have met with no case in which the opium was
contraindicated, notwithstanding I saw many in which the fever
ran high, the pulse was quick, and the pain in the head severe,
&c. In such cases, I did not hesitate to administer the opium,
in full doses, with the happiest effect. It never failed, in my
hands, when given in sufficiently large doses, to lower the pulse,
and make it more full—ease the pain in the head as well as ab-
domen—lessen the discharges, and induce sweating.

In this way I treated, this season and last together, two hun-
dred and forty cases, of all ages and sexes, and of every variety
above mentioned, and lost eleven, or five per cent. In a few
cases, where the symptoms were not urgent, and the liver ap-
peared to be inactive, the blue pill was used in connexion with
the opium with good effect.

I have already lengthened out my remarks too far, or I would
give cases illustrative of these different varieties and complica-
tions of dysentery.
Surgery, in the Country. By E. G. Harris, M. D., of Carroll county, Mississippi.

Physicians living in the country are seldom called on to perform surgical operations, in consequence of which they are apt to become rusty in this branch, and are generally very badly provided with instruments. Notwithstanding this, they sometimes have to take the place of the surgeon, and have to operate with such instruments as they may have, and often have to manufacture them. Having performed a few simple operations, and most of them without the right kind of instruments, I thought I would report them, and show that, although performed with the pocket-knife, they do as well as when done with more costly instruments.

In the winter of 1845, I was travelling in the steamer Enterprise, on the Yazoo river, on my way to New Orleans, when one of the deck hands had his great toe dreadfully lacerated; the skin and tissues for an inch above his toe were torn loose and peeled down to the first phalanx, which was dislocated. The skin was still peeled off further down to the middle joint, leaving a little cuticle on the under side. After carefully examining the case, I was perfectly satisfied it would have to come off. Having no instruments with me, I procured a razor, and amputated his toe at the dislocated joint, where it is attached to the foot. Having nothing to cut but the inferior integuments, it bled but little. There was no flap to draw over the stump. I dressed it with adhesive strips, and in six weeks it was well, except a small scab over the end of the bone. He had received his injury by placing his foot inadvertently in the fly-wheel of the boat.

In 1846, while practicing on the Yazoo river, in this State, a Mr. Chapman brought me his little son, six years old, who had not made water for twenty-four hours. I found the penis swollen about an inch back from its end, and felt at this place something very much like a pea, or a bean in the urethra. I could introduce a catheter to this point, but could get it no farther. I introduced a very small pair of tweezers, and could get a slight hold on the substance; but they would invariably slip
off whenever I attempted to grasp it. After vainly using every means I could think of for more than an hour, I plainly saw it would have to be cut out—so we laid him on a table, and while two men held him, I drew the penis back on the pubis and made an incision into the urethra about half an inch long down to the substance; I then took hold of the object with the tweezers and lifted it out very easily. It was a calculus, about the size and appearance of a large white coffee grain; was rather rough; flat on one side, and round on the other; $\frac{1}{4}$ of an inch long, and $\frac{1}{8}$ inch wide; firm, hard and compact; weight 22 grs. I dressed the wound with an adhesive strip, and he went out and made an enormous quantity of urine. This operation was performed with a common pen-knife.

On the 28th of October, 1849, in Fayette county, Alabama, I was called a distance of seventeen miles to see R. S., a farmer, in his 42d year, and of bilious temperament. He had phymosis from infancy, for which no operation had ever been performed. It had at no time ever troubled him until about two weeks previous to the time he called on me, when he felt some itching and soreness under the prepuce. By degrees inflammation and swelling came on; pus began to ooze out from between the prepuce and glans, and it was with difficulty he could urinate. When I saw him on the 28th, the prepuce and glans were enormously swollen; he was in perfect agony, enjoying scarcely any rest, day or night. I gave him an anodyne, and directed him to keep soothing applications to the sore, and promised to come back with assistance on the 30th, and try to relieve him by an operation.

Accordingly, myself and Dr. S. B. Abernathy went to his residence prepared to operate. We found him pretty much in the same condition he was at my first visit. Having no chloroform, I gave him $\frac{1}{4}$ gr. of morphia. As soon as he got under its influence, I introduced, with a good deal of pain to him, a grooved probe on the right side of the penis, between the glans and prepuce; I then ran a sharp-pointed bistoury along the groove and split the prepuce up to its attachment; I then operated on the left side in the same way, and turned back the flaps. There was but little hemorrhage; nearly one half the glans penis was destroyed. We enjoined perfect rest, light diet, and
the bowels to be kept open by epsom salts, and dressed the penis with lint, kept constantly wet in cold water.

On the 21st of November he sent after us again, and requested us to bring with us our instruments, as he expected we would have to cut it off. We accordingly went, and found him much worse. The flaps were swollen a great deal more, and ulceration both of the prepuce and glans had advanced rapidly since our last visit. The glans was nearly all gone, and the inflammation and swelling had extended nearly to the root of the organ. In viewing the case as to its probable result, we came to the conclusion it would be best to amputate it, and therefore, in the presence of Drs. Morton and Black, and another person, we laid him on a table, placed him completely under the influence of chloroform, and performed the amputation in the usual manner, at an inch and a quarter from the body. I took up the arteries and dressed the wound with cold water dressings. He did very well until the 24th, when the ligature came off the largest artery, and he bled considerably before he was aware of it. I tied the artery again. On the 26th, the ligature came off a second time, and I was again called, and I could not now get hold on the artery. I applied the actual cautery, which effectually arrested the hemorrhage. He then continued to improve, and in two months was quite well.

In the spring of 1850, he made a crop, and enjoyed as good health as ever he did in his life. In June, he felt some soreness and enlargement of the glands in the left groin. They continued to enlarge and increase in soreness until about the first of July, when the cuticle gave way, and the ulcerated glands discharged a large quantity of pus, mixed with blood and water. On the 23d of this month, I was called to see him, and became satisfied the case was cancerous, and informed him that I was fearful there could be but little done for him. The edges were rough and ragged, and discharged a very offensive, watery, bloody matter; the ulceration continued to enlarge and get deeper. I tried a little of almost everything to satisfy him, but nothing did him any good. Faith and Cancer Doctors promised to cure him in a week; but they left just before he got well, and reported that they had cured him wherever they went. He became emaciated; lost his appetite; the glands in the other
groin began to ulcerate—when, one day in December, just after having dressed his wound with a little simple cerate, and eaten a little dinner, he felt his left hip and side unusually warm where he lay in bed; he raised the cover, and discovered a puddle of blood some two inches deep; he called to his family—became sick—fainted, and never recovered. Thus he died, after nearly a year’s intense suffering, by the rupture of a large blood-vessel.

In July, 1852, I was sent for to see a young man in his 18th year, who had been accidentally shot by an uncle; but could not go. Another physician was called, who could do but little more than give him a purgative. On the twenty-second day from the time he received the shot, I was in his neighborhood, and he came to see me. The rifle ball (about 60 to the lb.) had entered his right breast, about an inch and a quarter below the right nipple, passed through the body, and lodged against the skin, close to, and on the left of the spine, and about an inch lower than where it went in. He suffered with paralysis of the leg for some four weeks, and an occasional shooting pain in that ankle. I cut the ball out with a razor, and he gradually recovered, and is now quite well.

He was running in a bent position, nearly in the direction to the one who shot him at the time he received the wound. How many could be shot through in the same place, and get well? Was not his position of being bent forward at the time he received the shot favorable to his recovery? At the crack of the gun he fell, and had no power to use his lower extremities for several days, showing the spinal marrow had suffered considerably. In about five days he recovered the use of his right leg entirely; but not of his left, for some time after I took out the ball.

ARTICLE XXXVII.

A Case of Poisoning. Reported by M. A. Milner, M. D., of Fairfield, Texas.

Dear Sir—The comparatively rare occurrence of poisoning by Hydrocyanic Acid, or preparations containing it, as Cyanide, or Cyanuret of Potassium, is admitted; yet it does sometimes
occur, and this induces me to report the following case, with the hope that it may elicit further enquiry for a certain antidote, and the proper management of such accidents.

On the 6th inst. (October), Col. W.'s little daughter, Fanny, three years old, in company with others, visited a Daguerreian Gallery, in the second story of my office. While the artist was preparing a plate, one of the ladies gave the child (for water) a solution of the chloride of silver and cyanide of potassium, used to galvanize plates. The mistake was discovered immediately, and the child brought into my office, with the cry—"Do something quick! it is poisoned with the Chloride of Silver." One glance revealed to me the truth of the alarm. Her face was flushed, her breathing slow and sterterous, and she was apparently insensible. With all possible haste, I tried a mustard emetic, but found she could not swallow, and immediately resorted to the stomach pump, and succeeded in drawing off a good portion of the fluid contents of the stomach. It being a short time after dinner, however, the imperfectly chewed and undigested bits of meat, &c., would fill the eyes of the tube, and prevented as effectual an emptying of the stomach as was desired, I then forced salt water into the stomach, but to no purpose, for the child was dead.

The length of time from the drinking of the poison, until the last gasp for life, was between four and five minutes.

None of the antidotes, as laid down by authors, were used, such as chlorine water, ammonia, cold water, &c.

In conclusion, I would respectfully ask, where such prominent poisons are taken, and the paralytic effect on the nervous system so instantaneous, should emetics, or the stomach pump, be thought of for relief? or should we depend upon inhalations and the administration of antidotes.

The composition of the poison was about 5 iv. Cyanide Potassium, 3 i. Chloride Silver, and three pints water.
Report "on the relative value of Lithotritry and Lithotomy."
Presented to the Medical Society of the State of Georgia, at its last annual meeting, by L. A. Dugas, M. D.

The subject assigned us for elucidation, as above enunciated, is by no means one of easy solution, for, in order to render the comparison of different plans of treatment at all satisfactory, we should first be prepared to admit that they are applicable to the same cases, or to the varied forms and circumstances in which the disease may be found; an admission which cannot be made in the present instance. Equally valuable in cases adapted to each particular operation, they cease to be so under different circumstances. While Lithotomy is alone advisable or practicable under certain conditions of the case, there are others in which it were unpardonable not to give the preference to Lithotritry.* A case in which Lithotomy would be attended with comparatively little danger, might be made much worse by a resort to Lithotritry; whereas another in which Lithotritry would be harmless, would become very serious if treated by Lithotomy. As well might we attempt to determine the relative value of Mercury and of the Iodide of Potassium in the treatment of Syphilis, in certain stages of which the one would be as baneful as it would prove beneficial at other periods of the disease; and vice versa.

We are aware that some of the enthusiastic advocates of the one or the other of these methods for the removal of vesical calculi, have from time to time invoked the aid of statistics to demonstrate the relative success attendant upon the performance of these operations; but after all, these researches have been exceedingly unsatisfactory. As Lithotomy is the only operation justifiable in some of the worst cases of stone, and Lithotritry the proper one in recent and uncomplicated cases, it is not to be marvelled at that the former should have proved oftener fatal than the latter procedure, in the hands of those who conscientiously practice either the one or the other according to the exigencies of each particular case. What would be the result if any one were so injudicious at present as to resort exclusively to Lithotomy or to Lithotritry in all cases indiscriminately, we cannot determine. It is true that we have some knowledge of the results of Lithotomy prior to the discovery of Lithotritry; but we know of no instance in which any practitioner of note or of extensive opportunities has treated all cases

* We retain the word Lithotritry in the sense used by the Society, in preference to adopting, as is suggested by some, the term Lithotripsy. Although the latter may be, etymologically, more correct as the operation is now performed, there is a manifest inconvenience in multiplying technicalities.
indiscriminately by Lithotritry, for even Civiale, Amussat, Le-
roy, Heurteloup, and Costello, the strongest advocates of Litho-
trity, do not hesitate to cut such cases as they deem inappro-
priate to their favorite method. To be, at this enlightened day,
the exclusive champion of either operation, would indicate a
disregard of the plainest inferences of reason and a reckless-
ness of human life entirely unworthy of the high calling of the
Surgeon.

Under existing circumstances, then, we propose to point out
the relative advantages of these operations in such cases as are
equally adapted to both, and, subsequently, to indicate the con-
ditions in which either the one or the other should be preferred.

In cases equally favorable to either operation, Lithotritry pos-
sesses the following advantages over Lithotomy:

1. It is a much less alarming procedure; there is nothing
repulsive in the instruments, which are constructed upon beau-
tiful mechanical principles, and evidently calculated rather to
avert than to give pain. Instead of subjecting the patient to
the terror of being bound hand-and-foot in a most uncomforta-
ble and humiliating position, he comes forward unshackled,
and submits with the cheering hope of relief by a bloodless
operation.

2. The operation is intrinsically less painful. With dexteri-
ty on the part of the operator, it may be performed with very
little inconvenience; whereas no degree of expertness can ren-
der Lithotomy otherwise than extremely painful. It is true,
that the discovery of anaesthetics lessens the force of this argu-
ment very materially; but while it prevents the evil effects of
the shock of pain upon the nervous system, it adds an element
of danger not to be entirely disregarded.

3. The bladder is more easily entered by the Lithotrite than
by cutting instruments. The Lithotrite is passed through a
natural opening with comparatively little difficulty; whereas,
the bladder can only be reached, through the perineum, by a
complicated process, requiring intimate anatomical acquaint-
ance with the region, and the most complete self-possession on
the part of the Surgeon. The introduction of an instrument
into the bladder per urethram completes an important stage of
Lithotritry; but is only the preparatory step towards the opera-
tion of Lithotomy.

4. By Lithotritry we avoid the danger of hemorrhage, prima-
ry and secondary, to which some of the French authors attrib-
ute one fourth of the deaths that occur after Lithotomy. The
most skillful Surgeons have sometimes wounded the bulb of
the urethra, the internal pudic and the hemorrhoidal arteries, thus
giving rise to serious or fatal accidents. Cases are on record
of deaths even from the opening of the transverse artery of the perineum, which is necessarily done in all such operations. But, if it be urged that such accidents might have been avoided by more prudent and dexterous operators, we may reply that there are sometimes anomalous dispositions of the blood-vessels which cannot be known to exist before the operation, and in the avoidance of which, therefore, skill is unavailing. A danger that no skill can avert is not easily overrated. Hemorrhage, it must be confessed, may be consequent upon Lithotritv; but it is here rarely, if ever, fatal.

5. We incur no risk of injuring the rectum in Lithotrity—a very serious accident.

6. There is much less danger of urinary infiltration. Yet, this may occur in Lithotrity in consequence of laceration of the urethra by a bit of the calculus adhering to the instrument when it is withdrawn—or by the efforts made to extract a fragment lodged in the urethra. But this is extremely rare in comparison with the accidents of Lithotomy, and not so apt to prove fatal.

7. Phlebitis and purulent infection are more common after Lithotomy than Lithotrity.

8. There is no danger of urinary fistula, which occasionally results from Lithotomy.

9. Lithotrity does not necessarily confine the patient to bed after its performance, and may in many instances not interfere with the pursuit of his usual avocations.

In enumerating the advantages of Lithotrity, we ought not to omit the very important consideration, that, if it were more generally practiced, and its merits better understood by the people, no one would suffer long from calculous affections, without applying for relief; and by thus early invoking professional aid, the cases would not become so complicated and aggravated as to render Lithotomy preferable. The patient would come to the surgeon before the stone had acquired such dimensions as to preclude Lithotrity; the bladder would not have become the seat of dangerous lesions; the general health would be comparatively unimpaired; and every thing, in short, would be found in the most advantageous condition for easy and successful Lithotrity. Lithotomy, instead of being, as it is now, generally preferred in the majority of cases, would be resorted to only in exceptional ones.

Let us now see what are the intrinsic advantages of Lithotomv, in cases equally adapted to either operation. We find, in the first place, that it is more promptly effectual; in the second, that it leaves the subject less liable to recurrence of the disease; and in the third, that it can be performed with instru-
ments less complicated, less liable to be made of bad materials, and more easily procured by the mass of practitioners.

Lithotomy is more promptly effectual, because the bladder is by it at once relieved from a source of irritation more or less injurious to the whole urinary apparatus and to the system in general, at the same time that the inconveniences and accidents attendant upon the discharge of calculous concretions through the urethra, after having been crushed by the Lithotriptic instruments, are obviated.

That a recurrence of the disease is less frequent after Lithotomy than after Lithotrity, seems to be generally conceded; and it is even affirmed that relapses are six times as frequent after Lithotrity as they are after Lithotomy. From the data furnished by Mr. Coulson, (Lithotrity and Lithotomy—London, 1853—p. 88,) we find that in an aggregate of seventeen hundred and forty-seven cases of Lithotomy, relapses occurred thirty-eight times, or once in forty-six cases. According to M. Civiale there were fifty-five relapses in four hundred and forty-eight cases treated by Lithotrity, or one in ten cases—showing relapses to be four and a half times as frequent after Lithotrity as after Lithotomy. The difficulty of getting reliable statistics on this point is so obvious that we place little confidence in the correctness of the above figures, except so far as they indicate the number of reported cases of relapse. We cannot regard them as establishing conclusively that all the relapses which took place, were necessarily known and recorded by the reporters. The more frequent recurrence of stone after Lithotrity, is probably owing rather to the incomplete extrusion of all the fragments (thus leaving a nucleus for additional deposits) than to any difference in the effect of the operation upon the calculous diathesis. Yet, the section of the neck of the bladder in Lithotomy, may, perhaps, more readily than Lithotrity, tend to heal a morbid condition of this viscus favorable to the formation of calculous concretions. Still another explanation presents itself: inasmuch as the peculiar condition of the urinary secretion, upon which such concretions usually depend, may be changed after a certain time, the longer the operation is deferred the greater will be the probability that the calculous diathesis has ceased to exist. Lithotrity is most frequently resorted to in cases in which the disease is of comparatively recent date, and may therefore be done before the subsidence of the diathesis, and consequently, be followed by a relapse, even though every vestige of calculus may have been passed off after the crushing. Lithotomy, on the contrary, is performed in all such cases of long-standing as have become unfit for Lithotrity, and in which it is exceedingly probable that the constitutional diathesis has changed.
It is to be regretted, that we possess no correct data by which these considerations might be tested. We would require for this purpose, statistical information as to the relative proportion of relapses, after both Lithotomy and Lithotrity; and also a specification of the age of the patient, the duration of the disease, the degree of relief experienced after the operation, and the length of the interval between the operation and the relapse.

The instruments required for the performance of Lithotomy are exceedingly simple, and may be readily procured by any one who may desire to use them; whereas, it is more or less difficult to obtain those for Lithotrity of sufficiently good workmanship and tried metal, to be safe. Indeed, there are few Surgeons who would feel justified in using any other Lithotritic instruments than those made by the distinguished Charriere, of Paris, or Weiss, of London: for the success of the operation and the safety of the patient, are as much dependent upon the perfection of the instruments as upon the skill of the operator. Again, the same Lithotrite cannot be adapted to all cases, and it therefore becomes necessary for the Surgeon to keep a variety of them, in order to be prepared for any emergency. This can scarcely be expected of the mass of practitioners, and consequently limits the performance of this operation to the few who may be more favored by circumstances. It is true that these considerations ought not strictly to be urged against Lithotrity; yet, they certainly account, to some extent, for the rarity of this operation in comparison with Lithotomy. While Lithotrity has as yet been performed by very few Surgeons in the United States, Lithotomy, on the contrary, has been and is daily being resorted to by a large number of our Physicians.

Having now enumerated the relative advantages of Lithotrity and Lithotomy, in cases equally adapted to both operations, the task of setting forth their disadvantages becomes comparatively easy; for the arguments in favor of the one, constitute so many objections to the other.

To Lithotrity, then, it may be objected that it very rarely relieves the patient of his troubles at one sitting; that these, on the contrary, must usually be repeated more or less often, and at intervals more or less great; thus consuming time, to the serious inconvenience of the patient, especially when away from home. Parents who bring their child from a distance are usually impatient to return, and will prefer the more speedy result of Lithotomy to the more tardy progress of Lithotrity, especially now that the painfulness of the former may be mitigated by anaesthesia.

The frequent repetition of Lithotrity, necessary in some cases, may so aggravate the irritation of the bladder as to forbid its
continuance, and occasionally to prove fatal. Each application of the Lithotrite is sometimes followed by considerable constitutional disturbance, which may not be renewed too often with impunity. In such cases the operation would have to be discontinued, and Lithotomy resorted to.

The manipulations in Lithotrity require a degree of dexterity and familiarity with the instruments that can only be attained by much practice upon the dead body and experience upon the living; whereas, any one who has the requisite anatomical knowledge and self-possession may perform Lithotomy tolerably well. An unskillful hand may seize the bladder with the Lithotrite, and thus do much mischief. However careful and expert the operator may be, fragments of the calculus will sometimes become so fixed in the blades of the instrument that these cannot be closed so as to permit the withdrawal of the Lithotrite; or, if the fragments are not so large as to prevent the withdrawal of the Lithotrite, they may produce laceration of the urethra and the danger of urinary infiltration; or the instrument may be broken in the bladder, and thus render Lithotomy indispensable. The difficulty of procuring good instruments of Lithotrity has been sufficiently adverted to. We have also seen that patients are more liable to a return of the disease after treatment by Lithotritry than by Lithotomy.

The objections to Lithotomy are very serious. It is infinitely more alarming to the patient than Lithotrity. With fear and trembling, he presents himself to the Surgeon with more apprehension than hope, with the terrors of an operation ever regarded as one of the most dreadful in Surgery, and with the uncertainty of surviving it. He comes, in short, after having suffered until life has become intolerable, and submits to the pain and risk of the operation as a dernier resort—as the last sad alternative of a man doomed to die unless this can afford relief. Nor are the preliminary steps for the operation calculated to change his feelings; for, although assured that by the use of anaesthetics he will be prevented from experiencing any pain, the strong bands by which his limbs are pinioned indicate but too unequivocally the writhings thus sought to be obviated.

In order to reach the bladder through the perineum, the patient has to be subjected to a wound in itself of dangerous character, even under the most favorable circumstances. Arterial and venous plexuses may be opened and give rise to alarming or fatal consequences; the rectum may be cut; the incision of the prostrate may prove to be too small for the passage of the stone, and require to be enlarged; and, finally, infiltration of urine may take place in consequence, according to Prof. Patterson, of injury to the vesical reflection of the pelvic fascia.
In the extraction of the calculus, some difficulty is occasionally experienced, in consequence of the contractions of the bladder, or of the position of the stone; the prostate and neck of the bladder may be seriously contused or even lacerated by the irregular surface of the stone, or because of the smallness of the opening made with the knife.

After the operation has been completed, the patient has to be confined to bed, and is there liable to suffer from the flow of urine over a raw surface, from phlebitis, from purulent infection from peritonitis, and finally from secondary hemorrhage. The shock to the nervous system, even notwithstanding anaesthesia, will occasionally take off a patient when least expected, as may be seen in a case reported by the writer in the Southern Medical and Surgical Journal, for February, 1853.

Inasmuch, however, as many cases are found which are not equally adapted to Lithotrity and Lithotomy, it may be well to study and to indicate the circumstances that would in such cases militate against either the one or the other of these operations.

The obstacles in the way of Lithotrity may be found in the condition of the urethra, in that of the bladder, or in the nature, volume and position of the calculus.

If the urethra be so irritable as to render catheterism painful and difficult, and that this state cannot be readily removed; if the canal be the seat of stricture which cannot without much inconvenience and delay be sufficiently overcome to allow the ready introduction of the Lithotrite; if there exist fistulous openings which seriously impede catheterism, and which would have to be cured before the instruments of Lithotrity could be easily used; and, finally, if the urethra were so compressed or deviated from its natural position by tumors situated along its course, whether in the perineum or prostatic region, as to offer an impediment to the introduction of large instruments; it is obvious that Lithotrity should give way to Lithotomy, and more especially if the early removal of the calculus, were deemed of urgent necessity. In such cases, the conduct of the Surgeon should be governed by a careful appreciation of all the peculiarities of the case. If the patient could, without incurring additional risk, be relieved of the obstacles and thus prepared for Lithotrity, all other things being equal, it would perhaps be advisable to adopt this course, for the operation of Lithotomy would not dispense with the necessity of subsequently combating the strictures and tumors to which we have referred.—Moreover, Lithotomy requires the introduction of a sound for the detection of the stone, and of a staff to guide the cutting instrument, although it is true that the sound and staff need not
be as large as a Lithotrite, nor would they probably have to be so often passed into the bladder. In such cases, if circumstances render it imperative to remove the stone as early as possible, Lithotomy will, of course, be the only alternative.

The prostate gland is sometimes so much enlarged, or the neck of the bladder compressed to such a degree by tumors, as to impede materially the introduction of the Lithotrite, and hence to preclude its use.

A very tender and irritable bladder will often prove an insurmountable obstacle to Lithotrity, notwithstanding the aid of anaesthetics. Sometimes the bladder is the seat of fungous excrescences, which will bleed more or less freely whenever instruments are introduced; or its capacity may be so much diminished as to render it difficult or impossible to distend it sufficiently with water to permit the safe use of the Lithotrite.

In cases in which the bladder is sacculated or affected with hypertrophied bands, the stone cannot be seized with the Lithotrite without great danger to the viscera.

The difficulty of crushing very hard and large stones is such as to render Lithotomy under such circumstances very objectionable. If the density of the stone is not great, however, its size will present but little difficulty, provided it be not too large to be seized by the Lithotrite.

Acute inflammation of the bladder, as well as atony or paralysis of this organ, will preclude a resort to Lithotrity, unless they be of such recent date as to warrant a delay sufficient for their subsidence before the operation be performed.

Most authorities are averse to Lithotrity in children, not only because of the greater difficulty of operating upon them, but also because of the very general success of Lithotomy in the young. The difficulty of operating upon children does not depend upon the mere smallness of their urethral canal, but also upon their lack of self-control—upon the almost impossibility of keeping them sufficiently quiet, even with the aid of strong assistants. Although the limbs and trunk may be firmly held, the convulsive movements of the diaphragm and abdominal muscles in crying and sobbing, will impart a degree of impulse to the bladder which may incommode the operator very much. But these difficulties are now measurably obviated by anaesthesia. M. Civiale however, (Traité Prat. et. his. de la Lithotritie, p.269) considers as very strong objections to Lithotrity in children, the existence of calculi too dense to be crushed with a small Lithotrite, and also the fact that in children the vesical orifice of the urethra, being very dilatable, will often allow fragments to pass into the urethra, which are too large to make their way out.
The circumstances that contra-indicate Lithotomy are generally admitted to be more rare than those that preclude a resort to Lithotritv. Among these, however, may be enumerated great exhaustion from long continued suffering or from other causes; the existence of an acute or chronic disease, which might be aggravated by so severe an operation; the presence of a stone of extremely large dimensions; deformities of the pelvis, or such morbid conditions of the hip joints as would prevent placing the patient in the proper position; great obesity, or the existence of perineal tumors, which would render it difficult to penetrate to the bladder; impenetrable strictures of the urethra; a sacculated or encysted stone; malignant disease of the bladder, &c. A very irritable or contracted state of the bladder that would prevent its being sufficiently distended with water before operating, would constitute a serious difficulty—and so would a reticulated or columnar state of the viscus. Considerable enlargement of the prostate will sometimes impede very much the extraction of the stone, even after the bladder has been penetrated.

If we now endeavor to determine how many out of any given number of cases of stone, would be adapted to either Lithotrity or Lithotomy, we will find no small amount of discrepancy among authors. We should rather say that we have no data from which we can deduce the proportion of cases in which Lithotomy, if exclusively used, could be resorted to—or, in other words, the proportion of cases of vesical calculus in which Lithotomy would be found impracticable or unadvisable, without regard to Lithotritv. Exclusive Lithotomists are not backward in furnishing the results of their operations; but they make no allusion to the number or proportion of cases rejected as unfit for operation. Yet such data would be necessary to judge correctly of the relative success of different Surgeons. It is evident that he who would eliminate or reject all cases of doubtful success might appear to very great advantage over those who feel bound to consult the best interests of the patient, rather than their professional reputation.

The only statement bearing upon the question, which I have seen, is that made by M. Civiale, who collected statistics from various parts of Europe, embracing no less than five thousand nine hundred cases of calculous disease. Of these 5900 cases, 4446 were operated on as follows: 3991 by cystotomy; 62 by extraction without incision; 73 by urethroty; and 320 by Lithotrity—thus leaving the large number of 1454 without being operated on—or about one-fourth who were probably deemed unfit for any operation. Although M. Civiale remarks that the details of the reports thus collected are incomplete, inasmuch as they only record 859 as not having been operated on, the infer-
ence we have drawn appears to us legitimate; for if the remainder had been operated on, the fact would have been stated. 595 cases are not accounted for. Sir Philip Crampton found two out of 35 cases unfit for any operation. The reliable statistics to which we have access refer to the number of cases adapted relatively to both Lithotritry and Lithotomy. Thus, according to Mr. Coulson (p. 111) "M. Velpeau asserts that Lithotritry is applicable in about a quarter only of the cases of calculous patients which may come before the Surgeon. M. Amussat, even so far back as 1835, declared that he found Lithotritry applicable to three-fourths of the calculous cases in his extensive practice. Sir Philip Crampton had occasion to treat thirty-five calculous patients within a period of eleven years, and of these two were considered unfit for any operation, twenty-four were Lithotritized, and nine were submitted to Lithotomy. This gives nearly the same proportion as that of M. Amussat, viz: three-fourths of calculous cases to which Lithotritry was applicable. The late Mr. Key, who was no warm advocate of Lithotritry, said, 'that more than half the number of adults who came under his care with stone were fit subjects for Lithotritry.' Between the years 1824 and 1836, M. Civiale saw 506 calculous patients; of these he rejected 199 as unsuited for the operation of Lithotritry, and operated on the remaining 307. Hence about two cases in every five were rejected during this period. From 1836 to 1845, M. Civiale saw 332 calculous patients, 91 were rejected, and 241 operated on; two cases in every seven were rejected during this period—or, taking both periods together, we have 290 cases out of 888 rejected, being a proportion of about one-third. This latter is perhaps as near to the true proportion as we can get; but we must remember that it applies to adults only."

Civiale (Tr. Prat. et Hist. de la Lithotritie, 1847, p. 567) states that in six years (from 1836 to '42) there were in the Parisian Hospitals 73 cases of Lithotomy, of which 45 were cured, 25 died, and 3 result unknown. During the same period Lithotritry was performed by others than himself in Paris 38 times, and death occurred in 11 of them. Civiale therefore infers that Lithotritry was deemed appropriate in 38 out of 111 cases of stone. He then states his own results during the same period to be as follows: In 97 cases of stone, he found 15 unfit for Lithotritry; 78 were subjected by him to Lithotritry, of whom 5 died.

From the ignorance, improvidence, or timidity of many of those affected with calculus, professional aid is not often invoked in the early stages of the disease; but is, on the contrary, made the last resort. In this way a larger number of cases become
unfit for Lithotrity than would be found under a different state of things.

In treating the subject assigned us, the question of the relative fatality of the two operations presents itself as one of primary importance. By reference to the works of M. Civiale, and to the more recent treatise of Mr. Coulson, we find a very considerable collection of statistical information; a portion of which we will use without further reference.

Mr. Coulson has collected well authenticated reports of no less than 6369 operations of Lithotomy, "more than two-thirds of which have been performed since the commencement of the present century," in which "the number of deaths was 958, and the general mortality, therefore, 1 in 6.62 cases." From the tables published by M. Civiale, it appears that of 582 lateral operations performed in France, 101 resulted fatally, making the proportion of deaths 1 in 5.70, and of 2278 cases of Lithotomy performed in various parts of Europe, 443 terminated fatally—or 1 in 5.14. From the tables of Mr. Coulson, the results in Great Britain were, in 1744 operations, 251 deaths, or 1 in 6.93.

According to Mr. Coulson's estimates the fatality of Lithotomy at different ages may be thus stated:

<table>
<thead>
<tr>
<th>Age Interval</th>
<th>Deaths</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 10 years of age</td>
<td>1 in 13</td>
<td></td>
</tr>
<tr>
<td>From 10 to 20 years</td>
<td>1 in 9</td>
<td></td>
</tr>
<tr>
<td>From 20 to 30 years</td>
<td>1 in 6</td>
<td></td>
</tr>
<tr>
<td>From 30 to 40 years</td>
<td>1 in 5</td>
<td></td>
</tr>
<tr>
<td>From 40 to 50 years</td>
<td>1 in 4</td>
<td></td>
</tr>
<tr>
<td>From 50 to 60 years</td>
<td>1 in 3.65</td>
<td></td>
</tr>
<tr>
<td>From 60 to 70 years</td>
<td>1 in 3.23</td>
<td></td>
</tr>
<tr>
<td>From 70 to 80 years</td>
<td>1 in 2.71</td>
<td></td>
</tr>
</tbody>
</table>

M. Civiale arrives at the following result:

<table>
<thead>
<tr>
<th>Age Interval</th>
<th>Deaths</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 1 to 10 years of age</td>
<td>1 in 8.47</td>
<td></td>
</tr>
<tr>
<td>From 11 to 20 years</td>
<td>1 in 7.41</td>
<td></td>
</tr>
<tr>
<td>From 21 to 30 years</td>
<td>1 in 4.62</td>
<td></td>
</tr>
<tr>
<td>From 31 to 40 years</td>
<td>1 in 5.32</td>
<td></td>
</tr>
<tr>
<td>From 41 to 50 years</td>
<td>1 in 6</td>
<td></td>
</tr>
<tr>
<td>From 51 to 60 years</td>
<td>1 in 2</td>
<td></td>
</tr>
<tr>
<td>From 61 to 70 years</td>
<td>1 in 1.89</td>
<td></td>
</tr>
<tr>
<td>From 71 to 80 years</td>
<td>1 in 1.20</td>
<td></td>
</tr>
</tbody>
</table>

The Records of Pennsylvania Hospital, according to Dr. Norris (Report in Trans. Am. Med. Association, vol. 1) show that from 1752 to 1848, there were 83 operations of Lithotomy,
of which 72 were cured, 10 died and 1 was relieved. The private practice of Surgeons, both in Europe and in this country, has in many instances presented a striking contrast with the statements derived from hospital records. It is unnecessary, however, to furnish farther statistics upon this portion of our subject.

With regard to the fatality of Lithotrity, we find ourselves restricted to the writings of M. Civiale for anything specific. The success of this distinguished Surgeon in the treatment of calculous affections is without a parallel; and, although his statements were at one time (doubtless from a narrow spirit of envy), made the subject of serious imputations, they are now generally conceded to be fairly established, and are, we believe, so recognized by the French Academy. M. Civiale has published a complete account of each case, as well as tables of results. From 1824 to 1848, he had 848 cases of calculous disease—upon 591 he performed Lithotrity, of whom 14 died, or 1 in 42.21.

The following will exhibit the number of cases, at different ages, so far as recorded:

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 20 years</td>
<td>25</td>
</tr>
<tr>
<td>21 to 40</td>
<td>80</td>
</tr>
<tr>
<td>41 to 50</td>
<td>124</td>
</tr>
<tr>
<td>51 to 60</td>
<td>44</td>
</tr>
<tr>
<td>61 to 80</td>
<td>234</td>
</tr>
<tr>
<td>81 to 90</td>
<td>5</td>
</tr>
</tbody>
</table>

M. Leroy d'Etiolles reports 11 deaths in 116 operations. M. Heurteloup states that he has lost but 1 in 8.

The conclusions of M. Civiale (op. cit., p. 48), with regard to the relative value of Lithotrity and Lithotomy, are as follows:

1st. Lithotrity when well performed, in appropriate cases, will save from 96 to 98 patients in 100.

2nd. The remaining fourth of calculous subjects unfit for Lithotrity may be subjected to Lithotomy.

3rd. By Lithotomy, if exclusively practised and without distinction of age, from 20 to 30 per cent. will be lost.

4th. If applied to children exclusively, Lithotomy will save nine-tenths.

5th. If applied to adults of all ages, Lithotomy saves from 50 to 75 per centum.

Having now presented, even at the risk of tedious repetitions, the arguments which might be urged for and against both Lithotrity and Lithotomy in cases deemed equally adapted to either of these operations, and also indicated the circumstances that should be taken into consideration in determining upon the adoption of one or the other operative procedure, it may
be expected of us to be more definite, and to avow a preference for either Lithotrity or Lithotomy, as a general plan of treatment. In deciding upon the propriety of surgical operations, or upon the merits of particular processes, it will be often found a wholesome rule, and one by which the solution may be readily obtained, to suppose ourselves in the condition of the patient, and then to ask what would be our election under such circumstances. We have very frequently, in this manner, determined at once the course to be adopted in cases previously involving much doubt and hesitation. With regard to Lithotomy and Lithotrity, we are free to acknowledge that if we were affected with stone, and that the circumstances were equally favorable to the success of either operation, we would not hesitate a moment in giving the preference to Lithotrity. The advantages of Lithotrity are numerous and important, whereas the only intrinsic or valid objections that can be alleged against it, under the circumstances referred to, are to be found in the facts that the operation may have to be repeated, and that it leaves the patient more liable to a recurrence of the disease than Lithotomy. The advantages of Lithotrity unquestionably very far outweigh all the objections to it. So thought those justly celebrated practitioners, Lisfranc, Dubois, Boisseeau, &c., who did not hesitate to do homage to Lithotrity, and to the skill of Civiale, by submitting to be Lithotritized by him.

Some important Observations on Aphonia arising from organic lesions. By Horace Green, M. D.

[The following article was read before the London Medical Society (having been furnished at the request of a corresponding member of that Society,) by the Secretary, at its session, in April, 1854.]

Since the publication of my work on "Diseases of the Air-Passages," in which are recorded several cases of aphonia, dependent as it appeared to me at the time, on the presence of ulcerations of the vocal cords, I have had an opportunity of observing a large number of cases of aphonia, in many of which the alterations of structure were quite different, in their character and location, from those of the above cases. In other words, the lesions on which the aphonia depended, were not constantly lesions of the vocal cords, nor did they always occur in their immediate vicinity. As such instances are frequently to be met with, in which the changes of structure are in some degree remote from the vocal ligaments, and as the voice in these cases cannot be restored until the primary lesion

* A Treatise on Diseases of the Air-Passages, &c., p. 75, et seq.
is discovered and arrested, it has occurred to me that a history of some of those cases of aphonia which arise from causes not alluded to by authors, may add something to our knowledge in medical pathology.

Dr. Cullen has enumerated three species of aphonia, namely, *aphonia gutturalis, aphonia trachealis,* and *aphonia atonica;* and most subsequent writers have followed this division. But these varieties do not include some of the most difficult and severe forms of this symptomatic affection; for aphonia is not an idiopathic disease, but has its origin either in lesion of sensibility or lesion of structure. Under the first head are included those forms of nervous aphonia to which writers on this subject have generally alluded. In this variety, which occurs from lesions of sensibility, no organic changes whatever take place. It is the *aphonia atonica* of Dr. Good, and consists of "a total exhaustion of nervous power in the vocal organs."* In the succeeding cases, the causes of aphonia proceeded from structural changes. They belong, therefore, to the second variety. Aphonia, under my observation, has been found to follow, or to be perpetuated by, the following changes.

1. Ulceration of the mucous membrane of the vocal ligaments.
2. Thickening of the mucous membrane of the vocal ligaments.
3. ÒEdema of the aryteno-epiglottic folds.
4. ÒEdema of the epiglottic cartilage.
5. Ulcerations of the fossae at the roots of the tongue and on the sides of the aryteno-epiglottic cartilages.

1. *Aphonia from ulcerations of the mucous membrane of the vocal cords.*

It is the opinion of both Andral and Ryland, that simple ulcerations of the lining membrane of the larynx, unless they invade the vocal cords or the thyro-arytenoid muscles, cause but little change either in the power or tone of the voice. When the mucous membrane covering one of the vocal ligaments only is ulcerated, the voice is rendered raucous and hoarse. If the investing membrane of both vocal cords is affected, the voice loses its power, and is reduced to a rough whisper only.†

It has been observed by Louis and Andral,‡ that the effects produced on the voice by ulceration of the larynx, differ mate-

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* Good's Study of Medicine, article, Aphonia.
‡ Clinique Medicale, Tome II., p. 208.
rially, according to the seat and extent of the ulceration. In fourteen patients, whose cases of laryngeal ulceration, complicated with phthisis, are recorded by M. Louis, where small, superficial ulcerations were found seated, either within the ventricles, between the arytenoid cartilages, or at the point of junction of the vocal cords, the symptoms present were, hoarseness, a marked alteration in the character of the voice, with heat and pricking pains in the larynx, followed, ultimately, by a complete extinction of all vocal sounds.

During the past five years, many cases of aphonia, consequent upon ulcerations of the mucous membrane of the vocal cords, occurring in the progress of follicular laryngitis, have come under my observation, in all of which the ulcerations have been arrested and the voice restored by topical medication, except in those cases in which the vocal ligaments had been previously destroyed by long-continued disease, or in such as were complicated with tuberculosis. It will be sufficient, by the history of a single case to illustrate this variety of aphonia, which has its origin in ulceration of the investing membrane of the vocal cords.

Case I. A gentleman forty years of age, from an adjoining State, who had suffered under follicular laryngitis for two years, came to New York several months ago, for medical advice. Two years before this visit, whilst actively engaged in business, he found his voice beginning to fail. He became hoarse, and a constant feeling of uneasiness, with pain, was experienced about the throat. These symptoms, first observed early in autumn, continued to increase in severity during the subsequent winter and spring, attended with debility and great nervous irritability, until May following when he became completely aphonic. Obliged to relinquish his business on account of his feebleness, he passed fourteen months after the loss of his voice, before I saw him, in the employment of different measures for the recovery of his health. But failing in all these efforts, he came to this city for aid. His condition, on examination, was found to be the following: He was much debilitated, with a feeble pulse, and his voice reduced to the lowest whisper; he complained of pain in the larynx and under the sternal bone, and of a sense of uneasiness and constriction in the upper part of the throat. The mucous membrane lining the pharynx was covered with enlarged follicles, some of which were ulcerated; the tonsils were slightly enlarged, and the epiglottis much thickened, and its upper border serrated by ulcerations. This condition of the mucous membrane, as far as it could be seen, the pain and soreness in the larynx, the
Observations on Aphonia. [December,

loss of voice, and other symptoms present, indicated ulcerations of the involving membrane of the vocal ligaments. This opinion was confirmed by the difficulties encountered in the first attempts to pass the sponge probang through the rima glottidis. A strong solution of the argent. nit. (2 scruples to the oz.) was applied to the fauces and pharyngeal membrane. The second day, the application was carried down to the epiglottis, and to the opening of the glottis; and on the third day, the vocal cords were reached, and fully cauterized. This last application caused much irritation, and for a short time severe pain directly in the larynx. This I have always found to be the case when a strong solution of the nitrate of silver is for the first time applied to ulcerations of the vocal cords. Subsequently, this pain diminishes on each application, and very soon ceases altogether. Ferruginous tonics, with other appropriate general treatment, were employed; and the topical remedy was continued daily for a week, when the ulcerations about the mucous membrane of the pharynx were found to have healed; and about the same time the soreness and irritation in the laryngeal cavity, and the pain under the sternum had entirely disappeared. In two weeks from the time when the local remedy was first employed, the voice of the patient returned, and vocalization in the course of a few days was fully and permanently established.

That the aphonia, in the above case, had its origin in an ulcerated condition of the mucous membrane of the vocal cords, was inferred from the presence of the symptoms which have been enumerated; from the fact that the sponge containing the caustic fluid, at the moment of passing the rimaglottidis (the space between the vocal ligaments,) produced at this point a distinct painful sensation, as when an ulcerated surface of the mucous membrane is touched with the argentinc solution; and also from another fact, which when existing, reveals to the experienced operator, with much certainty, the presence of ulcerations of the mucous membrane in the cavity of the larynx. I refer to the fact, that when the sponge-probang is applied to an inflamed or thickened mucous membrane it glides smoothly over the part, as if passing over the surface of moistened glass; but when ulcerations of the membrane exist within the larynx, a distinct sensation of roughness is conveyed to the hand of the operator when the instrument is introduced into this cavity; and this sensation will continue, but diminishing as the ulcers heal, until the membrane is restored to its normal condition.

Several years ago, I had an opportunity of treating a gentleman in this city, who had labored many years under chronic laryngitis, or "laryngeal phthisis." All the symptoms of ul-
ceration of the larynx were present, and when the cauterizations were made into the larynx this sensation of roughness of the lining membrane was very apparent. It diminished as the applications were continued, as did the unfavorable symptoms which attended this condition.

Some years afterwards, I had an opportunity of examining the larynx of this patient (who died of another disease,) and found the mucous membrane of the ventricles and of the larynx covered with the cicatrices of old ulcerations, but which were quite healed. This morbid specimen I have still in my possession.

2. Aphonía from a thickening of the mucous membrane of the vocal cords.

This lesion is of more frequent occurrence, I am confident, than is generally admitted. Many of those supposed cases of atonic aphonía were the loss of voice has been attributed to lesions of sensibility, have proceeded, I believe, from a slow hypertrophy or thickening of the investing membrane, and of the follicles of the vocal cords. It has been shown by Rokitansky, that not only hypertrophy of the mucous membrane of the airpassages may occur, but that the follicles of the larynx and trachea are frequently found in this condition. When this altered state of the lining membrane of the air-tubes is moderately developed, it presents the ordinary characteristics of hypertrophy of mucous membranes; but in a higher degree, Rokitansky remarks, "it especially affects the mucous glands, and in the larynx gives rise to glandular swellings of the mucous membrane, at those parts where the glands are most abundant, as for instance, on the vocal cords, in the ventricles, over the transverse muscles, and on the epiglottis."

This variety of aphonía is generally complicated with, or the result of chronic follicular inflammation. Some ten cases of the disease originating in these changes of structure have come under my observation within the last few years. Most of these cases have occurred in females, and in a large portion of them the disease had been considered as dependent upon impaired sensibility of the laryngeal nerves. You will recall one or two of these cases which were under treatment last fall, one of which was present when I had the honor of a visit from Dr. Marshall Hall, whose skepticism at this time, with regard to the medication of the windpipe, was somewhat dissipated by seeing the sponge-probang passed repeatedly into the trachea of some of the patients then present.

The history of this last case, which both of you, I believe, had an opportunity of seeing, will illustrate that change of structure of the vocal organs on which depends this most obstinate form of aphonia.

Case II. Miss B., aged twenty-six, consulted me, December, 1852. At this time she had not spoken aloud for fourteen months. Six years before, in the spring of 1846, she took a hard cold, which was followed by a severe cough, sore throat, pain in her side, &c., for which she was treated by her family physician. She passed the following summer in the country, and was improved in her health; but in the succeeding winter the cough, pain in the chest, and irritation of the throat returned. In the summer of 1847 she was again in the country, by which her health was again improved. The return of the cold season of 1848 brought back all her unfavorable symptoms: and although relieved as at former times by the recurrence of the warm season, yet cold or damp, and cold weather, invariably aggravated the disease. In the summer of 1849, after a slight exposure, she contracted a cold, and for three or four weeks was very ill. The thoracic symptoms were urgent; pain in the chest, severe cough and fever, for which active treatment was employed. After this attack she was more feeble than ever, and during the winter of 1850 her cough and other pulmonary symptoms were more persistent and severe than at any former period. But in the succeeding spring and summer a change of climate, as in former seasons, was resorted to, which was again followed with some degree of relief. Throughout this year she was attended by two intelligent physicians, who, together with a distinguished auscultator of this city, by whom her chest was examined, considered her case and treated it as one of confirmed phthisis. From November to May, 1851, Miss B. was not able to leave her house. During several months of this year she was affected with a chronic diarrhœa, by which she was greatly prostrated. Her voice, which had been hoarse for a long period, grew gradually weaker until October, 1851, when it became permanently extinguished. In this condition she remained, with but little change in her general symptoms, except some slight mitigation of them during summer weather, until the 25th of December, 1852, when at the request of her attending physician I saw her for the first time.

Miss B. was quite feeble, emaciated, and had a pale, anxious countenance: a cough, with muco-purulent expectoration, was present. The respiration was hurried, and rendered more difficult on making the least exertion; and the voice was reduced to the lowest whisper. In the throat, the follicles of the
pharyngeal membrane were enlarged and indurated, both tonsils were partly destroyed by disease, the epiglottis was twice its natural thickness and had a pale aspect. The arytenoid cartilages, examined by touch, were not oedematous. On examining the chest, the respiration was found weak in the upper portions of both lungs, with bronchial respiration. There was also slight dullness on percussion under the left clavicle. A few applications of the nitrate of silver had been made, by her attending physician, to the pharynx; and it was proposed to carry these applications at once, into the larynx; and a teaspoonful night and morning of the following preparation was ordered,—

B. Potass. iodid., 5 ij.,
Proto. iodid. hydrarg., gr. ij.,
Tinct. columbæ,
Syr. sarsa. co. aa. f 3 ij.

and on the second day the attempt was made to pass the instrument through the rima-glottidis, but the space between the vocal cords proper was found to be too narrow for the passage of a sponge-probang of the smallest size. After continuing the applications, however, for several days, a small sponge was passed through the rima; and this application was continued every second day through the month of January. At the end of six weeks from the commencement of the local treatment, the general health of the patient had somewhat improved; but the voice was unchanged, except that the whisper, which at first was not above the ordinary respiration, was a little increased in volume; but by no exertion could the patient utter a word above the whisper. It was observed, moreover, that a larger instrument could be passed through the rima-glottidis than at first. Yet, still, the thickened and unyielding nature of the vocal cords could be distinctly felt, as the sponge passed between them. This local treatment was continued, though at longer intervals, through the months of February, March, and April, combined with appropriate constitutional remedies. In May, Miss B. was absent from the city a part of the time, and only a few applications of the caustic were made during this period. In July, the topical treatment was renewed and with a confident hope of success; for although the aphonia had been unusually persistent, yet it was found that the induration and thickening about the vocal ligaments continued steadily, though very slowly to diminish; and along with this local improvement, the cough, and other unfavorable, general symptoms, had greatly diminished. At this time, too, a sponge, more than double the size of the one first employed, could be passed readily through the rima-glottidis. Inhalations
of creasote were occasionally employed, and the applications of nitrate of silver continued until the 18th July, when for the first time for a period of twenty-one months, Miss B. spoke aloud.

Her voice at first, was feeble, but it rapidly increased in strength and volume; and vocalization, in a few weeks more, was fully restored. A change equally favorable occurred with respect to her general health: as the local symptoms improved, the cough, pain in the chest and other indications of thoracic disease diminished. She improved in strength and flesh, and has now (Feb. 1854) passed a period of eighteen months, since the recovery of her voice, in the enjoyment of excellent health.

In this case of Miss B., the disease proved the most obstinate of any case of the kind I have ever treated. I have had several instances of this form of aphonia come under my notice, in none of which was so long a course of treatment required.

In the case of a lady from Massachusetts, who had been for five years perfectly aphony, the voice was fully restored by the employment of the local treatment for six weeks. In another instance, a patient from Connecticut, voiceless for more than three years, was perfectly restored in as many weeks.

In all these instances, symptoms, more or less marked, of thoracic disease, were present; and it has been a matter of great interest to myself and others to observe in these cases, how constantly the pulmonary symptoms have disappeared, as the causes of the local irritation have diminished.

3. Aphonia from òedema of the aryteno-epiglottic folds.

That form of inflammation which occasionally attacks the superior aperture of the larynx, and which is termed òedema of the glottis, is characterized, anatomically, by an infiltration of the sub-mucous areolar tissue of the aryteno-epiglottic cartilages; and whether the disease is idiopathic or secondary, it is always attended by entire loss of voice. The aphonia consequent upon this morphological change, does not exist in consequence of any alteration of structure about the vocal cords, for infiltration is here prevented by a very beautiful arrangement. Over these ligaments the mucous membrane is thin and adherent, having no sub-mucous areolar tissue interposed between the vocal cords proper and their lining membrane.

The loss of voice, in this affection, proceeds from the almost complete closure of the opening of the glottis, and the òedema of the arytenoid cartilages; and, also, from the morbid impression produced on the laryngeal nerves by the disease located in their immediate vicinity. In a small work, published by me some months ago, on "Polypi of the Larynx and Òedema of the
Glottis,” I have given several cases of òedema-glottidis, in all of which the voice was completely lost. But there occasionally occurs an intumescence of the aryteno-epiglottic folds of a character less intense than that of true òedema. It accompanies catarrhal inflammations of a sub-acute character, and consists in an infiltration of the sub-mucous areolar tissue of the above folds, and is frequently attended with aphonia as in true òedema of the glottis.

The following case will illustrate this variety: Sept. 1, 1852; J. C. F., a young gentleman, âet. 25, came up from his residence on Staten Island, this morning, to consult me in regard to the loss of his voice. Several weeks ago, Mr. F. took “a slight cold,” to which, at first, he gave but little attention. Some degree of fever, with cough and expectoration, were present, and his voice, which was hoarse from the first, continued to lose its power until, on rising one morning two weeks before I saw him, he found himself quite incapable of uttering a sound aloud. His physician, finding the faucæ and posterior wall of the pharynx inflamed, applied daily a solution of iodine to these parts, and administered an emetic, followed by expectorant remedies. These and similar measures, constitute the treatment before I saw him. The aphonia, at this time, was complete. A cough, with considerable expectoration, which appeared to come from the throat and upper part of the wind-pipe, was present. The patient suffered also from dyspœna, which was much increased by the least exertion. The dyspœna was characterized by that peculiarity which, more or less, attends all cases of òedema, when located at the aperture of the glottis; that is the act of inspiration occurs with much difficulty, whilst expiration is performed without obstruction.

On examining the throat of the patient, this condition, indicated by the above symptom, was found as anticipated. By pressing the finger over the laryngeal face of the epiglottis, a small soft tumor was readily detected, occupying each lateral border of the glottis. Having learned, from past experience, that infiltrations of the opening of the windpipe are rapidly removed (as I have shown in my work on òedema glottidis) by applications to the parts of a concentrated solution of nitrate of silver, I immediately applied this remedy, by means of the ordinary sponge-probang, freely to the injected borders of the glottis. The applications were repeated daily, and the iodide of potassium was administered internally. Under this treatment the òedema rapidly diminished.

As the intumescence subsided, the dyspœna, cough, and expectoration, diminished; and at the end of a week the patient could speak aloud. The local treatment was continued for
another week, when all the unfavorable symptoms had disappeared, and the voice was restored to its normal condition.

As I have before stated, this Óedematous condition of the aryteno-epiglottic folds is the frequent concomitant of catarrhal inflammations. The aphonia consequent upon it will sometimes remain for months under ordinary treatment, before the infiltration is sufficiently removed to allow vocalization to be performed. Besides, the swelling acting as a local irritant, at the opening of the air-passage, is very likely to awaken more serious organic disease, particularly in constitutions predisposed to tuberculosis. It is therefore, of the utmost importance to detect this lesion in its earliest stage; and it may be discovered readily by the touch, as well as by the characteristic respiration. Once detected, it is most certainly and rapidly removed by the topical medication.

4. Aphonia from Óedema of the epiglottic cartilage.

Óedema of the epiglottis is an alteration of structure of more frequent occurrence than the lesion of the aryteno-epiglottic folds, to which I have just referred. It proceeds from the same cause, namely, catarrhal inflammation, and consists in an infiltration of the sub-mucous areolar tissue of the epiglottis. The infiltration occurs on the lingual side of the cartilage, because of the great amount of areolar tissue on its anterior face. This causes the epiglottis to assume a very anomalous aspect; its edges are rolled back and approximated, and when the intumescence is considerable, it presents much the appearance of a round tumor at the base of the tongue. That variety of aphonia consequent on this lesion of the epiglottis, is frequently observed in epidemic catarrhs. During the prevalence of an influenza that occurred to some extent, in New York, in the winter of 1853, I observed many cases of total loss of voice from this cause. Even within the present month (Feb. 1854.) during the cold and unusually damp weather which has occurred, some four or five patients, laboring under this form of aphonia, have presented themselves at my office for medical treatment. I will give a single instance of this form of the disease, arising from Óedema of the epiglottis.

Case IV. A young gentleman, who, three weeks before, had had an attack of the prevailing epidemic, called on me, January 29, 1853. The disease, in its early stage, was attended by a total loss of voice; and it was in reference to this voiceless condition that my opinion was desired. Some degree of cough was present, attended with slight expectoration, but the respi-
ration was but little affected. On depressing the tongue of the patient, the epiglottis was readily brought into view, and it certainly presented that very anomalous aspect to which I have alluded.

Extensive infiltration having taken place in the sub-mucous tissue on its anterior face, the cartilage was enormously enlarged, its lateral edges were turned backwards and approximated and its whole appearance was that of a round, puffy tumor, lying at the opening of the glottis. Examining, with the finger, for the arytenoid cartilages, they were found to be not involved in the oedematous infiltration; and this exemption from the disease, in this location, accounted at once for the slight degree of difficulty presented in the respiration of the patient.

To procure a re-absorption of the infiltrated serum, a strong solution of nit. argent. was applied freely to the epiglottis, and to the whole faucial region. A profuse expectoration of adhesive mucus, from these parts, followed the application. The topical remedy was continued daily, for ten days. Under its use the tumefied epiglottis diminished constantly; and at the end of a week, the patient could speak aloud, although his voice had a muffled sound. Continuing the applications a few days longer, the epiglottis, at the end of this time, was found reduced to its normal size, and the patient's voice and general health were fully restored.

That the loss of voice, in this case, as well as in many similar cases which have been observed, depended on the intumescence of the epiglottis, has been proved repeatedly by the fact, that when the epiglottis has been thus oedematous, voicelessness in most cases has been present; and, also, by the other fact, that the voice in some of these cases returned after the oedema of the cartilage had been removed.

5. Aphonia arising from ulcerations of the mucous membrane of the fossæ which are situated between the columns of the palatine arch, but at their base, and external to the arytenoid cartilages.

It has long seemed to me that the very great frequency with which ulcerations are found to exist in the lateral fossæ at the base of the tongue, and the equally important truth that very serious consequences not unfrequently follow their long continuance in these locations, are facts far from being generally known or appreciated by the profession. In connection with long-continued follicular disease of the throat, these ulcers are of every-day occurrence; and they not only affect vocalization, but through constant irritation, kept up by their presence near the opening of the air-tubes, they awaken, quite frequently,
more serious disease in the pulmonary organs. But, at present, I have only to speak of that variety of aphonia which is caused, occasionally, by these lesions.

Ulcerations of the thyro-arytenoid mucous folds may exist without inducing, necessarily, a loss of voice. When one fossa only is involved in the change of structure, vocalization is not ordinarily interfered with to any considerable extent. But, when both fossæ are ulcerated, the voice soon becomes hoarse and uneven, and is followed, at length, in some cases, by total aphonia. During the past ten years, I have observed many such instances of the disease; several cases have occurred, within a few months, in my practice. One of these, that of a gentleman from Kentucky, you will recollect having noticed. I will therefore illustrate this variety of aphonia by reference to his case.

Case V. This patient first called to consult me in October, 1853. He had then been for several months voiceless; and for twelve months, or over, he had suffered from chronic ulceration of the throat; for which, general treatment, with the use of astringent gargles, had been employed by his attending physicians, one of whom recommended him to visit New York and consult me. On examining the patient's throat, the pharyngeal mucous membrane was found thickened, and ulcerated at many points. Between the anterior and posterior columns of the palatine arch, on depressing the tongue, a large and deep ulcer was observed on either side, commencing at the base of the tonsillary gland, and extending down into the fossa as far as the eye could see. The epiglottis and the arytenoid cartilages were in a normal condition. An abundant muco-purulent secretion was being constantly hawked up from these parts.

There was difficulty of deglutition; but no cough existed, nor were there any other indications of disease within the larynx; still, this gentleman had been aphonie for several months. His general health had suffered from the local disease; for he was feeble, pale, and emaciated, exhibiting, in short, many of the external or rational signs of phthisis. But auscultation failed to discover any abnormal state of the lungs. With a small sponge-probang, the lingual fossæ were cauterized with a strong argentine solution (80 grs. to 3 i.;) and a drachm of the following mixture ordered to be taken twice daily:—

\[
\begin{align*}
\text{r} & \quad \text{Potass. iodid., gr. i.} \\
\text{r} & \quad \text{Proto-iodid. hydrarg., gr. i.} \\
\text{r} & \quad \text{Tinct. columbæ.} \\
\text{Syr. sarsæ, co., aa. f. 3 i.} \\
\text{M.}
\end{align*}
\]

The cauterizations were repeated daily, until the 13th, when
the ulcerated fossæ were nearly healed, and the patient could speak at this time in a loud, although a hoarse voice. After this he improved rapidly; the expectoration diminished, the difficulty of deglutition was gone, and in the course of another week, the patient had gained several pounds of flesh. He was able to converse with a voice as loud and clear as at any period of his life; and he left for his home with the intention, as he declared, of "stumping it for Congress" on his arrival in his district, in Kentucky.

That the loss of voice in this case, as well as in many similar instances which have come under my observation, depended upon the above lesions of the fossæ, may be fairly inferred from the results of the treatment. As no disease existed within the larynx, the applications were not made to the vocal cords, but external to the opening of the glottis, where the ulcerations were located. When these were healed, and not till then, vocalization and, ultimately, the general health of the patient were fully restored.

These lesions on which depend this last variety of aphonía, are, I repeat, of very frequent occurrence, and are very frequently overlooked. Within a few days, since I commenced drawing up this paper, I have had an opportunity of seeing, in consultation with our distinguished friend, Dr. Valentine Mott, an interesting case of aphonía having its origin in ulcerations of the above fossæ. The disease, in this instance, had been of twelve months' standing; the lesions during this time remaining undetected, whilst constitutional remedies had been addressed, by the patient's medical attendant, to the general symptoms, which, although of a grave character, were only secondary, and of course remained unrelieved by the treatment.

Aphonía, then, I do not hesitate to declare, will be found to originate, at one time or another, in each and all of these structural changes, to which allusion has been made. Some of these lesions, I am aware, may exist without, in all cases, inducing aphonía; but I have the records, and could give you the history if necessary, of a large number of cases which have followed each of the pathological conditions. Some of these cases, as well as their treatment, you have observed; and many of them, you are aware, have been seen at my office, from time to time, by medical men from almost every part of the Union.

It will be unnecessary to enter into any details with regard to the treatment to be employed in the management of these different forms of aphonía. Whether the alterations of structure, on which the disease depends, consist in oedema of the parts, in ulcerations of the mucous membrane or its follicles, or in a thickening of the investing membrane of the cordæ vocales,—
topical medication in the form of a concentrated solution of the crystalized nitrate of silver has proved in my hands to be altogether the most effectual remedy that has yet been adopted. Constitutional remedies, when indicated, are to be employed, as in other cases where local disease is found complicated with general derangement. The different preparations of iodine, chalybeates, and other tonics, with the inhalation of creasote, are valuable adjuncts; but without topical medication, these latter measures are ordinarily of no avail.

[Cure of Laceration of the Urethra. By Dr. J. Gautier, M.D., of Tuskegee, Alabama.]

James Hall, aged 35 years; has light hair, blue eyes, fair complexion; a sound and vigorous constitution; weighs about one hundred and fifty pounds. In May, 1852, he was engaged as a deck-hand on board of a steamboat running from the city of Galveston to Brazoria, and while in the latter port, and engaged in discharging freight (at night), he attempted to cross over the hatch, and in doing so missed his footing, and fell astride of a square bar of iron extending across the hatch, upon which the doors rested. Laceration of the urethra, and great contusion of the perineum resulted. The injury occurred about 10 o'clock at night. I did not see Hall until the next morning between 8 and 9 o'clock. He was then complaining of excruciating pain, with great distension of the bladder, and an inability to pass urine. By the forcible contraction of the bladder, occasionally a few drops of bloody urine would pass through the penis. On investigation, I at once concluded that there was laceration of the urethra. The only case of the kind I had ever seen before, was in a little boy, treated in the Pennsylvania Hospital, under the care of Drs. Norris and Fox, in 1850. The experience furnished by the case, together with the valuable instruction given by the doctors above-mentioned, rendered the treatment of this case, to my mind, positive and clear.

At once, I attempted to introduce a silver catheter into the bladder, but could only pass it up to the seat of laceration. After working with him an hour or two, and trying every size of gum-elastic catheter, I at last succeeded in introducing one of the latter, of very small size, into his bladder, and drew off by measurement twenty ounces of urine considerably coloured with blood. Having got a catheter beyond the point of laceration, I knew, from the facts of the case seen in the Pennsylvania Hospital, that it was wise to keep the instrument as long
as possible in the urethra. On the second day, I had to remove the catheter; but I immediately introduced another of a larger size.

The perineum was kept constantly bathed in cold water, or a solution of sugar of lead. Hall had high fever and costive bowels, and saline purgatives were administered and an antiphlogistic treatment adopted. In a few days his fever subsided, and he was doing well. In six or eight days after his injury, I was able to introduce a large silver catheter into his bladder.

From the time of his injury, I have endeavoured to make it an established rule with Hall that he should never attempt to pass urine while the catheter was out of his bladder. On the morning of the fifteenth day of the injury, professional duty compelled me to be absent, and during my absence, Hall took the catheter from the urethra, and left it out for several hours. When he wanted to make water, he was unable to introduce the instrument. As he was suffering from distension of the bladder, another physician was sent for, and Hall was told to pass water without the catheter.

On my return home in the afternoon, I went immediately to see my patient. I found him in a condition vastly more dangerous than he had been upon the morning of his injury. The penis, scrotum, perineum, and cellular tissue about the pubis, were enormously distended from infiltration of urine. He had high fever, and his mind was considerably disturbed. Some of the by-standers supposed him to be dying. With considerable difficulty I again succeeded in introducing a catheter into the bladder. I then freely scarrified the scrotum, to allow the infiltrated urine to escape. In a few days, mortification of the scrotum took place, and both testes were left entirely denuded of skin and cellular tissue, hanging only by the cords. The posterior and under part of the penis, and a portion of the perineum, were in a state of sphacelation. About two inches of the urethra was destroyed. From the destruction of the perineum, under part of the penis, and the urethra, at least two inches of the silver catheter could be seen. The bulb of the urethra was not injured, the destruction being anterior and posterior to the bulb. To add still another pang to Hall's misfortunes, one day, when asleep, flies deposited their ova on his testes and perineum. In the course of four or five days, at least fifty large maggots were taken from the perineum. My patient was now troubled with constant hectic fever, and greatly emaciated. In this condition, I had but little hope of his recovery. For ten or twelve days he lay feeble and prostrated almost unto death. I watched his case closely, removed all disturbing causes, and kept the catheter constantly in his blad-
der, removing it only to be washed. I gave him but little medicine, principally tonics. Rich, nutritious diet was allowed. The case was left as much in the hands of nature as possible.

About the latter part of June, Hall began to show evidences of recovery. His general health was gradually improving. Nature was throwing off the putrid mass, and beginning to reproduce new tissue. Indeed, the rapidity with which the parts were restored to their normal condition was truly astonishing. In less than six weeks from the commencement of the formation of new tissue, the testes were enveloped in a new scrotum; the penis, urethra, and perineum were entirely restored.

By the latter part of August, Hall was well, and free from deformity. He could retain his water as well as he ever did, and void it per vias naturales, and with ease. He has not used a catheter since the 12th of August. When I saw Hall again, early in September, he was riding an unbroken mustang horse; and he assured me he was perfectly well, and had as much strength, and as perfect use of himself, as he had before the fall.

[Note by the Editor.—In connection with the above interesting case, we will refer to some observations which we published in the number of this Journal for Feb. 1837, on accidents of this character, their nature and mode of treatment, illustrated by a large number of cases.]—Amer. Jour. of Med. Sci.

Diabetes Mellitus.

Probably one of the most elaborate papers ever written on this disease has just been published by Dr. Th. Von Dursch, of Manheim. It is founded upon two very interesting cases of diabetes, of which he has given very careful clinical reports, and also accounts of the pathological lesions found after death. With indefatigable perseverance and most praiseworthy zeal, he carefully ascertained, every day for several months, the nature and amount of the food and drink taken by his patients; the amount of fluid contained in the aliment; the quantity of urine excreted, its specific gravity, and the amount of sugar it contained; the number of the stools, the proportion of their watery constituents; the amount of water exhaled by the lungs and transpired by the skin, &c. The results of these most laborious and minute investigations he has condensed into two large synoptical tables, which are appended to the memoir. In one of these, full particulars are given of the effects of different kinds of diet upon the total amount, specific gravity, and
saccharine constituents of the urine. As far as our limited space permits, we shall now glance at the general results thus tabulated. First, when the patient was put upon a mixed diet for forty days; second, when a farinaceous diet alone was allowed during eight days; and, third, when animal food was given during a period of five days.

1. Effects of mixed diet on

(a). The specific gravity.—The average density of the urine, while this regimen was adhered to, was 1037.8; it was higher in the mornings and evenings (1038) than during the day (1036).

(b). The amount of the urine.—The daily average was 5234 cubic centimetres. The quantity voided was greater in the morning (1971 c.c.) and evening (1831 c.c.) than during the day (1430).

(c). The percentage of sugar.—The average amount of saccharine matter was 9.134 in the 100 grammes. The percentage was lower in the morning and mid-day urine (8.9) than in that passed at night (9.4).

(d). The total amount of sugar.—The average daily amount of sugar excreted during the whole period was 477.7 grammes; the lowest was 350, and the highest 615 grammes.

2. Effects of farinaceous diet on

(a). The specific gravity.—This continued nearly the same as with mixed diet; the average was 1037.6. With this regimen, also, it was lower during the day than at night or morning.

(b). The amount of the urine.—This was increased to 5604 cubic centimetres as its daily average. It was greater in the morning (2165 c.c.) than during the day (1737 c.c.) or at night (1701).

(c). The percentage of sugar.—This continued nearly unchanged, being on an average 9.39 in 100 grammes.

(d). The total amount of sugar.—In this a considerable increase was visible, while the farinaceous diet was continued. The average quantity of sugar daily excreted amounted to 526.4 grammes; and the urine in the morning contained more (201 gr.) than at noon (159 gr.) or at night (165 gr.)

3. The effect of animal diet on

(a). The specific gravity.—It remained nearly unaltered by this regimen, as happened with both the other diets. Its average was 1037.2; and it was lower in the morning (1036) than at other times (1037).

(b). The amount of the urine.—This was considerably diminished, the average quantity per diem being 4588 cubic
centimetres. The average amount was much greater in the morning (1816 c.c.) than during the day (1324 c.c.) or at night (1448 c.c.)

(c). The percentage of sugar.—This was also lessened, being on an average 8.232 in 100 grammes.

(d). The total amount of sugar.—Here, likewise, a striking diminution was manifest. The average quantity daily excreted was 379.8 grammes; this was greatest in the morning (139 grs.) and less during the day (114 grs.) than at night (126 grs.)

Dr. Von Dursch discusses several of the questions relative to diabetes, and brings to bear upon them the weight of his experience and careful observations. As regards the disputed point, whether the quantity of the urine voided in this disease surpasses the amount of the fluids absorbed, he thinks that the question has not been properly considered, and that we ought to compare the amount of water in the urine, &c., with that contained in the food and drink taken. During his investigations, he ascertained the amount of the cutaneous transpiration and pulmonary exhalation by frequently weighing his patient; and he also carefully noted the quantity of water contained in the feces. He has succeeded thereby in satisfying himself that the water given off by the patient equals exactly the amount of the water absorbed by him.

In conclusion, the author believes, from all his researches, that diabetes principally depends on the sugar normally existing in the blood being undestroyed and unappropriated; and he is of opinion that all kinds of food are capable of producing sugar.—[Monthly Jour. Med. Sci., from Henlé und Pfeuffer's Zeitseh. für Rationelle Medicin.

On the use of Vegetable and Mineral Acids in the Treatment, Prophylactic and Remedial, of Epidemic Disorders of the Bowels.

An interesting paper on this subject was read before the Epidemiological Society, July 3, 1854, by J. H. Tucker, Esq.—The author commenced by alluding to the remarkable, but well-established fact, that in 1849 the cider districts of Herefordshire, Somersetshire, and part of Devonshire, were, to a great extent, exempt from the epidemic ravages of cholera, while the disease was raging around. Upon further inquiry, it was ascertained that this exemption was confined a good deal to those individuals who drank cider as a common beverage, and that those who partook of malt liquor occasionally suffered. He also remarked that, in some parts of France, and Normandy more particularly, where cider is the common beverage,
cholera is seldom known to exist; and further, that Switzerland was reported to have been free from its visitation.

Having adduced these and other facts in proof of the prophylactic power of cider, the author expressed his opinion that other vegetable acids would be found of service, such as lemon-juice, orange-juice, and sour wines made from grapes, or even from gooseberries. And as it would be found impossible to supply the whole of London with a sufficient quantity of pure cider, Mr. Tucker suggested that vinegar might be found a useful substitute in case of another outbreak of cholera, provided that it could be obtained in a state of purity. In confirmation of his view of the sanative and medicinal virtues of vinegar, the author quoted Hippocrates, who (de natura mu
liebri) "employed white vinegar medicinally"—Plutarch and Livy, who refer to the use of vinegar by Hannibal, in his passage over the Alps, when he is said to have "softened the rocks with fire and vinegar," an operation which the author facetiously regarded as rather metaphorical than chemical, as the vinegar, swallowed by the troops, probably sustained their strength, and thus in effect softened the asperities of their rough way. The author also quoted from Roman history the story that "Scipio Africanus is said to have gained a great battle with a few skins of vinegar," the troops refusing to march until the general had obtained a supply. Caesar was also reported to mention in his Commentaries the supply of vinegar to the troops; and Mr. Tucker remarked that the drink of the Romans in all their campaigns was vinegar and water, and, sustained by that beverage they conquered the world. Modern authors (Sir John Pringle, Sir Gilbert Blane, and others) were also quoted in proof of the antiseptic and medicinal qualities of vinegar. The author then proceeded to show that acid drinks were not only preventive, but remedial in epidemic disorders of the bowels. Cases were related, in which not only persons were exempt from attacks of cholera raging around them, who drank large draughts of cider, but a case of severe cholera was also related, which yielded to the diluted juice of sour apples. The efficacy of the Mineral Acids, especially the sulphuric, in diarrhoea, and especially in choleraic diarrhoea, was also advocated by reference to numerous facts and authorities. He also referred to some established facts connected with the spread of epidemic dysentery in the army, showing the efficacy of vegetable acids in that disease.

In conclusion, Mr. Tucker suggested a necessary caution relative to the use of the wretched and unwholesome substitute for vinegar commonly sold in the London shops.

The discussion which followed the reading of the paper, elicit-
ed many facts in confirmation of the author's views; and, as to the efficacy of sulphuric acid largely diluted with water, in choleraic diarrhoea, there was not a dissentient voice.—[Lancet.]

On the use of Nitric Acid as an Anti-Periodic. By George Mendenhall, M. D., Prof. of Obstetrics, &c., in the Miami Medical College of Cincinnati.

My attention has recently been called to the use of Nitric Acid in the treatment of intermittent fever; and as a substitute for quinine in this class of diseases is a matter of some consequence on many accounts, I am induced to lay it before your readers that it may more fully undergo the ordeal of experience and its true value be tested by different observers.

The facts upon which this paper is based, are taken mainly from an Inaugural Dissertation, presented to the Trustees and Faculty of the Miami Medical College, for the Degree of Doctor of Medicine, by E. T. Bailey, M. D., of Emmetsville, Ind.

He states, that in the section of country in which he resides, there is a large portion of marshy land, and therefore the circumstances are favorable to the development of autumnal fevers. His attention was first attracted to the use of nitric acid in the treatment of intermittent fevers, by noticing its effects in a case of chronic intermittent, which was attended with profuse night sweats, and for which complication he administered the remedy. In this case, there had been daily paroxysms for the preceding five days; night-sweats profuse, the tongue coated, and the bowels constipated. Nitric acid was given in doses of six drops, diluted with water, in the evening; and he was agreeably surprised to find that the paroxysms did not return on the following day; and this circumstance induced him to try its effects in other cases as an anti-periodic.

Since that time he has treated over ninety cases of intermittent fever with this article, with remarkable success. Of this number, all recovered promptly except ten, and in every one of these unsuccessful cases, the remedy was discontinued contrary to directions.

Fifteen of the whole number were of the tertian type, and seventy-five of the quotidian. In fifty cases, there was no return of the chill after commencing the use of the acid. The others were rarely attended by more than one paroxysm, and in no case by a third. When the patient had a paroxysm after taking the medicine, it was in every case diminished in intensity and duration.

In Dr. Bailey's practice, this remedy has entirely superseded
every other article for the purpose of interrupting the paroxysms of intermittents. His mode of proceeding is to give from five to eight drops of the commercial nitric acid, properly diluted, once in six hours, without regard to intermissions or exacerbations. Cathartics and alterants may be necessary for the purpose of changing certain conditions of the system; but so far as the interruption of the paroxysms is concerned, the acid may be given without any preparation of the system whatever, if we choose to do so.

The following cases are selected from among many others, in order to show the different varieties of the disease, and the mode of treatment pursued:

**Case I.**—Mr. L. S., aged 55, of temperate habits, called upon him on the 12th of July, 1852. In May previous, he was attacked with intermittent fever, which was cured by quinine, but relapsed in six weeks, since which, the disease has continued with daily paroxysms. The tongue was furred, and the bowels constipated. A purgative of calomel and rhubarb was ordered at bed time. A violent fever followed the chill, which occurred at 11 o'clock, A.M., of this day. Five drops of nitric acid was directed to be taken every six hours, diluted so as to make a pleasant drink, to be commenced on the following morning at 6 o'clock, the 13th. The calomel and rhubarb produced two copious operations from the bowels, prior to commencing the nitric acid. Three hours after the exhibition of the remedy at 6 o'clock, as directed, a chill came on, followed by a high fever. The medicine was continued through the day.

14th. The patient is free from a paroxysm; no fever; the tongue clean and moist; and the medicine was directed to be continued as before.

15th. The tongue improving; bowels regular, and pulse very little excited; no chill. Medicine continued.

16th. Patient has entirely recovered.

Forty-five drops only were taken in this case, as the medicine was not given at night.

**Case II.**—Sept. 10th, 1852, was called to see Master L. A., aged six years. He has had intermittent fever since the 6th inst., with daily paroxysms, followed by high fever. The tongue was moist, and the bowels open. Four drops of nitric acid were ordered, which was diluted as before, so as to be easily taken; one dose to be taken at 12 o'clock, and the second at 6 in the evening; to be resumed at 6 the following morning, and repeated at 12 o'clock.

11th. Visited the patient in the afternoon. He had not
had any chill; the tongue was clean and skin moist, with no excitement of the pulse. Discharged cured.

In this case, the medicine was discontinued to see whether the effect would be permanent.

12th. No return of the paroxysm. Sixteen drops were taken in this case.

Case III.—Sept. 20th, 1853. Saw Miss D. N., aged 28.

Three days ago, she was attacked with intermittent fever, the paroxysms of which commenced at 10 o'clock every day, and the chill was followed by high fever. A mild purgative was ordered at bed time; and sixty drops of nitric acid were diluted with two ounces of water, and directed to be taken in nine doses, at the rate of three doses per day, commencing on the morning of the 21st.

25th. Saw the patient to-day, and found that there had been no return of the paroxysms for three days. In this case, sixty drops were taken.

Several other cases are reported with the same result, but it is not necessary to repeat them here.

It is stated that relapses seldom occur—much less frequently than after the use of quinine, but upon this point more precision is required. It has been administered in all the various forms of intermittent fever which were presented to the author of the essay, and no unpleasant effects observed in any case. Should they be verified by the experience of others, this remedy will be found to be a valuable agent, and to possess the following advantages:

First. Certainty as an Anti-Periodic. Second. The power of invigorating the general system, while at the same time it has alterant properties. Third. Facility of exhibition, being much easier taken than quinine, barks, &c. Fourth. Freedom from the unpleasant effects which sometimes follow these remedies. Fifth. Cheapness of the article, which is often of considerable importance in miasmatic regions.—[Western Lancet.

On the Influence of Opium as a means of Preventing and Removing some of the Injurious Consequences of Over-work and Anxiety. By Dr. Johnson, Assistant-Physician to King's College Hospital.

The following interesting and practical remarks are from a course of lectures on materia medica and therapeutics, delivered before the College of Physicians in 1853. Dr. Johnson proceeds:

When all that is possible has been done for avoiding the cause of mental worry, and when all needful advice and en-
Influence has been given, we have next to direct our attention to the consequences, some of which will often continue long after their exciting cause has ceased to operate; while others are perpetuated by some persistent and unavoidable source of anxiety. Now, the first and the most frequent consequence of over-work or anxiety—the one too, which, more than any other, is productive of further mischief—is restlessness, or some form of disturbed and unrefreshing sleep. And the chief cure for this, after the causes have been as much as possible avoided, is an opitate at bedtime. So far as I can see, it is of little importance what preparation of opium or of morphia is used. For hospital patients I generally order the compound soap-pill; one advantage of which is, that its name does not indicate its opiate nature. The dose must vary according to circumstances. In ordinary cases five grains, of the pill, that is, one grain of opium, may be taken every night at bedtime. In a case of much excitement, with extreme restlessness or a threatening of delirium, the dose must be double or treble that which I have mentioned. In such cases, however, the opium would be best given in a liquid state—in the form of tincture, or the solution of the muriate or acetate of morphia.

The time for the continued exhibition of the opiate must vary according to circumstances, and will be much influenced by the success of the treatment. The object is to break the habit of dreaming restlessness, and to procure sound and refreshing sleep. In many cases this object may be attained by the nightly repetition of the dose for one week. It is seldom necessary or desirable to continue the medicine for more than a month, though in some cases, it may be expedient and beneficial to extend the period considerably. In many cases I have found that the beneficial effects of the medicine have been immediate; the patient has slept soundly, the distressing dreams have ceased, the appetite has returned, and all the symptoms which depended on loss of sleep and loss of appetite have quickly disappeared. After a few nights of sound sleep have been procured by the opiate, the dose should be discontinued, and in most cases the patient will continue to sleep as well without the medicine as with it. There is, probably, no one medicine which has the power of quickly removing such a multitude and a variety of distressing symptoms as opium, when its action is really favorable in the case to which I refer. It is not, however, to any specific efficacy residing in the opium, but to the marvelous influence of sleep in refreshing both body and mind, that the benefit is really due. The value of the opiate consists in the fact, that, on the whole, it is the safest and most certain means of procuring sound sleep.
The use of opium as a medicine is sometimes attended with unpleasant consequences, and it does not always effect what is desired. I proceed now to indicate some of the unfavorable results of the opiate treatment, and the precautions which ought to be observed in the use of the medicine. One of the most frequent discomforts attending the use of opium is a feeling of nausea and faintness, either with or without headache, in the morning after waking. The best cure for this is a cup of coffee or tea, with some solid food, followed by a walk in the open air. In many cases the opium, although at first it may disagree, yet produces no unpleasant effect after the second or third dose.

The nervous patients who require the method of treatment which I am advocating, almost invariably suffer from constipation,—a torpid condition of the bowels, being, in fact, one of the natural consequences of the general debility which characterizes the patients in question. Although the immediate effect of the opium is to increase the constipation, yet its ultimate tendency is to restore the regular action of the bowels, by means of the invigorating influence derivable from sound refreshing sleep, and an increased appetite for food. The temporary constipation may readily be obviated by an occasional mild aperient—a seidlitz powder, or a compound rhubarb or colocynth pill. The inconvenience arising from the astringent effect of opium upon the bowels is so easily met and removed, that it would never deter me from giving the medicine in any case which appeared to require it.

One of the most serious objections to the use of opium, is its tendency, in some cases, to produce an effect the direct opposite of that which we require,—to produce wakefulness and excitement, instead of sleep and composure. It is only in a small proportion of cases that this difficulty arises. It may sometimes be overcome by changing the form of the medicine, or by increasing the dose of the opium or morphia, and, in other cases, by combining the opiate with a moderate dose of antimony—James’s powder, or tartar emetic—a combination which has been strongly recommended by Dr. Graves to procure sleep and check delirium in some cases of fever. It must, however, be admitted, that some patients cannot tolerate opium in any form or in any dose; and nothing can better show the value of this drug than the difficulty of finding a substitute for it. We may try henbane and hop, and these will sometimes effect our object; but their action is very uncertain in comparison with that of opium.*

*Since this lecture was delivered, I have found reason to believe that one of the best substitutes for opium in the cases referred to, is Chloroform, in doses of from m x to m xx, made into a draught with mucilage.
It is well to remember that an opiate enema will sometimes procure refreshing sleep, when opium, in any form administered by the mouth, is either quite inoperative, or productive only of distressing excitement or sickness.

But may not the frequent repetition of an opiate dose become a necessity for the patient? May we not be instrumental in making him an opium-eater? I admit that the danger of such an evil, if real, would be a very fearful one. There are few results of medical practice which I should regret more than the reflection, that I had in any way contributed to render a recourse to narcotics or stimulants habitual or necessary to a single patient. I believe, however, that a cautious use of opium is attended with little danger of leading to so terrible an abuse of the drug.

In giving opium to hospital patients, I never tell them what they are taking; and one reason for preferring the compound soap-pill, in such cases, is, as I have before intimated, that the nature of the medicine is not apparent from the prescription, if the patient should read it. The opium should be discontinued as soon as it can be dispensed with,—as soon, that is, as restlessness and frightful dreams have ceased to harass and exhaust the patient. The rapid convalescence, and the renewed health, and strength, and spirits, which are wonderfully promoted by securing sound and refreshing sleep, will generally enable the patient at once, and without difficulty, to dispense with the use of opiates. I should withhold opium from a patient who neglects any directions which I have given him as to exercise, diet, and the general management of himself, and whose restlessness and nervousness appear to result from such negligence.

In other words I would not encourage a patient to trust habitually to opium for the removal of discomforts which might be avoided by the exercise of self-control, and by obedience to natural laws.

I beg to make an earnest protest against the routine practice of giving opiates to every patient who complains of inability to sleep. Our first care must be to discover, and then to remove the cause of the sleeplessness. We shall meet with some indolent patients, for whom the best soporific is regular employment and daily active exercise in the open air; for others, who are feeble, tonics and nutritious food will be the appropriate remedies; and again, in other cases, dyspeptic symptoms will cease, and refreshing sleep will return, under the influence of an occasional aperient and carefully regulated diet. In most cases of this kind, the exhibition of opium would not only be unsuccessful, but positively hurtful.
The cases in which the opiate treatment is most rapidly and completely successful are those in which the nervous symptoms are the result of some past grief, or anxiety, or fatigue, the impression of which remains, and is perpetuated by the patient's inability to obtain refreshing sleep. In such instances, a few nights of sound sleep, procured by means of the opium, rarely fail to effect a rapid cure, and this, too, after the nervous symptoms have continued for many months, or even for years.

Another class of cases in which equal benefit is often derived from a similar method of treatment, are those in which nervous restlessness has been induced by continued overwork, whether mental or bodily. In such instances, it is obviously desirable, as I have before intimated, that the patient should rest, or diminish his labors, if possible; but the patient may assure us that he has no alternative but to go on with his work, or to lose his employment, and with it his means of living. In such a case, we may often prevent overworked men and women from breaking down, and enable them to go on in comparative comfort, by giving an opiate nightly for a week or two. Refreshing sleep will be induced, the appetite will return, and, as a consequence, the strength and spirits will revive. and the strength and spirits thus obtained are not false and artificial in the same pernicious way as the stimulus obtained from alcohol, by which too many are tempted in the circumstances to which I have referred. The temporary help which a languid body or mind derives from alcohol is generally followed by a corresponding amount of depression, and with this there comes a craving for the repetition of the stimulant. Another bad result of the too free use of alcohol is a loss of appetite and an impaired power of digestion. Now, the effects of the opiate plan of treatment, conducted with the precautions to which I have before alluded, are in most respects the opposite of those produced by alcoholic stimulants; for we seek, by means of opium, a natural remedy for fatigue, that remedy being sleep, which brings with it a desire for food, and the power to digest it. Alcohol is taken for the sake of the immediate stimulus; the subsequent depression is the drawback upon its utility as a means of keeping up the working powers. The object in giving opium is to obtain, not its stimulant effects, which are comparatively slight and transient, nor immediately its composing influence, but the refreshment which follows the latter, and which has nothing corresponding with it among the ordinary consequences of alcoholic stimulants.

My objections to the abuse of alcohol as a stimulant do not, of course, apply to the use of wholesome wine and beer as arti-
cles of diet by those who require them, and who appear to derive benefit from them. Moreover, there are certain cases of nervous disease in which some form of alcoholic stimulant may be given with great advantage, either alone or in conjunction with opium. I refer to cases of extreme restlessness, either with or without delirium, and whether resulting from intemperance or from grief, or watching or fatigue, when the bodily powers are very feeble, although under the mental influence there may be great excitement. In these cases repeated large doses of opium sometimes fail to procure sleep, but appear rather to have a depressing influence: the patients skin becomes cold, and is bathed in perspiration, while the delirium and excitement continue. In such circumstances, the continued use of the opium is not only useless, but injurious and dangerous; and the surest mode of arresting the collapse, and of procuring sleep, is to give freely either wine or brandy, or in cases of intemperance, the stimulant to which the patient has been accustomed, with beef-tea, or some other form of nourishment.

It is scarcely necessary to observe, that in all cases of nervous disease we must carefully watch the signs of functional disturbance or of structural change in any organ of the body, and that we must meet such symptoms by the appropriate remedies. And although, in most instances, a tonic plan of treatment is required, yet we must not hesitate to resort to measures of depletion if they are called for by the occurrence of such organic disease as appears to need this treatment.

The cases which are least favorable either for the opiate or for any other plan of treatment are: 1st, cases of confirmed hypochondriasis or melancholy of very long duration, and especially when these have the character of religious despondency; 2dly, cases in which extreme nervousness has resulted from great terror, or from a sudden shock, which has left a deep and durable impression upon the mind and nervous system; and lastly, cases in which the symptoms are perpetuated by some constant source of anxiety or sorrow.

These classes of cases, although very unfavorable, and often little benefited by any plan of treatment, whether medical or moral, are yet by no means hopeless nor always incurable. Their unfavorable and unmanageable character is, however, greatly confirmed when they are complicated with epilepsy; and this whether the epilepsy has been induced by a sudden shock of grief or terror, or whether it has supervened upon long-continued anxiety and nervousness.—[Buffalo Medical Journal.]

N. S.—VOL. X. NO. XII. 48
Veratrine in Febrile Diseases, &c. [December,

Researches on the use of Veratrine in the treatment of febrile diseases, and particularly Pneumonia, Typhoid Fever and acute articular Rheumatism, &c., by Dr. Aran. Translated from the French, by A. Sager, M. D.

In a patient with acute articular Rheumatism, the medicine was given alone for twenty-four hours. Three centigrammes had been quite accidentally combined, in six pills. The physiological effect was of the most marked character. But what more especially attracted attention was the great diminution in frequency of pulse, falling from 112 to 64, and even to 48 per minute.

In reading the more recent researches on the therapeutic action of veratum viride, the author learned that an American physician, Dr. Norwood, regarded that plant as a certain remedy against all febrile affections, whatever might be their origin.

He immediately resorted to clinical experiments; and from the first series of observations our learned associate furnishes us with results of his investigations on veratrine in pneumonia.

In order to give an idea of the nature of the cases in which it has been tested, we will furnish here merely the heads of his observations, viz:

1st Obs.—Double pneumonia with pleuritic effusion in the right side. Antiphlogistication, veratrine, amelioration, relapse, cupping and vesication of the chest, veratrine in large doses, rapid recovery.

2nd Obs.—Pneumonia of the right side, treated by blood letting; persistence and aggravation from accidents, use of veratrine; rapid recovery.

3d Obs.—Pleuropneumonia of the right side in a tuberculous subject, treated exclusively with veratrine; rapid cure.

4th Obs.—Pneumonia of the right side in a tuberculous subject treated by veratrine; rapid amelioration, then signs of relapse; blister and veratrine continued; cure of the pneumonia; formation of a tuberculous cavity in the opposite side during convalescence.

5th Obs.—Pneumonia of the left side in a female of 70 years, treated without success with venesection and Tart. Ant et Pot.; veratrine used. Patient cured.

6th Obs.—Capillary Bronchitis and double pneumonia in a female of 69 years, the gravest complications, veratrine used in full doses; unexpected amelioration, relapse, death.

The detailed observations, furnished by the author in reference to those cases show—

1st. That in most cases, even after the first dose, but more
frequently still, after the second or third dose of 5 milligrams, the patient was affected with nausea, retching and vomiting, sometimes with hiccough, seldom with alvine dejections, and still more rarely with a sensation of burning in the esophagus and stomach. These symptoms, continued as long as the veratrine was exhibited in sufficient doses.

2d. That in each of these six cases the pulse fell, in the first 24 hours of its exhibition, from 24 to 60 beats. The rhythm was not at first affected, but while it became slower, it likewise grew smaller and feeble. In some cases, however, it became also vibrating, dicrotic, and very depressible, when the slowness became extreme, the regularity was frequently interrupted by the intermission of two or three pulsations.

3d. That from the first to the second day of the treatment, the respirations were diminished to six per minute.

4th. That in every case the depression of temperature was extremely marked, the skin however dry and burning at first, became moist, cool and often bathed in perspiration.

To these diversiform modes of physiological action, we must add its therapeutic agency, viz: The cough was always much diminished, the dyspnœa entirely disappeared, and the expectoration becoming much more easy, lost also much of its characteristic rusty hue. The physical signs were, however, less influenced by the medication than the general symptoms enumerated. In conclusion, Dr. Aran, in consideration of its violent action, thinks it should only be used in cases of great gravity and complication. It should be cautiously employed in a great number of cases, and the indications for its employment clearly made out before it should be admitted into the list of therapeutic articles.

In a second memoir, the author treats especially of its use in acute articular rheumatism.

From the considerations which he adduces on this subject, it results that veratrine is not a remedy of great utility in arthritic affections, and especially that it exerts but little influence over the pain which accompanies the disease.

He has observed that while in this disease as in pneumonia, nausea, vomiting and hiccough occur; the depression of temperature and of the pulse was much less marked. He exhibits in conclusion the effect of the treatment of 8 cases of acute articular rheumatism with veratrine. In two cases of very acute disease, it completely failed; in four cases, a cure was rapidly effected, and in two similar cases it was impossible to continue it, because of the perfect intolerance of the remedy. He infers therefore that it is not entitled to the first rank as a therapeutical agent in this disease; that it should not be relied on
as a general method of treatment, and thinks it more especially indicated in cases with endocardial or pericardial complication.—Gazette Medical de Paris. Peninsular Jour. of Med.

**Cause and Treatment of Prolapsus of the Rectum.** By M. Duchaussay.

In a short but interesting memoir, M. Duchaussay reviews the circumstances attending this troublesome complaint, and fixes attention in particular upon the loss of power in the sphincter and muscle as the chief cause of the descent of the bowel. Moreover, he endeavors to show that Dupuytren's operation, by excising the radiating folds of skin around the anus, and the operation by four touches with the actual cautery, practiced by Guersant, act not by causing any subsequent retraction of the cellular tissue, skin, and mucous membrane, but rather by stimulating the sphincter muscle so that it regains its contractility, and therefore its retentive character. How else, asks M. Duchaussay, do we explain the fact, that the prolapsus is often cured, or does it return after two days, or even after one day, or not at all after the operation? He points out the fact, that in case of this disease in infants, three fingers may sometimes be introduced without causing contraction of the sphincter, before the operation by cautery, whilst afterwards, if one be passed, a powerful contraction of the sphincter immediately ensues. As proof that this recovery of contractile power by the sphincter is the cause of cure, a case is mentioned in which M. Guersant had used the cautery too superficially, the sphincter failed to contract, and the disease returned. A second cauterization was followed, on the contrary, by return of the muscular contractility, and the cure was complete.

According to the author, the cautery acts as a stimulant to the paralyzed muscle, just as it will to the deltoid in a like condition. After pointing out the inconveniences and apparent severity of M. Guersant’s method, M. Duchaussay suggest that a slighter cautery, or some other stimulant to muscular contractility, might act as well, and he suggests strychnine. This, with M. Guersant’s permission, has been tried in the Hopital des Enfants, in the case of a girl aged eleven years. The prolapsus here arise from obstinate constipation; it had lasted for four years; the bowel protruded at each evacuation about ten centimetres (—4 inches). During the first month of her admission she was treated by laxatives only, with no other result than that of diminishing the length of the protruded portion of bowel to about four centimetres (1½ inches). Strychnia was then employed endermically near the region of the sphincter:
the next day there was no evacuation; on the following day the bowels acted once, only a slight bulging of the rectum taking place; on the third day the protrusion was still less after an ordinary evacuation; and during the next thirteen days it did not occur again.

Blisters were made in the cleft between the nates, and on the right thigh close to that cleft; one-sixth of a grain of strychnia was applied the first day, one-third on the second, and one-third on the fourth day. On the fifth day, about half a grain of sulphate of strychnia was used, and this was repeated for the last time on the sixth day. In the case of a boy, it is recommended to be applied between the scrotum and anus, immediately over the anterior interlacement of the sphincter ani fibres, The remedy certainly deserves further trial.—[Archives Gén. de Méd. North Western Med. and Surg. Jour.


1. Of the Ductus Arteriosus. 1. The period when the Duct is completely closed.—In the India pig, at 12 days; the rabbit, 16 days; dog, 23 days; the calf, between one and two years. In man it is not closed at the 18th month.

2. Filaments of the Ductus Anteriosus.—These exist in no animals examined by me except the calf and the horse. In the calf, I have found them at two months.

3. How these filaments are disposed at first, and the mode in which they unite to effect the Closure of the Duct.—The filaments never exist alone; they are always developed with a membrane, whose margin is adherent to the posterior edge of the opening. The filaments rise to the number of twelve or fifteen at least, from the free margin of the membrane. But they almost immediately unite together, separating again to unite a second time, thus forming a net work, increasing in size as it leaves the margin of the membrane. This mesh, so to speak, suspended in the left auricle, terminates by three or four filaments, which go to be inserted into the left surface of the wall of the auricles, at one-half a centimetre from the anterior margin of the foramen ovale. These terminal filaments, in lieu of their insertion in the wall of the auricles, form the arches of a bridge; the middle arch is larger than the rest.

In proportion to the development of the animal, the net of filaments thicken; in proportion to this thickening the meshes disappear. The terminal points of insertion are always in the same number, and in the same situation. After a while there
Remedy for Hydrophobia, December,

remain but three or four arches formed by the free margin of the membrane, and its filaments much thickened and much shortened. The arches finally disappear by the same process; the communication between the auricles is cut off. Before this orifice is entirely closed, there exists a very oblique canal, which extends from the right auricle to the left. Sometimes this passage continues in the adult, (cow, sheep, etc.)

In animals which have not these filaments, the mechanism is somewhat similar. Here, also, it is by the thickening of the membrane, and by its insertions in the left auricle, that the foramen is closed; and there is a very oblique canal which may exist in the adult, (dog, rabbit, man, etc.)

II. Ductus Arteriosus. Period when the Duct is completely obliterated.—In the dog, in 36 days; in the rabbit, in 26 days. In man, I have examined the duct on at 18 months to 2 years—it was not entirely closed. The ductus arteriosus appears to close first at its middle, the two extremities remain open for some time after the centre is closed.—[Philadelphia Med. and Surg. Jour.

Remedy for Hydrophobia. By W. N. Hurt, of Kilmichael, Miss.

There is no disease to which the human family is liable, that has been the object of so much speculation and experiment as Hydrophobia; in order to find out an appropriate remedy and with so little success. Every remedy heretofore that appeared to be successful at first, has on further trial been found useless. It is my present object to offer to the public a remedy, the efficacy of which is so well attested that I think it well worthy of a fair trial; it was given me by my old friend Thomas Harvey, who states he has used it in a great many cases, and assures me it has never failed in a single case. I have also seen many of his patients who fully corroborate Mr. Harvey's statement. It not only proves an effectual remedy in all stages of the disease but as a prophylactic of superior efficacy, always preventing an occurrence of the disease when given to a person that has been bitten by a rabid animal and before the period of incubation.

B. root of Phytolacca 1 lb
new milk, xiv oz.

Slice the root and boil it in the milk down to 7 oz., press the liquid thoroughly from the mass through a fine cloth. Half a tea-cupful to be taken every hour until the disease disappears, when it should be gradually discontinued. When given as a prophylactic the above amount may be given four or five times
a day for eight or ten days, it will nauseate, vomit and purge. The patient should take nothing but low diet during the treatment. Be particular to get out all the pulp of the root from the liquid. — [Southern Journal of Med. and Phys. Sciences.

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EDITORIAL AND MISCELLANY.

BIBLIOGRAPHICAL.


The intrinsic merits of Prof. Carpenter’s works upon Physiology have secured to them a position that cannot be bettered by any individual encomium. The splendid and valuable book above named is eminently creditable to both the author and his publishers. Every physician should own it, for there is no better way to learn human physiology than by the study of the functions of life as modified by the various organizations of animated nature. To every man who has any taste for natural history, the perusal of this work will be quite a treat, as it is certainly more complete than any of the kind in our language.


It is always pleasing to see attempts made to *popularize* the love of science. The object of the little book before us is not so much to *teach* science as to awaken a *desire* for its knowledge in those who would shrink from such a volume as that of Carpenter, and yet be willing to look through a small one, purporting to impart pleasure as well as information. This is one of the series published in England under the title of “Orr’s Circle of the Sciences,” and is remarkably well adapted to the purpose for which it is intended.


This, like the work just noticed, is one of “Orr’s Circle of the
Sciences. It is written by the most distinguished Comparative Anatomist of England, the Cuvier of Great Britain. As a popular monograph upon a topic of general interest, it will doubtless be extensively read.


Our indefatigable confrere, Professor Meigs, has just favored us with another of his valuable contributions to practical medicine. The work before us is in the epistolary, free, and familiar style which has made the writings of our distinguished friend so popular. This monograph will be found to fill an important gap in our medical literature, and to sustain the high reputation of the author.


The title page of this work explains its character; and the demand for a second edition shows that it has been found useful. It is intended more especially for those who practice Dental Surgery than for the general practitioners of Medicine, but may be consulted advantageously by all. The multiplication of works upon Dentistry, their extensive sale, and the liberal patronage of the several schools of Dental Surgery, constitute an American peculiarity to which no one has so much contributed as Prof. Harris, who by his zeal and ability has placed his profession upon higher grounds in the United States than it enjoys in any other country.


The Profession should feel under obligations to Dr. Kirkbride for the collection in this small volume of much useful information, not otherwise attainable without much labor. In no particular is the nineteenth century more marked for benevolence than in the management of the Insane. This work is full of valuable suggestions, and ought to be carefully studied by all who may be connected with the establishment or supervision of Lunatic Asylums.
Resume de Recherches Cliniques sur la fièvre continue la Dysenterie, la Pleurésie Chronique, et sur les variations du ton dans les sous.

This is a French translation of the several clinical works of Prof. Flint, to which we have already adverted at the time of their publication in this country. It is gratifying to perceive in this a just appreciation of our countryman's genius and talent for observation.


A most convenient pocket-book, which every practitioner ought to procure.

We are indebted to authors and publishers for a large number of pamphlets, among which are the following works:

Transactions of the Medical Society of the State of Pennsylvania, at its annual session held in the city of Pottsville, 1854.

The Minutes of the fifth annual meeting of the Medical Society of the State of Georgia, held in the city of Macon, April, 1854.

Besides the Minutes of the proceedings of the Society, this work contains a list of the Officers and Members, the Constitution and By-Laws, a Report "on the relative value of Lithotrity and Lithotomy," by L. A. Dugas, M. D., and a Report "on Chloroform in Surgical and Obstetric Practice." by Joseph A. Eve, M. D.

Proceedings of the American Pharmaceutical Association at the third annual meeting, held in Cincinnati, July, 1854.

Report of the Special Committee of the Board of Regents of the Smithsonian Institution, on the distribution of the income of the Smithsonian fund, &c. 1854.

The Voluntary System of Medical Education, instituted by the Independent Medical School of Pennsylvania. 1854.

Insanity in Italy. By John M. Galt, M. D., of Virginia.

Elkoplasty or Anaplasty applied to the treatment of old ulcers; also, a new mode of treatment for delayed or non-union of a fractured Humerus. By Frank H. Hamilton, M. D., &c., &c., of Buffalo.

Statistics of the Medical Profession of the United States. By C. A. Lee, M. D.—By the census of the United States of 1850, we learn that there are 40,564 Physicians in the United States. Whether this includes the irregular practitioners and quacks we are not informed, but presume that it does not. The reader will perceive, by consulting the following table, the number of practitioners in the U. States and in each State of the Union, the ratio of practitioners to the
population, and the number of square miles in each State and Territory:

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<th>STATES</th>
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| Total        | 40,564           |              |                                  |                                  |

The total population is 23,191,876; the ratio of practitioners to the whole population is one to 571. California is better supplied with Physicians than any other part of the United States, there being one to every 147 inhabitants, while New Mexico is the most deficient, there being but one to 6,838 inhabitants. Considering the sparseness
and thinly scattered state of the population, in most parts of the Union, it may well admit of doubt, whether the surplus is very great. That it is so in the older and comparatively more settled States is sufficiently obvious.

The mortality among medical practitioners is greater than among any other class of men; we believe, taking the whole United States, that it will not fall short of one in twenty-five, annually. This will give a total of 1622 deaths, which are to be supplied from our medical graduates. Considering that large numbers of young men, especially from the Southern States, are educated to the profession, without any view to practice, and that many more enter upon other pursuits, and engage in other and more profitable callings, the number of those who annually graduate from our medical colleges will not appear disproportionately large; we do not know the exact number, but suppose it will not vary far from 2000.—[Buffalo Med. Journal.

Mortality among Children. By W. A. Alcott, M. D.—The Boston Journal for August 10, has an article, copied from the Baltimore Patriot, on the mortality of children, which is deserving the attention of those whose office should be not only curative but preventive. I copy from the article as follows:

"In the cities of New York, Philadelphia and Baltimore, last week, out of a total of 1,724 deaths, 1,025—within a fraction of two-thirds of the whole number—were children under five years of age."

Now as there is no date to the article of which the foregoing is a part, it is not in my power to say precisely what week the writer refers to; but it is a fair inference that it was recent. Nor am I able to say by what arithmetic or logic, 1,025 is made out to be "within a fraction of two-thirds" of 1,724. It would be more nearly three-fifths of the whole. Still the fact is a terrible one. Many have thought the statement so often made by myself and others, that two-fifths of our population, taking the year together, die under five years, an exaggerated one; but here is a mortality of three-fifths for a particular period.

The writer in the Baltimore Patriot, in his comment on the dreadful fact, justly observes:—"There is certainly some cause for this, and it is due to the science as well as the philanthropy of the age, that this cause should be distinctly ascertained and pointed out." Again he says:—"A close examination of the subject, we doubt not, would show that it is chiefly among those who are surrounded with all the comforts, and, in many instances, with the luxuries which riches command, that infantile diseases find their most numerous and unresisting victims."

With one qualification, Messrs. Editors, I can subscribe most fully, to the truth which is suggested in the latter quotation. Instead of saying "riches" in a country where almost every pauper is rich enough to have his appetite tickled and gratified, I would say "money and a shortsighted selfishness."

In regard to the cause of this fearful and fearfully increasing infantile mortality—for there are doubtless more causes than one—I have something to say, suggested by the study of the subject for thirty years
or more. And though I lay no claim to infallibility, I do greatly desire to be heard.

My first suspicion rests on the too free use of alkalies among us. I say "the too free use," because, although I should not be likely to encourage their dietetic use, in any quantity, or in any circumstances of health, yet there is certainly a wide difference between excess and moderation. It is one thing to use just so much saleratus as shall be neutralized by the acetic acid it meets with, so as to leave no residuum but a little acetate of potash, and quite another to use the alkali so freely that a portion of it remains in the stomach and intestines unneutralized. Yet the latter is an every-day occurrence. Our children, generally, have their first passages in a state of sub-inflammation, from this and other kindred causes; and though the use of mild acids, especially those of fruits, may do something to soften or mitigate the condition, is it any wonder that bowel complaints, in these circumstances, become very severe and unmanageable? Is it any wonder that two-fifths, and in summer three fifths of all who are born, die under five years of age?

I have no doubt that quackery and humbuggery, as well as many more things, tend to a fatal result in these cases; but I can say no more in a single number. You may possibly hear from me again.

AUBURN DALE, August 15th, 1854.

Mortality among Children, No. 2.—When I call to mind that the character of your work varies somewhat from that of its predecessor—whose motto was "The best part of the medical art is that of avoiding pain," I begin to doubt whether you have room for short articles from time to time on prevention. And yet, medical men in general are not so lost to philanthropy, and even to common humanity, as not to look a little at prevention now and then. They know something of the pain I have often experienced on reflecting that while I have been the means, apparently, of extending the lives of some of my consumptive patients from one to thirty years, it has had one terrible effect which philanthropy herself scowls at—it has served to propagate and perpetuate a feeble race. Still, cure we must have, and will have; and postponement and palliation. It wont do to let the feeble die off if we can help it.

The subject I broached in a late number of the Journal on infantile mortality is one of serious and alarming import. The paper from which I quoted was probably correct, for during the week ending about the middle of August, the New York Independent states the whole number of deaths in the three cities I have mentioned, at 1,790; while that of those under 5 years of age was 936, considerably more than half, still. Such a mortality is indeed frightful. What are we to think of the habits of people when half the children in families die under 5 years of age? What would be thought of the good sense and right treatment of domestic animals where half the lambs, pigs and chickens should die thus prematurely?

I spoke of the use of saleratus as in the front of a long list of transgressions. I ought to have particularized. Dr. Hammond, of Kil-
lingly, Ct., first called my attention to this subject, ten or twelve years ago. He confessed to the use of ten pounds in his small family in a year, and said he was very far from being alone. Soon after that I went down East, and learned something of the state of things in New Brunswick and Maine. I found that in Bangor ten or twelve pounds a year were very common. So I found it afterwards in some portions of Massachusetts and Connecticut. Col. Ivers Phillips, of Fitchburg, five or six years ago, told me that in a family of ten persons they used twenty-five pounds a year; and Mrs. P., who was present, endorsed the assertion. The smallest quantity I have known used in any ordinary family, except my own, is about five pounds. In Ohio, families who were at first disposed to sneer at my statements, confessed to the use of six or eight pounds yearly.

My deliberate conviction is, that the families of twenty millions of people in our United States population—amounting to about four millions—use the average quantity of five pounds of this alkali yearly—or one pound to each individual. This is an aggregate of twenty millions of pounds. How much of this goes into the alimentary canal and courses its devious way without meeting with any free acid or other substance calling into play new affinities, cannot easily be told. In these days of excess in its use, I fear one half. But to be safe, I will place it at one-fourth. Is it so, then, that the lining membranes of our people—our children among them—must be irritated yearly by 5,000,000 pounds of uncombined—unneutralized salæratus? The very thought is enough to make one shudder!

From ten to twenty grains of this substance is sometimes put down in our medical dictionaries as a dose. Place it at thirty. Do we swallow 960,000,000 doses of medicine a year, in this careless, uncalled for manner? What effect can medicine be likely to have, when given in an emergency, to children who have been irritated day after day, and year after year, in this way? I have said irritated—not poisoned. Yet, Orfila, I find, calls salæratus an irritating poison, and gives us a long list of its terrible symptoms. I need not detail them in a Journal designed for the profession; but they ought to be hung up in letters so large that they could be read at any distance all over the country. They would make some of our house-keepers stare—and it ought to be so.

Let us make one more estimate. I have no facts to bear me out in what I am going to do, because I have not the patience to gather them up—scattered as they are up and down the earth’s surface. But I suppose four maximum medical doses of this article, taken at once, would be called excess; and this excess would be evinced by some or all of Orfila’s “symptoms.” In short, the individual who should take such a dose would be poisoned. I do not say he would certainly die, for I am not warranted in this. But I do say that, in all probability, he would not greatly desire to take another such dose immediately. But 5,000,000 pounds of this alkali—the quantity we suppose to be swallowed yearly unneutralized—would at this rate be 240,000,000 doses of the poison. It would poison all our 20,000,000 of white
people in the Union, twelve times each, or once a month, for the whole year. But enough for the present.

Auburn Dale, August 25, 1854.

Mortality among Children No. 3.—One fruitful source of infantile mortality is medicine. Let not my medical friend accuse me of heterodoxy, in making this statement. I have reason for my belief.

When I speak of medicine as a cause of infantile mortality, I have no reference—not the remotest—to that small amount of it which is given at the prescription of the family physician. There may have been error here; there certainly has been, in all time and countries, unless it is our own. But I waive all this. Nor do I refer in particular to the enormous quantity of drugs and medicines taken without the prescription of any person duly qualified for the purpose, beyond the pale of the family—a hundred times greater than the quantity given by all our regular physicians of every school.

But I would aim chiefly, in these paragraphs, at what I have been accustomed to call maternal dosing and drugging. Bad as the world is, in other departments of drugging, this is more prolific of infantile disease and premature death than all else, except bad cookery; of which, by the way, I have said something in a former number.

Mothers assume to understand the constitution of their own children; and almost deem it an insult to be told of their mistake. Yet they are mistaken. Reasoning a priori, it is impossible, or at least next to impossible, for those who are situated as mothers generally are, to understand enough of the laws of hereditary descent, temperament, &c., to be able to understand what is almost impossible to the wisest physiologists and physicians. And then, as regards the plain matter of fact, their mistake is still more obvious. They almost every day, for example, treat their scrofulous children—amounting to one third or one fourth of the whole—in a manner diametrically opposite to what they would have done had they understood the nature of the case and how the first symptoms of latent scrofula manifest themselves.

And yet it is almost as much as one's reputation is worth, whether in the profession or out of it, to run the risk of giving to our mothers this little piece of information. And the hazard is great in exact proportion to their ignorance. An ignorant mother is, next to the Pope of Rome, the most infallible of all human beings! I mean, of course, in her own estimation. You may reason, sometimes, with an intelligent mother—seldom with an ignorant one.

But whether ignorant or somewhat enlightened, the vast majority of our mothers doctor, more or less, their own children. At least, if they refuse to call it doctoring, they give them a vast amount of small elixirs, cordials, &c. The closets of not a few housekeepers are a complete apothecary's shop. They may, it is true, have smaller parcels than the regular apothecary; but they have almost as great an assortment. And they not only keep it; they administer it. They may not intend it; they do not mean to give much; sometimes they really think they do not give much. But it comes to pass, in the course of the year, that
much is given by somebody; and I greatly fear that the mother must be held responsible for it.

True it is, that no mother confesses to this crime of dosing and drugging. As it used to be with tight lacing of the chest, that no one was guilty herself, but almost everybody else was, so in this matter of drugging and dosing children. Yet how often have I seen these very mothers with their bottles or phials on the steamboats and railroads of our country—hardly willing to wait for the arrival of the cars at a "station," before they administered the needful elixir, but actually administering it on the road!

But now for the consequences of this maternal dosing; for this it is with which medical men have chiefly to do. Next to bad food and wretched cookery, as I have before intimated, this error is productive of more sickness and premature death than any other. No physician knows what to do with a sick child, who has been thus tampered with. He may indeed *guess a little better* than others; but even he will often *guess wrong*. Their first passages are irritated, and perhaps inflamed; and if it were possible to make the right appliances either internally or externally, it would still puzzle the wisest head to know how to apportion the quantity so as to be more likely to do good than harm. Diseases, in these circumstances, as you know, are more apt to be severe and complicated, and the termination more likely to be fatal, especially if much medicine is used.

The worst remains to be told. As it is not always easy to trace the cause of severe, protracted or fatal infantile disease to maternal error, we not only contrive to kill, from generation to generation, by thousands and tens of thousands; but we partly kill by millions. If all the mischief that is done could be concentrated, as it were, in a few, and were to kill them outright, so that every body might see that they fairly died of violence, there might be hope. But no; we seem to be left to grope on in ignorance, and not only to kill, continually, but to *partly* kill many more. We bring on, gradually, some disease or other; or we render an inherited disease, which might have been mild, very severe, or early fatal; or we aggravate, by over-dosing the symptoms of acquired diseases from other causes. We clip from the existence of one child or person, a year; from another, two or three years; from all, or almost all, something. The aggregate of these clippings, so to call them, every year, though it cannot be exactly ascertained, is, no doubt, fearfully great, and fearfully increasing.

I have sometimes thought maternal dosing was a little more mischievous in the families that confide in the homeopathic and botanic treatment, than in those who adhere to the old system. I will tell you why. They seem to think vegetable medicine, and even small doses of mineral medicine, so harmless that they may dabble with them when and where they please—almost without reserve or limitation. Perhaps this is not justly chargeable on the systems themselves, but only an incidental evil. But this does not alter matters of plain fact; and if the public are killing their children with too many small shot, as well as with musket and cannon balls, it should be known, that
that the evil may be guarded against, or, if possible, removed. — *Boston Med. and Surg. Journal.*

AUBURN DALE, Sept. 9, 1854.

**Viviparous Fish.**—Dr. Bennet Dowler has recently discovered in the vicinity of New Orleans a small osseous fish, which proves to be viviparous, having no less than twenty-two well formed young in its body at the time of examination. Dr. D., however, yields the priority of description of viviparous fish to Dr. Gibbons, who found them in California.

A case of total Inversion of the Uterus of many years’ standing, in which extirpation of the entire organ was successfully practised by Dr. E. Geddings, is reported in the Sept. No. of the Charleston Medical Journal.

Professor Trousseau recommends the extract of belladonna, in doses of one-fifth of a grain, three times a day, as a remedy par excellence for habitual constipation. With great deference to this distinguished savan of France, we would suggest that his remedy will be far more successful if he will add thereto 3 grs. of P. Rhei and 1 gr. of P. Ipecac; these being the constituents of Professor Chapman’s "Peristaltic persuaders." The latter will succeed when the Belladonna fails.—[N. Y. Med. Gaz.]

Professor Simpson propounds the theory that Phlebitis is contagious, and, like epidemic erysipelas and puerperal fever, may be communica-
ted by the hands or instruments of the operator. Hospital gan-
grene he would place in the same category. If this theory be true, a new corps of surgeons should be enlisted for the New York Hospi-
tal at this present writing, for those on duty are making sad havoc by spreading the poison, if the reported fatality by the latter disease be correctly stated.—[Ibid.]

In Chlorosis, the salts of manganese are now very generally sub-
stituted for those of iron, in Germany, and the testimony is very strong in their favor, as appears by the Foreign journals — [Ibid.]

**Medical Prize Question.**—The New York Academy of Medicine, through the liberality of a few of its members, offers a prize of $100 for the best essay on *The Nature and Treatment of Cholera Infantum,* to be presented during the ensuing year. The trial for the prize is not restricted to the fellows, but is open to the Profession throughout the country.—[*Boston Med. and Surg. Journal.*]