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"Je prends le bien où je le trouve."

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Original Communications.

Malformation of the Genito-Urinary Apparatus. By L. A. Dugas, M. D., Professor of Physiology and Pathological Anatomy in the Medical College of Georgia.

Having just had an opportunity to examine the malformation existing in the person of Joseph Hayden, a native of Rhode Island, about 21 years of age, we think that it may not be without interest to present to the profession a description of its peculiarities. The seat of the malformation is principally in the genito-urinary apparatus, but this gives rise to modifications in the parts contiguous. The first feature that strikes the eye is a red, angry looking surface, of nearly circular form and about three inches in diameter, just above the usual place of the symphysis pubis. This surface protrudes considerably beyond the general level of the abdomen when the individual stands up, but when he assumes the horizontal position the protrusion gradually diminishes and finally subsides entirely. Indeed, after having been in bed all night, and before arising, the surface rather presents a depression. The protrusion is therefore occasioned by the pressure of the abdominal viscera and constitutes a species of hernia. Upon examining the red surface it is found to be a mucous membrane which secretes healthy mucus, and which terminates abruptly at its circumference, where it is united with the skin of the abdomen. At the lower portion of this mucous membrane may be seen, about
an inch apart, the orifices of two tubes which make their way obliquely through it, and from which urine is continually dripping. These are the orifices of the ureters, and the red surface is the mucous membrane of the posterior portion of the urinary bladder.

But this red surface is elongated inferiorly so as to reach the region of the symphysis pubis, at which place we find continuous with it an imperfect glans-penis, about midway between which and the orifices of the ureters are found two other orifices from which the seminal fluid issues whenever the venereal orgasm is excited. These latter orifices are, therefore, those which ordinarily convey the semen from the seminal vessels into the urethra. There is no urethra here however; the posterior portion of the bladder and of its prostatic region being all that is left, and their mucous membrane constituting a part of the external surface of the body, the secretions from the ureters as well as from the seminal and prostatic ducts are enabled to reach the surface without their usual conduit, the urethra: hence it is that the glans-penis is found attached to the remains of the neck of the bladder and that its superior aspect presents a groove or fissure covered with mucous membrane, in lieu of the urethra. The glans looks as though it had been cleft upon the median line from its corona down to the urethra. The prepuce would seem also to have shared the same fate, for it is bilobed as well as the glans, as far down as the level of the urethra—its frenum being perfect. The corpora cavernosa are of course entirely wanting, but the spongy texture of the glans still remaining, this is susceptible of erection under venereal excitement.

The testicles are in the scrotum, but this is much less capacious and pendulous than usual, the testicles being located just below the external inguinal ring. A slight inguinal hernia shows itself on the right side. The hair which should occupy the mous veneris is here found upon the sides of the mucous surface just described.

There is no umbilicus perceptible—and this case offers us a specimen of some of those erroneously referred to in support of the doctrine that the foetus may be nourished without the direct communication with the mother afforded by an umbilical
The disappearance of the umbilical cicatrix is, however, (in these cases at least) not conclusive evidence of the non-existence of the umbilical cord at a former period. In anomalies like the one before us the umbilical cord has existed, but its attachment was so near the upper margin of the exposed mucous membrane of the bladder, that the cicatrix resulting from its fall is continually subjected to the distension occasioned by the pressure of the abdominal contents and the consequent herniary protrusion of the mucous membrane. The umbilical cicatrix has been here effaced by long traction and seems blended with the imperfect cicatrix which results from the union of the mucous with the cutaneous surface. It must be remembered that the abdominal walls are here replaced by those of the posterior portion of the urinary bladder. The intestines are therefore at this place retained by a wall much thinner than that formed by the abdominal muscles; hence the herniary protrusion, which by its continual traction tends to increase still farther this attenuation, especially at the umbilicus where the wall does not appear to be thicker than common writing paper.*

We have thus far described only the external peculiarities of this case; but the malformation extends to the bones of the pelvis. The pubic bones do not form a symphysis, but are separated from each other from 2 to 2½ inches. The whole pelvis is broader than usual in the male and much resembles that of a woman. The thighs are far apart, and the want of firmness or of fixedness in the pelvis renders walking awkward and tiresome.

The general aspect of Mr. H. may be thought by some rather effeminate; yet it is not more so than that of most men of fair complexion, light hair, and rather scanty beard. His voice is as masculine as that of most men—indeed there is nothing in

* The Museum of the Medical College of Georgia contains a remarkably fine specimen of this malformation, sent to the Faculty by the late Dr. Foster of Warren county. Being a full grown male fetus, in which the umbilical cord has not dropped off, as the child did not live after birth, it may be seen that the cord is inserted just at the upper margin of the mucous surface, where we would naturally look for it, and where it is almost uniformly found in eoverrideions of the bladder. Besides these, we had an opportunity to see two others living, in Paris—one an adult male, and the other a female about 25 years of age. In these four instances the umbilicus was similarly located.
his general appearance that would indicate any malformation, save his gait, the freedom of which is impaired both by the defect of the pelvis and the effort made to prevent the painful friction of the exposed mucous membrane against the clothing.

The anomaly we have just noticed was first satisfactorily described by Chaussier, who termed it alternately Ectroversion and Ectrophy of the urinary bladder. It has also been called Inversion, Prolapsus and Hernia of the bladder. It is evident, however, that these terms convey but an imperfect idea of the true state of things. Indeed, the complexity of the malformation is such that no single appellative can comprehend all its features. It is therefore now most generally treated of under the head of Ectroversion of the bladder, as this is not only the most striking peculiarity, but also the probable cause, or antecedent at least, of all the others.

Two theories have been proposed for the purpose of explaining the manner in which these anomalies are produced. Whilst Chaussier and others believed that the bladder after having been formed protruded through the unclosed walls of the abdomen, and, adhering to the sides of the fissure, suffered a loss of its anterior portion by laceration, absorption or otherwise, M. Isidore Geoffroy Saint-Hilaire,* invokes the aid of analogy and of the well established laws of evolution, and very satisfactorily demonstrates that we have here nothing more than an arrest of evolution. The very interesting and we may add beautiful researches of M. Serres upon Transcendental Anatomy throw a flood of light upon this subject. They teach us that in the process of evolution all the symmetrical portions of the body are originally distinct or separated from each other by a space or fissure upon the median line; that the symmetrical portions situated upon this line unite more or less early in different localities; and that all the abnormal fissures that we find persisting after the full evolution of the body are clearly attributable to an arrest in the process by which the union should have been completed. Such is the explanation of fissures of the lip, palate, abdominal walls, penis, clitoris, scrotum, pubes, &c., &c. If the process of union had not been arrested in these cases the fissures would certainly not remain.

* Histoire des Anomalies, tome 1, p. 386.
Now in the case before us there has been an arrest of evolution in the parietes of the abdomen, the pubes, the bladder, the urethra, the penis, the inguinal canal and the testicles. The persistence of the abdominal fissure at the time of the formation of the bladder permitted the anterior margin of each half of this to adhere to the corresponding sides of the fissure, whilst it did not prevent the union of the two posterior margins of the bladder. We accordingly find the posterior portion of this sac presenting a normal condition and perforated by the ureters. It must be remarked, however, that the bladder, after having been thus far developed, has ceased to grow; it is much smaller than it should be in an adult, and the ureters open much nearer the prostate gland than they do in the fully evolved organ. There has been here an evident arrest of evolution, and this arrest has extended very naturally to those parts the existence of which is but a consequence of a fully formed or closed bladder, viz., the urethra and penis. The secretions from the kidneys, testicles and prostate being poured out upon the exposed surface, there could be no use whatever for an urethra nor for a penis. The corpus spongiosum, it is true, does exist, because it is formed earlier than the corpora cavernosa and almost simultaneously with the bladder, but we find that here, as in the bladder, an arrest of evolution occurred just after the posterior edges of the lateral halves had united, and that the anterior edges have never grown together. The cleft then is continuous from the anterior portion of the bladder down to the extremity of the glans penis.

Whether in the case of Mr. Hayden the spermatic vesicles exist, or not, could not be ascertained. They have been found wanting in some of the cases subjected to post-mortem inspection,* and this is in accordance with the general principles of arrests of evolution, inasmuch as these vesicles do not exist at all in many animals, and are formed comparatively late in man.

The very extensive researches of Mr. I. Geoffroy Saint-Hilaire, have enabled him to verify the deductions of reason in relation to the order and frequency of anomalies in the various parts of the animal structure. He accordingly establishes the general rule that anomalies are most frequent in the organs

* Dict. des Sciences Médicales, tome 14, p. 346.
last formed, and that this is especially the case in relation to the several parts of a common apparatus. (Loc. cit., Tome 1, p. 440 et seq., and Tome 3, p. 390 et seq.)

In the osseous system, the bones last ossified are the most often affected with an arrest of evolution. The nerves suffer this arrest much less frequently than does the spinal marrow, and this less often than the brain, which is the last portion of the nervous system evolved. The heart, which is formed long after the aorta, is more frequently imperfect—and even in this organ the septum-auriculum, which is the last portion perfected, is also most commonly the seat of an arrest of evolution, by which the foramen ovale remains pervious.

We should add to the principles just announced another which may be regarded as complementary—viz., that whenever the first formed organ or portion of an apparatus suffers an arrest of evolution, those which would have been formed subsequently are usually found wanting. The impetus of formation, if we may use the expression, having been arrested in the formation or evolution of the first part of an apparatus, it is lost to all the remainder. (Loc. cit., T. 3, p. 391.)

It will be perceived that with the aid of these general laws all the anomalies existing in the case of Mr. H. are very easily accounted for. We have seen that the arrest of evolution in the bladder was but a consequence of the persistence of the abdominal fissure. In the formation and evolution of the urinary apparatus the kidneys are first formed, then the ureters, the bladder, and lastly the urethra. In Mr. H.'s case, the arrest occurred only after the formation of the kidneys, the ureters and the bladder to a certain extent. But the bladder having remained only partially evolved, the urethra has as a consequence remained in a similar state. Yet although the urinary and generative apparatuses are, strictly speaking, distinct in their functions, certain portions of each have an intimate anatomical relation. Hence it is that anatomical lesions of the one will not unfrequently occasion modifications of the other, especially in the male subject. In Mr. H.'s case the testicles have been fully evolved, but they have not assumed the position they would have occupied had all things progressed normally. They are not hanging loosely in a capacious and pendulous scrotum,
but are found just below the external inguinal ring, and in a contracted scrotum. Whether this is owing to an arrest in the evolution of the scrotum or in that of the spermatic cord, is not certain. It is probable, however, that the defective evolution of the latter has occasioned that of the former. In many cases the testicles remain permanently within the abdomen, and in all such the scrotum is found to have suffered a corresponding arrest of evolution. That the generative as well as the urinary apparatus has, in the case before us, suffered an arrest of evolution is evident. In the order of their evolution the testicles are first formed, then the seminal vesicles, the prostate gland, and lastly the corpora cavernosa. In the case of Mr. H. the testicles are fully formed, but not fully evolved. We say not fully evolved, because, if so, they ought to be in the place assigned them in the normal adult. This arrest of evolution, although slight with regard to the portion of the apparatus usually first formed, must be more manifest in those of subsequent formation. The spermatic ducts or vasa deferentia, may terminate abruptly upon the mucous surface, or they may first give rise to the formation of the vesiculae seminales, which themselves may be more or less perfectly developed, and lead to a similar state of things in the prostate gland. It is probable that, inasmuch as the prostate is evidently partially developed in Mr. H., the seminal vesicles are likewise more or less so. The effects of the arrest being, however, more and more marked as we come to the last formed portions of the generative apparatus, we are prepared to find that it has entirely prevented even the formation* of the corpora cavernosa.

This malformation, although exceedingly interesting to those who are fond of the study of nature's works, whether normal or otherwise, is to Mr. H. a very serious grievance. He is affected not only with impotency, but with an inability to retain his urine. This, by continually dripping and flowing over the glans penis, the scrotum and the thighs, keeps these surfaces more or less excoriated and painful. He has observed that whenever his digestive functions are impaired the acrimony of the urine

* The terms formation and development or evolution are not synonymous. An organ may be formed without being ever evolved. The heart, the brain, &c., are formed long before their full development or evolution.
is very much increased—sometimes to such a degree as to de-
ude almost the entire surface upon which it passes. Moreover,
he finds it very difficult to prevent his garments and bed from
being more or less impregnated with urine, the odour of which
is a source of great annoyance both to himself and to those who
approach him. Besides the inconveniences consequent upon
the incontinence of urine, the patient suffers from the friction of
his clothes against the mucous membrane, and, whether stand-
ing or reclining, is compelled to protect this surface. This he
does by a very badly contrived apparatus, consisting of a con-
cave metallic pad, fixed to a belt and placed over the mucous
surface, and to which is attached one end of a folded napkin
which passes down over the perineum and is fastened by its
other extremity to the posterior part of the belt. It is a matter
of no little surprise, that one reared in the "land of inventions"
has not been provided with something more appropriate to
comfort as well as to cleanliness. By substituting for the napkin
a bag of India rubber fabric, or even of oiled silk, containing a
sponge, this would absorb the urine, which could from time to
time be expressed and the sponge replaced. By renewing the
sponge occasionally, or cleansing it well, all unpleasantness of
odour would be effectually avoided.

But the patient suffers considerable inconvenience, and we
might add danger from the forcible protrusion of the mucous
membrane by the abdominal contents. The walls of the blad-
der are well known to be very thin when compared with those
of the abdominal parietes—and are in this case, as has been
already observed, almost as thin as writing paper at the umbil-
cal cicatrix. Whenever he takes much exercise, or is affected
with cough, the tension causes much irritation and pain in the
bladder, which are increased by muscular efforts. Indeed he
is constantly in danger of rupture, which might prove fatal.

In view of this state of things the question naturally presents
itself—is there no relief to be expected from mechanics nor
from surgery? As this protrusion is really herniary, the appli-
cation of a truss might be proposed. But it is evident that the
pad could not be endured by the mucous surface to which it
would have to be applied. The irritation would soon become
intolerable, whatever might be the nature of the pad or of the
We know of no mechanism by which the protrusion may be prevented.

Surgery we think promises more—nay, entire relief, so far at least as relates to the protrusion. We have stated, that after being in bed during the night the position of the mucous surface is reversed; that in lieu of a protrusion we find a depression. In the case of the child referred to as being in our museum, and similarly affected, the body is suspended by the knees to the upper part of the bottle in which it is immersed in alcohol. In this position the weight of the abdominal contents is entirely removed from the bladder, and this, so far from protruding, recedes into the abdomen so as to present a pouch. In this case it would certainly be very easy to bring the lateral borders of the pouch together, to denude them just beyond the mucous membrane, and to maintain them in apposition with pins or sutures until adhesion would be effected. In short, by an operation similar to that for hare-lip, the skin upon each side of the mucous surface might be made to adhere. In this event the mucous surface would be folded upon itself, and would constitute a sac more or less complete. The effect of such an operation, if successful, would be to conceal the mucous surface from view, to strengthen this portion of the abdominal walls, and, if necessary to permit the application of a truss. The urine would continue to flow as fast as secreted, but if caught in a sponge, as suggested, it would be attended with comparatively little inconvenience.

In the case of Mr. H. the operation would not be so easy as it might have been in the child alluded to. Yet upon a careful examination of the parts we found that the integuments on each side of the abdominal fissure were much more yielding than might be supposed, and that by gradual traction they could be brought entirely over the mucous surface so as to be secured in apposition. The operation could certainly be neither very painful nor in anywise dangerous.

Having fully explained our views to Mr. H., and offered to make the attempt to relieve him, he consented, and promised to return to Augusta after a short visit to a neighboring city. Should his fears not deter him from doing so, we will lay the result before the profession.
Notes upon the Properties of Saliva and its use in Digestion; taken from the Lectures of M. Bernard, and contained in a letter from Juriah Harriss, M. D., of Georgia, now in Paris.

It is not my object now to mention those properties of saliva which are so well known and generally recognized, but merely to give a short sketch of some recent experiments and their results, by M. Bernard. I shall find it necessary, however, in order to give clearly his views, to mention some of the established properties of this fluid. First, then, it is generally admitted that saliva is alkaline. The mucus of the mouth, as all other mucous secretions, is acid when exposed to air. This has led some to believe that the saliva is acid. It is true that the saliva when taken from the mouth is sometimes acid, but this is the result of a great quantity of mucus being mixed with it. If a person whose saliva seems to be acid will smoke, he will soon expectorate the mucous secretion, and then his saliva will be alkaline. Among the great variety of substances which we eat, saliva acts alone upon starch. It acts neither upon albumen, fibrin nor oils, nor indeed upon any other substance of which our food may be composed. If saliva be allowed to remain in contact with starch for a short time, the starch will be transformed into dextrine; if allowed to remain longer, it will be changed into sugar; and if still longer, it will be transformed into lactic acid, as it is generally believed. If saliva be taken from the mouth and placed into a glass vessel it will distinctly separate into three strata. The first will be the mucous secretion which floats upon the top, the next the clear saliva, and the last the epithelium from the mucous membrane of the mouth, which is deposited at the bottom of the vessel. M. Bernard has discovered and demonstrated in his lectures, that although the anatomical construction of the salivary glands is apparently the same, yet the fluids secreted from them are different and their office somewhat unlike. He has shown that the fluid secreted by the parotid is clear and limpid, whereas that secreted by the sub-maxillary is glutinous. The sub-lingual secretes the same kind of fluid as the parotid, and the orbital (formed in the dog) secretes the same as the sub-maxillary. These facts, so im-
portant to understand well the office of this fluid, he demonstrated by taking the fluid separately from each gland. Thus, to prove that the parotid secreted a clear limpid fluid, he cut (upon a dog) down to the duct of steno, ligated it, and then made an opening into it upon the portion of the duct nearest the gland. He formed a fistula. To show that the sub-maxillary and orbital glands secreted a different fluid, he performed the same operation upon their respective ducts. As acids are well known excitants of the glands, he placed in the mouth of the dog some acid; this caused the saliva to flow freely, when he caught it in separate vessels as it ran from each gland. Thus he had the saliva from each gland pure and unmixed. He proved first that the fluid from each gland was alkaline, and that when they were mixed they were yet alkaline. He next showed that the saliva from the parotid and sub-lingual was clear and limpid, whilst that from the sub-maxillary and orbital was glutinous. He showed also that if you triturated either of the glands in a little warm water you would have the same kind of fluid as that which the gland naturally secreted—that the parotid and sub-lingual would produce a clear fluid, and the sub-maxillary and orbital a glutinous.

The discovery that saliva would transform starch into sugar was made by M. Zench, a German, and since then the error has continued to prevail. M. Bernard has most conclusively shown that saliva does not possess this property; that it cannot of itself produce this effect; but that it derives it from the mucus. He demonstrated it thus:—He took the saliva, pure as it ran from each gland, by the means just mentioned, and mixed them in separate vessels with starch. In neither of these vessels was sugar to be found. He then mixed the saliva coming from each gland in a vessel in which he also placed starch, nor yet was there the least manifestation of the presence of sugar. This proves, beyond a doubt, that the property does not exist either in the saliva from any one gland, nor in them all combined. If, however, the saliva be taken from the mouth and placed in a vessel with amidon, the sugar will be readily produced—showing that it derives the property from this cavity. What then gives it the property to produce the change? It evidently derives it from the mucus which becomes intimately
mixed with it in the mouth. This is proven from the fact that the mucous secretion from any mucous membrane will produce the same change—even that from the rectum: and farther, a mucous membrane placed in a solution of starch, will produce, as a result of its action, sugar, and finally lactic acid. M. Bernard stated that any fluid from the economy will bring about the same result, even the serum of dropsy; but he added, one must not suppose from this fact that they would assist in digestion. He however stated that he once saw a case in which the saliva from the glands did apparently produce this effect before it had entered the mouth. This was a man who was wounded in the late revolution. The ball entered one cheek, passed through the mouth, and made its exit through the other cheek, opposite its place of entrance; it cut the duct of steno in its passage, and a fistula was of course the result. This is the only case among the four or five which he has seen that seemed to contradict his theory. He found, however, upon a minute examination of the case, that there existed a communication between the fistula and the cavity of the mouth, through which communication the mucus from the mouth became mixed with the saliva. This apparent difficulty was thus satisfactorily explained.

Ptyalone is one of the principal components of saliva. It is insoluble in alcohol. If alcohol be placed in a vessel which contains saliva, ptyalone will be deposited in the bottom. It is this which gives to saliva its viscidity. It is found in the substance of the glands, and may be obtained from them by macerating them in a little warm water.

The test of the presence of amidon is tincture of iodine, which turns a mixture of it blue. It was by this test that M. Bernard proved that there was no sugar produced, and that the starch was unchanged when placed in contact with saliva taken from the glands before it had entered the mouth. When dextrine is present, the same test gives a rose color, whereas with sugar no color is produced. When sugar of the second kind is placed in a warm solution of potash, a blue color is manifested. I mean the grape sugar, for it is the only kind found in the animal economy. Sugar of the first kind, or cane sugar, boiled with an acid, is transformed into sugar of the second kind, after
which no farther alteration takes place. Cane sugar is changed into grape sugar in the stomach, and is then digested. Grape sugar is constantly formed in the liver. If you kill an animal, and a short time after analyze the blood of the hepatic vessels, sugar will be found in it—it is formed in the liver, and regurgitates into these vessels after death. If you kill the animal and take the blood from these vessels immediately, no sugar will probably be found: this is owing to the fact that time is not allowed for the regurgitation. The test which M. Bernard uses to prove the presence or absence of sugar in saliva or other fluids is tartrate of copper and potash. If it be present, the solution is turned blue by this test. M. Bernard, after showing that saliva taken from the mouth (or rather the mucous) would turn starch into sugar, gave a dog a solution of it to drink, into the stomach of which he had placed a canula. The canula was placed in the stomach in the following manner:—An incision was made upon the left side, just below the ensiform cartilage, in the direction of the fibres of the rectus muscle of that side—the fibres of this muscle assisted in the retention of the instrument. After cutting through the walls of the abdomen, and coming upon the stomach, he drew a portion of this through the orifice, and passed a threaded needle through the walls of the stomach; he then cut a hole in the stomach near the string, placed his canula in this orifice and secured it with the string. The other end was passed through the external opening, which was closely sewed up around the canula. The canula was of course closed, so that no gastric juice could escape, except when desired. A silver canula was used, because the gastric fluid does not act upon it. About two hours after giving the dog this mixture of starch, he collected it in a vessel through the canula, and no sugar could be discovered by the test before mentioned, but the starch was unaltered. This seems a contradiction to his statement, that the saliva would turn starch into sugar. The contradiction is however only apparent, for it can be easily accounted for. Why then was not the sugar produced? The solution was taken into the mouth, and immediately swallowed, so that the saliva had not sufficient time to act upon the starch in the mouth, and it did not carry a sufficient quantity into the stomach to produce it there; and be-
sides, the gastric juice, being acid, does not allow the action to take place in the stomach. This is not a peculiar property of this juice, for any acid will prevent the action.

M. Bernard thinks that saliva performs little or no office in digestion—its action being mechanical, and little or not at all chemical. When an animal is masticating food, the greater or less flow of saliva in the mouth is not occasioned by its chemical composition, but by its mechanical properties. If you give an animal a hard or dry substance to eat the flow of this fluid will be very great; but if you give him a soft or moist article of food, the flow will be much less. To illustrate this point, M. Bernard performed his experiments upon a horse, as they were more satisfactorily done upon this animal than any other. He found that the horse swallowed naturally four boluses per minute, but when he cut the duct of the parotid gland, mastication and deglutition were retarded, and the animal swallowed with much more difficulty and less frequently. In this state the horse could swallow but one bolus per minute, if the substance was dry, and but two if it was moist. This proves that saliva does assist a great deal in mastication and deglutition, from its mere mechanical properties. His process of getting the saliva from the horse, was to cut the oesophagus, and to give the animal a bolus of bran, which, when he swallowed, made its exit through the opening in this conduit. The saliva is then obtained by compressing the bolus. The glands which secrete limpid saliva are for mastication, as they mingle rapidly with the food; but those which secrete glutinous fluid are to assist in deglutition. Saliva is much more active when there is salivation or any inflammation of the mucous membrane, because there is more mucous mingled with it. Saliva, in transforming starch into sugar, gives off a gas; hence, if the gastric juice is not sufficiently active to prevent the action in the stomach, digestion will be more or less retarded, and the stomach filled with gas. This is probably a frequent cause of dyspepsia. If you cut the pneumogastric nerve, the food can no longer enter the stomach, but will be arrested in the oesophagus, just where it passes through the diaphragm. This is caused by a constriction of the muscular fibres at this point. This experiment was made upon a rabbit. Both the pneumogastric nerves were cut, after
which the animal eat bread as though nothing had transpired. Wheat bread was given to it in order to distinguish it from the food which it might have had in its stomach previously. After the animal had eaten he attempted to vomit. These efforts were caused by the oesophagus being filled, and some of the food getting into the larynx and producing a little suffocation, which induced him to attempt to rid himself of the source of annoyance. This phenomenon of vomiting always occurs in this experiment. M. Bernard has made this experiment upon dogs and other animals, and always with the same result.

Extract from another letter from Dr. Juriah Harriss.
I will give you the outlines of a case I saw at La Charité, under the charge of M. Velpeau. It was one of Popliteal Aneurism, which he attempted to cure by Galvanism. He passed the fluid through it by means of metallic pins, which were stuck through the tumour. The next day this was not cured as some thought it would be, by coagulating the blood, but the whole leg was much swollen and the knee very tender to the touch. He applied poultices, to reduce the swelling, but without success. About five days after the use of galvanism he tied the femoral artery at the middle of the thigh, the second day after which gangrene took place, and extended to the knee—the third day he amputated the limb, and upon the fourth, gangrene commenced in the stump, and the man died the night of the fourth day. The gangrene is not attributed to the galvanic fluid, but to there not being a sufficient number of anastomosing branches to keep up the circulation in the leg, for the man was 55 years of age.

ARTICLE XIII.

In the February No. of this Journal, I observed an article on Quinine, (taken from the Charleston Medical Journal and Review,) by Dr. Holmes, of Newberry, So. Carolina, in which he states that his "experience has led him to look upon large doses of quinine, as a sedative to the vascular system; also possessing
a tendency to augment and originate a determination to the brain;” this, he says, “has led to its exclusion in fevers accompanied with cerebral congestion.” Now if quinine is an arterial sedative, it is the very remedy indicated in fevers accompanied with congestion of the brain; for, together with its “sedative action upon the circulation,” it is the most powerful febrifuge we possess, having a peculiar and mysterious property of equalizing the circulation—a property, I believe, admitted by nearly every physician, who has had much experience with the article. If this arterial sedative, as Dr. H. calls it, in the same dose, acts as a sedative to the circulation, and at the same time “originates and augments a determination to the brain,” it possesses a power possessed by no other medicine in the materia medica, and will at once destroy our theory as to the “modus operandi” of this class of medicines.

I think Dr. Holmes makes too sweeping an assertion, when he says that “quinine has been excluded in fevers accompanied with cerebral congestion.” The great mass of physicians of the South and South-west use quinine in our autumnal fevers, whether accompanied with congestion of the brain or not—having learned from experience that it is one of the most potent remedies they possess for removing this serious complication. Dr. H. could not have read Dr. Lavender’s able article on congestive fever, published a few months ago, in the American Journal of Medical Sciences, or he would not have made so bold an assertion. If quinine was excluded from every case of fever, accompanied with congestion of the brain, or nervous excitability, we would have very little use for this inestimable febrifuge, in our autumnal fevers.

Again, Dr. H. says, “the South and South-west have exultingly exclaimed ‘Eureka,’ and hold up to us morphine as the long sought desideratum” to prevent quinine from “originating and augmenting a determination to the brain.” I think here Dr. H. is mistaken; the physicians South and South-west, I presume, combine morphine with quinine, to prevent its unpleasant effects upon the optic and auditory nerves, and not to prevent congestion of the brain; the merest Tyro in medicine would not think of giving morphine, to prevent congestion of the brain.

Dr. Holmes passes quite an encomium upon the power of
Digitalis, in preventing the unpleasant effects of quinine. I have never used digitalis in combination with quinine in fevers, but am inclined to look upon it as a doubtful remedy. Dr. Pereira, in speaking of its effects in fever, says—"it cannot be regarded, in the most remote way, as a curative means; on the other hand, it is sometimes hurtful. Thus, not unfrequently, it fails to reduce the circulation; nay, occasionally, it has the reverse effect, *accelerates* the *pulse*, while it *increases* the cerebral disorder, and perhaps *irritates* the stomach. Sulph. Ether (a cerebral stimulant) has greater power in preventing the unpleasant nervous disorder, produced by large doses of quinine, than any medicine with which I am acquainted. If Dr. H.‘s theory was correct, its effects would be just the reverse: I first used sulph. ether in combination with quinine; having heard the venerable Dr. Chapman, of Philadelphia, speak of it, as the best remedy he knew of, to relieve the tightness about the chest, and roaring in the head, complained of by persons under the influence of quinine.

Dr. Holmes mentions quinine as the "sheet anchor of the physician's hopes, in congestive chills." Dr. H. here seems to have forgotten the view he took of the physiological effects of quinine in the beginning of his narration. In most of the cases of "congestive chill" (a very inappropriate name, for all chills are congestive) which I have witnessed, the brain was the organ most frequently congested.

I do not think that quinine should be classed either as an arterial sedative, or stimulant. The great diversity of opinion upon this subject, among physicians, is enough to convince any one, that it does not possess either power to any great extent. I look upon quinine as an antidote to malaria, and hence its virtue in all diseases having a malarious origin. Malaria, acting as it does, upon persons of various idiosyncrasies, does not always exhibit the same phenomena: in one, the pulse may be depressed below the natural standard—in another, accelerated; the latter is the most frequent effect. Now in either case, if quinine be administered, the pulse is brought to its natural frequency, the poison in the system being neutralized. This poison, I conceive, acts upon the nervous system, especially the cerebro-spinal, and quinine, its antidote, acts upon the same field.
Dr. Yandell’s Medical Notes of Europe. [April,

PART II.

Reviews and Extracts.

BIBLIOGRAPHICAL NOTICES.


From Professor L. P. Yandell, we have been presented with a copy of the above work, forming quite a neat volume, and containing the notes of his highly gifted son, made during his two years sojourn in Europe. We learn from the St. Louis Medical and Surgical Journal, that even at the early age of ten years, this youthful author gave evidence of great promise and worth; and his recent letters (several written before the age of manhood and expressly to relieve the editorial burdens of a father) now compose a volume of nearly 350 pages. May such a son long live to lighten the labors of his worthy sire, and prove an ornament, as he assuredly will, to the profession of his choice!

Our estimate of this book, we propose to exhibit, by transferring from it to our pages, such information as we think may interest our readers; and this we shall do, without any formal review of its contents.

We first present the preface of the author.

Preface.—It was not with any expectation of making a book, that I commenced my Notes on Medical Matters and Medical Men in Europe, which, for more than two years, have occupied so much space in the Western Journal of Medicine and Surgery. The letters were written to one of the Editors, and, at first, without any object beyond his personal gratification. They were deemed by him worthy of publication, and forthwith I was enrolled “Foreign Correspondent” of the Journal. In the midst of engrossing studies, which left me but little leisure, I was induced to continue the correspondence, not more by the evidence afforded me that my contributions were well received, than by the assurance of the working Editor, that they lightened his onerous labors. The correspondence, commenced and continued in this spirit, has, at length, grown into a volume. As the successive numbers were passing through the press, a few extra sheets were obligingly set apart for the author by the publishers, and these make the volume now presented to the reader. With this explanation, no apology will be necessary for the style in which it appears.
Medical Students in London.—The students attending the hospitals and lectures in London have none of the affability so characteristic of young men in our country; neither are they so fine in appearance as those you are accustomed to see. They are earnest, assiduous students, but distant and indifferent; crowding around their teachers, eager to hear, careless whether standing in your way or not, and looking all the time most ludicrously frigid. Students of the same small class will often be found wholly unknown to each other. There are those I have seen who have followed Mr. Liston and other teachers through the hospitals for three or four years, and expect to take their degrees soon, without ever having exchanged salutations with them. I know a class consisting of five students dissecting for Mr. Liston, who meet every morning, and have dined together, on an average, twice a week for two months, who, nevertheless, profess no acquaintance. I inquired of one of them, a day or two ago, the name of a gentleman, pointing to one of his class-mates. "Well, I declare I don’t know," was his reply. But they are students, in truth. You may walk into the library room of the University College and find twenty or thirty young men poring over their books, from which they are taking notes, not one of whom will raise his head to see who you are. You ask the librarian for the book you wish to consult; it is handed to you immediately, and you take your seat at one of the tables without your next neighbor’s turning his eyes to see whether you are an acquaintance or a stranger.

Dr. Quain on Strictures of the Urethra.—In his clinical lecture, some days since, Dr. Quain insisted that there is no such thing as purely spasmodic stricture of the urethra. In cases of stricture, after using fomentations to the lower part of the abdomen, and perineum, a warm bath, tartar emetic, a saline purgative and opium, he recommends the introduction of a soft catheter, instead of the one commonly employed. He is in the habit of using an instrument of this description both in hospitals and his private practice, and he prefers a large catheter, which he has sometimes been successful in introducing after surgeons had failed to pass a small instrument. He can give no directions as to the manner of introducing the catheter, dexterity in this, as in nearly all the operations in surgery, depending upon practice. He advises students to carry a catheter in their pockets, and to take every opportunity to introduce it into the dead subject. Hold the instrument loosely, are his directions, and rather suffer it to pass by its own gravity than use any force to carry it forward. He spoke of two cases of retention of urine, one occurring in a young man in consequence of stricture; the other in the person of a man eighty years of age, produced by enlarged prostate, which after existing for some time, brought on paralysis of the bladder. In the young man the bladder could be felt above the pubis, round and well defined; in the man advanced in life this roundness was absent, and the outlines of the distended organ were not well defined. The urine in paralysis of the bladder is muddy, and, under the miscroscope, purulent. He in-
jects the bladder in such cases with warm water to wash it out, and gradually reduces the temperature of the water until it is cold, which acts favorably in restoring the contractility of that viscus.

The Hunterian Museum.—The Hunterian collection contained, in all, ten thousand five hundred and sixty-three specimens. Of these 963 pertained to osteology, 1345 to natural history, 1215 were fossils, 617 dry preparations, and 3745 preparations in spirits; constituting the physiological department. The pathological department contained of preparations in spirits 1084 specimens, dry preparations 625, monsters and congenital malformations 218, calculi and concretions 536, microscopic preparations of normal and abnormal structures 217. The members of the College have added 12,347 specimens to the museum; of which, in the physiological department, 2119 are osteological, 240 are dry preparations, 1998 are in spirits, 427 relate to natural history, and 1200 are fossils; and, in the pathological department, the preparations in spirits are 2142, the dry preparations 1355, the monsters and congenital malformations 157, calculi and concretions 884, and the microscopic specimens 1791.

The museum, through the liberality of its proprietors, is open four days in the week, instead of two, and under special circumstances visitors are often admitted on the other two. The library consisting of works on all branches of medicine as well as the collateral sciences, embracing a great number of most costly books relating to natural history, amounts to 20,000 volumes; it is kept complete by the regular addition of new works, and affords every facility for study, being open from 10 o'clock until 4 daily. The books have cost the College about £10,000, and the annual expense of the library is about £600. The average weekly number of visitors is one hundred and twenty. The Council, some years ago, instituted studentships, three in number, with salaries of £100 per annum, which are held for three years. The appointments are bestowed as the rewards of merit, the test being a strict examination.

Test for water in alcohol.—In no country are physicians more interested in knowing whether the alcohol they use is free from water than in the United States. There are various methods known to almost every one for ascertaining this, but there seems to me none so simple, and few, I am inclined to think, which succeed so well as that of M. Casoria, published in the Journal of Medical Chemistry. It is based upon the property possessed by the common hydrated sulphate of copper of losing its color when it becomes dry, and regaining it when again brought in contact with water. Thus, if we place a piece of anhydrous sulphate of copper in a vessel containing the alcohol which it is wished to test, in a short time it becomes blue if the alcohol be mixed with water, whereas if it is absolute the salt will remain white.

Thé action of Strychnine on the Bladder.—M. Trousseau, in his
Traité de Thérapeutique, speaking of strychnine, says: "We have not seen any secretion rendered more active by the nux vomica if it be not the urine, and here not only is the secretion more abundant, but the excretion is both more frequent and more energetic, to such a degree that some patients are obliged to urinate every hour." Trouseau is one of the few writers on medicine who have indicated this predilection, so to speak, of strychnine for the urinary apparatus. Several cases have occurred recently in the wards of M. Vigla, at the Hôtel Dieu, which, while they tend to confirm this opinion, suggest some reflections of the highest practical importance.

The subject of the first case was a man aged forty years, who had been taken five months before, without any known cause, with lassitude and feebleness in the legs, which phenomena gradually became more intense, and ended by constituting a true paralysis of the inferior extremities. He was admitted into the ward, where he was treated at first by revulsions upon the digestive tube. then by strychnine. M. Vigla is accustomed to commence with strychnine in the dose of one-fifth of a grain per diem, given in a gum julep of four ounces. He prefers this mode of administering it both to the endermic method and the form of pills. He has remarked that the effects of the medicine are more rapid and complete when it has been dissolved before reaching the stomach, since this organ thus effects the absorption much more promptly than when both its solution and absorption are required at the same time.

The first effect produced in this case was a more abundant secretion of urine, then frequent desire to micturate, during which act there was slight scalding; subsequently there were twitchings and pinching in the legs, and a very marked return of mobility, so that the patient was able to walk without much difficulty. The augmented activity of the bladder, the more remarkable as there existed at the time the patient entered the hospital a commencing paralysis of this organ, continued only for a few days, and has diminished in the ratio with which the strychnic phenomena have manifested themselves in the muscles of the extremities.

The second case relates to a man who has been sick for six months. The affection commenced by constipation, difficulty in defecation, sluggishness of the bladder, pains in the back and legs, the latter growing so weak that on his entry, about four months ago, he was totally unable to walk. The treatment that he had undergone before coming to the hospital consisted in venesection, hip baths, pilaries of cherry stones, wine of cinchona and gentian. When examined for the first time, he had almost complete retention of urine resulting from distension of the muscular fibres of the bladder, which were deprived of their elasticity. Belladonna was first prescribed, then strychnine in the same dose and manner as in the case just related. Here, equally as in the preceding example, the first symptoms produced were manifested in the bladder—frequent disposition to urinate, accompanied by scalding during micturition; convulsive twitchings in the muscles of the legs and thighs. At this period (April) the
strength has increased, and the patient has commenced walking with considerable facility, although he still throws one of his legs slightly to one side.

The last case is that of a man, who in September last, was attacked with a myelitis, which became chronic. He entered the hospital on the 20th of February, at which time it was wholly impossible for him to move his legs. He was put upon strychnine, and, as in the two others, he experienced tremblings and twitchings in the legs, and even pretty severe pains; a little increase of activity in the secretion as well as excretion of urine. A varioloid, so light that it did not even suppurate, supervened, and the strychnine was obliged to be suspend- ed. But, singular to relate, under the influence of the varioloid, at the end of seven or eight days, the paralysis seemed to be modified, and now the subject, lying upon his bed, can move his foot from the horizontal plane which it has occupied, and lift it to some height. The retention of urine has ceased, and there is no longer any difficulty in its expulsion.

Before proceeding to give some other instances of an analogous character, I may submit, that should ulterior and more extensive ex- periments with strychnine demonstrate that it has an almost specific action upon the muscular fibres of the bladder, we may hope to derive very great advantages from its employment in certain paralyses of this organ, whether they be idiopathic; the result of some mechanical cause, in which case strychnine is the principal element of the treat- ment; or symptomatic of some other affection, when it would consti- tute a useful adjuvant to stimulate the inert viscus, while appropriate means were being directed against the causes of the affection.

M. Mauricet has published in the Archives de Médicine (te. xiii, page 403) a short history relating to this subject, which, being unusu- ally striking, I translate entire:—The two sons of Mr. R., he says, the one 13, the other 14 years of age, both of lymphatic constitution, had labored since their birth under nocturnal incontinence of urine. I prescribed the alcoholic extr. of nux vomica in doses of ½ gr. morning and evening. Three days elapsed; the incontinence had disappear- ed and was not again seen during the use of the remedy. At the end of fifteen days, the nux vomica was discontinued; relapse. Consult- ed again. I made the same prescription; the incontinence again dis- appeared. The treatment was interrupted; another relapse. Finally, having taken the extract for the third time, and having continued its use during a month, the two patients were completely cured of their disagreeable affection.

M. Mauricet, after observing concerning these facts that they re- quire to be substantiated by new experiments, adds—"Nevertheless, in considering that the incontinence of urine has always disappeared under the influence of strychnia, and that it manifested itself anew at the cessation of the remedy, have we not ground for believing that the nux vomica contributed powerfully to the cure?"

One more case, and I dismiss the subject: M. Trousseau employ- ed strichnine with the most perfect success in a woman who, in con-
sequence of a fall from a considerable height, had been first paraplegic, and afterwards merely affected with a paralysis of the bladder. The latter affection yielded most promptly to the strichnine.

_Cancer of the Breast._ VELPEAU.—A peasant about fifty years old has returned to our service for a cancer of the breast. I say returned, for she had presented herself to us when the tumor was circumscribed, its limits clearly definable, its mobility evident—in a word, when it offered conditions favorable to the operation. But the tumor was the seat of no pain; the patient could not comprehend how a tumor which gave her no trouble was a fit subject for the knife, and, refusing the only efficacious remedy that we could propose, returned to the country. Today she asks for what at that time she could not be prevailed upon to accept; today the tumour is ulcerated, adherent, and extends perhaps to the ribs. This is a trouble that you will often meet with in practice. You will see the operation rejected at the moment when it is opportune, and solicited at a later period, when the progress of the diseases has rendered it almost impossible, or at best of doubtful success. And this is particularly the case when the cancer causes no pain, especially as women find physicians who give them counsel more in accordance with their taste in altogether disconcentring the operation or in postponing its application. This order of physicians may be subdivided into numerous genera. The first are charlatans, whose only end is to inspire the patients with a false security, the consequence of which it is needless to allude to. There are others, and these may perhaps be conscientious, who believe in the medical cure of cancer, at least in certain cases; these essay internal medication before resorting, if it should become necessary, to the removal of the tumor. It is not true that medicine ever made the smallest cancer disappear, and these pretended cures arise from an error in diagnosis. In good practice, he alone attacks cancer by internal remedies who is assured that the nature of the disease is not malignant. And should he have to deal with confirmed cancer, he is in a dangerous path; he loses precious time in dissipating or diminishing the engorgement of the tissues which surround the tumor, while he exercises not the slightest influence on the final result. This method, then, possesses not a single advantage, while it has many attendant evils.

In the first place, that cancer is often primitively a local affection I have not the slightest doubt, although this is a point which, as you know, has been warmly contested. In temporizing, then, or leaving the disease to become general, the cancerous cellule, if it really exist, is transported first into the circulation, afterwards into the other organs, and infection is the result. Granting, even, that the cancerous principle pre-existed in the economy, and that the tumor is but a manifestation of it, in removing this tumor, if you do not destroy the principle, you at least destroy one of its effects, without increasing in any degree the activity of the cancerous diathesis.

On the other hand, as a wound the operation offers no danger if it be made in time, a little while after the appearance of the morbid pro.
duct—when, for example, its volume does not exceed that of a filbert. In this case you relieve the patient by a small incision scarcely followed by reaction. I should advise you, and this is my practice, to operate as soon as the cancerous character is evident. To wait till the tumor ulcerates and extends, or even until the ganglia become affected, is to compromise the life of the patient as well as the character of surgery. When the ganglia are only engorged, the result is already uncertain, and if you would operate under such circumstances now, you will not do it when you become old. Young practitioners attribute this to the coldness of age, and, full of confidence in the powers of the art the duties of which they are just entering upon, they mistake for timidity what is but the fruit of experience. And after a first and even a second failure, they still repeat their efforts; but finally correcting themselves, they in their turn become old, and no more subject their patients to useless torture.

In the case which occupies us, the tumor is ulcerated, adherent, comprehending perhaps the ribs, and the ganglia in the axilla are enlarged. This lymphatic engorgement, which is nearly always cancerous, would deter me from any operation if the patient, seeing but too clearly the fate that awaits her, had not persuaded me by her repeated and anxious entreaties to give her, uncertain as it is, the sole chance that remains. The condition of the part, and especially its size and depth, forbids removal by the bistoury; caustics are scarcely of easier applications, but they disturb the economy less, occasion no fever, and although more painful, are less alarming to the patient. To what caustic should we give the preference—to the paste of chloride of zinc, or that of Vienna, or that of frère Côme? The latter possesses a particular danger belonging to the poisonous nature of arsenic, which constitutes its base; and although these dangers have been exaggerated, still they are not the less real, as there are instances to prove. And here the size of the absorbing surface augments it in a fearful degree. Besides, this paste produces great pain and high inflammation. That of Vienna produces a sanguineous discharge which fuses it, and its action is too superficial. That of the chloride of zinc attacks only fungous tissues or those deprived of their epidermis; you may hold it a year in your hand without feeling it, but the moment you remove the epidermis by a blister, it will take effect and burn you violently—a property as true as it is strange. It would be necessary here to denude a part of the tumor, and this initial step is very embarrassing; and let me add that this paste causes cruel suffering during the whole time of its application.

The black caustic, composed of sulphuric acid and saffron, without any precise formula, but so as to form a homogeneous paste, appears to me to possess incontestable superiority over all the others. It destroys every surface with which it comes in contact; it occasions no sanguineous discharge even when the skin is ulcerated and fungous; it occasions very little pain; the tissues attacked become dry, and suppuration arrives only with the eliminatory inflammation at the end of fifteen days; and during this time, without any dressing, with-
out any care, the patient may forget his eschar. Added to all the rest, the retraction of the eschar limits the extent of the cicatrix. It is true that its application is somewhat difficult; it adheres more to the spatula than to the tissues. As it burns all, the diachyelon cannot circumcribe it; it is not well applied except on a horizontal surface, and it is, moreover, liable to become fused. But these defects, which I am far from endeavoring to conceal, by no means counterbalance its good qualities, and I repeat that the black caustic is, in my opinion, preferable to all the others. I proceed to attack successively the various points of the tumor by partial applications.

**Fissure of the Anus; Subcutaneous Tenotomy.**—We are, aware of few local affections in which a longer catalogue of remedies has been proposed, than the one which forms the caption of this article. The very often intolerable pain which attends it, accompanied not unfrequently by spasm of the anus, demands active means to soothe the one and overcome the other. The employment of the history is not rarely required, though there are many cases for the relief of which all that is necessary, is the application of emollient and anodyne fomentations, or at most, cauterization with the nitrate of silver.

Dupuytren, it is reported, employed with considerable success a mixture of the following ingredients:

- Extract of belladonna, 3ij.
- Honey water, . . . 3ij.
- Adipis, . . . 3ij.

Carried into the anus by means of a wick or tent. By gradually augmenting the volume of the tent, the resistance of the sphincter is overcome. It appears desirable to make the tent as large as possible, for, although it causes very considerable pain at first, this soon ceases.

Cold water applied to the part, and decoctions of various substances have been much vaunted, but the three remedies which have been most insisted on within late years, are cauterization with lapis-infernalis and nitrate of silver, dilatation, and section of the sphincter.

Boyer, the first to propose incision of the sphincter, regarded this operation as invariably successful, though Roux, Béclard, and Richerand have all cited cases in which it has failed in their hands.

Dilatation has also had, and has still, its advocates—among others, Dubois, who declares that it constantly succeeds, and Béclard, Marjolin, Copeland, &c.

Without consuming further time in this way, I will say that the subcutaneous section of the muscle, as proposed by M. Blandin, appears to me to possess incontestable advantages over all other methods that I have ever seen used, and I have seen almost all used that the art possesses.

M. Blandin divides the operation into four stages:

1st. Puncture of the skin.

2d. Introduction of the finger into the rectum, and tension of the skin on both sides of the anus.

3d. Pushing the tenotome between the mucous membrane and the muscle.
4th. Division of the muscle.

The puncture of the skin is so simple that it is unnecessary to speak of it, save in relation to its seat, which is a matter of some importance. Practiced too near the anus, it renders the section of all the muscular fibres somewhat difficult, and exposes, while dividing them, to enlargement of the cutaneous opening; then, if the patient is obliged to go to stool before the cicatrization is perfect, the contact of the fecal matter with the wound will irritate it and determine an inflammatory action, which may even pass, in some circumstances, rare it is true, to the phlegmous state.

If the puncture is practised at too great a distance from the anus, some difficulty will be experienced in cutting the most internal fibres of the sphincter, which, I need not remark, it is always essential to divide completely. The proper distance at which to make the puncture of the skin is from five to seven lines from the anal opening.

If it be complained that I have given too much space to this portion of the subject, my reply is, that in subcutaneous sections of muscles the persistence of the integrity of a few very fine fibres may almost completely mar the results of the operation. Some years ago, when strabotomy was, if we may use the expression, the fashionable operation, it often happened that the complete section of the muscle, with the exception of one or two fleshy fibrils, produces no change in the direction of the ocular globe and it became necessary, by aid of a blunt crotchet to find those fibres which had escaped, in order to effect a cure.

That which obtained in the muscular fibres of the eye occurs equally in the section of the sphincter of the anus. It has happened to Blandin himself, and notwithstanding the care that this able operator invariably takes he has been more than once obliged to resort to a second section, in order to relieve a contraction which a first attempt had failed to overcome.

In connection with this subject, the following case which occurred in Blandin’s wards may prove interesting:

A young girl entered the service of M. Blandin a short time since, having an anal fissure accompanied by all the characteristic phenomena, spasmodic constriction, lively pain, etc. The operation was performed by the subcutaneous method; the recovery was rapid, equally as regards the fissure and the muscular constriction. Notwithstanding there still remained something—a little pain, a little constriction. The finger introduced into the anus passed, however, with sufficient facility, and M. Blandin thought that with time and the aid of opiates the girl would be cured. But, convinced that some of the fibres of the sphincter had escaped, he determined to perform the operation anew, as being a more simple and rapid means, and more certain of effecting a complete and definite cure.

What remains to be said of the operation is but brief. The introduction of the finger into the rectum is of real importance, since its internal face serves as a guide to the instrument inserted beneath the mucous membrane. This introduction may sometimes pre-
vent the destruction of the mucous membrane, which would certainly be far more easy without this introduction. The remaining steps of the operation do not differ from those of ordinary tenotomy. At the moment when the instrument divides the muscle the well known *bruit de craquement*, characteristic of the section of a tense muscle, is heard. When the operation is terminated, by the muscular section being complete, contraction ceases, and the finger introduced into the rectum manifestly feels a depression, if it may be so expressed, of greater or less length and extent, formed by the interval which separates the two extremities of the divided sphincter. The dressing consists simply in the application of compresses, wrung out of cold water, to the little wound, which cicatrizes in forty-eight or seventy-two hours. Five or six days suffice to reunite the two extremities of the muscle.

**Gun-Shot Wounds.**—The chief surgeon of Val de Grace, M. Baudens, during a short series of lectures which he delivered just after the Revolution of February, on gun-shot wounds, gave in a very few words the basis of his treatment of these accidents, which, from all accounts, was eminently successful in Algeria.

It is embodied in six precepts, which run thus:

1st. Of a compound wound make on the spot a simple one, by extracting the fragments of bone.
2d. Combat by cold water, and if need be by ice, the excess of the local traumatic reaction.
3d. Keep the inflammation local, and thus prevent it from gaining the important viscera.
4th. If the thoracic member has a comminuted fracture, extract the fragments, make suitable resections, and reserve amputation as a last resource.
5th. If the femur is fractured with fragments, amputate immediately; if the tibia or the fibula alone is fractured, endeavor to preserve the extremity, after having removed the fragments, and reserve amputation; if the fracture involve both bones, as a general rule, amputate immediately.
6th. Isolate, at whatever cost, the patients whose wound suppurate, in order to prevent the much to be dreaded miasmatic infection. In the absence of chambers, put the wounded under tents; in the absence of tents, place them in the open air, under hastily-erected sheds.

We give the next letter, the last of the series entire. We had marked it for republication when issued in the Western Medical and Surgical Journal. We believe it contains true and valuable information for all desirous of visiting the European Medical Institutions.

"What are you going to London for?" I once heard a young graduate in medicine asked, who had just had a passport filled for Great Britain. His reply was, "for the hospital advantages and anatomical
facilities.” I had passed a summer in that vast city only two years before, in search of medical knowledge, and felt the injustice my young professional brother would be doing himself in sojourning there any length of time, but in the hurry and bustle attendant upon disembarking from a long voyage, although I wished to make myself known to him and point out the error under which he was laboring, the opportunity for doing so did not present itself.

What, in reality are the hospital advantages of London? Great, very great. In comparison with those of Paris? Small, very small. And as for anatomical facilities, there is not a medical school, in any village in the United States, however small, which does not afford subjects for dissection cheaper and in greater abundance than either King’s College, or University College, or any other College in London.

I remember very well, that in the summer of 1846, when following the lamented Liston through the wards of the University College Hospital, I thought what an ample opportunity was afforded me for acquiring medical knowledge! At that time I fancied that he who saw most would learn most. It was not long, however, before I began to experience that there was something wanting—that there were too many students about the beds of the patients; that I saw disease, but could neither feel or hear disease; in a word, that my opportunities carried me to a certain point and there stopped. Not content with what I saw in University College Hospital alone, I followed Key, in Guy’s Hospital, Ferguson in King’s College Hospital, Lawrence in St. Bartholomew’s, and other surgeons in other hospitals; but still the same objections were present to me. I bethought me of the dissecting room, and through the kindness of Mr. Liston every facility was afforded me free of charge, which was effected by my dissecting in his private room. Those students, however, who were dissecting at that time were paying, if I remember aright, a guinea for an arm, 39 shillings for a leg, and from four to five guineas for an entire subject. For what they were paying for a single lower extremity in London, they might have dissected in Paris, from the first of November to the middle of April, and in Florence for two sessions of five months each, and had their knives regularly sharpened into the bargain.

Knowing that clinical lectures were of inestimable value, I looked about me for good teachers, determined to attend their courses with the utmost assiduity. Stanley amused me exceedingly the first two or three days by his pompous, inflated florid style, but I soon grew weary and ceased attending his clinics. Ferguson possessed even less talent for lecturing than Stanley, and although the matter of his lectures was pre-eminently sound, practical and valuable, his manner of communicating it was so unpleasant that my patience was soon exhausted. J. C. B. Williams, although by no means a lecturer of the first order, was still infinitely superior to either of those just named, and always succeeded in imparting much that was useful, notwithstanding his manner was offensively testy and ill-humored. Quain could almost be said to have been a pleasant lecturer, though he was
somewhat wanting in a very essential element of a speaker, animation. Without extending to greater length the list of clinical teachers, it may be said of the London faculty, that it would be a difficult task to find among so many men of extensive acquirements and reputation, so few who were interesting and attractive instructors. The power of imparting knowledge orally, so far as my observation extends, is possessed by a very small number of Englishmen.

Every medical school in London has in connection with it a hospital, access to which is obtained by paying, save in a few instances, a hospital fee, varying in amount in different hospitals.

Admission to the University College Hospital costs four dollars; to the London Hospital, ten dollars; to King's College Hospital, two dollars; and to Middlesex Hospital, five dollars.

The offices of dressers, house-surgeon and clinical clerk, in some hospitals, are obtained by purchase; in others they are awarded to merit. In Guy's Hospital a dressership costs two hundred and fifty dollars per annum; in the London Hospital it commands one hundred and fifty dollars, as is also the case in the Middlesex Hospital.

Attendance upon both the medical and surgical practice of University College Hospital costs one hundred and fifty dollars; upon either one alone seventy-five dollars per annum.

One cannot become an attendant upon the meetings of any of the scientific societies unless he pay the admission fee, varying in different institutions, but in all cases being of some moment to the student who wishes to take advantage of all the various means of improvement by which he is surrounded. How differently things are conducted on the other side of the channel!

In the first place the most abundant anatomical material is obtained at the Ecole Pratique or Clamart, during six months, for six dollars—for less than half the cost of a subject in London. And this, if one is not a candidate for a diploma from the Ecole de Medicine, is the sole outlay for medical knowledge. Should the diploma be made an object, the sum that the house-surgeon annually pays at Guy's will meet all the costs and give him thirty dollars to spare. In other words, the attendance upon one single course of lectures in any one of the schools and any one of the hospitals, in London, will cost more than attendance during four years upon the lectures of eighteen professors and twelve hospitals in Paris. In Paris a hospital fee is unknown, and the house-surgeoncy and clinical clerkship; instead of costing their occupants one or two hundred dollars, are sources of almost that much revenue, yielding to each, eighty dollars and their lodgings, the first year, and a hundred dollars and their lodgings during the second and third years.

In London, although each school has its hospital, the number of students in attendance on them is too great to allow of that close examination and continued investigation of cases, which is necessary to give clinical instruction the highest value of which it is susceptible. In Paris the case is different. The number of students at the Ecole de Medicine is, say one thousand. These are divided among ten
hospitals, and the hundred thus allotted to each are again subdivided and scattered over the building, some in the surgical, and others in the medical wards—some following Velpeau, others Gerdy, and others again Bouillaud.

Let us take La Charité, for instance, and observe how instruction is dispensed there. The patients are distributed through sixteen wards, and are committed to the care of eight physicians and surgeons. The wards are open to students from 7 o'clock, A. M. till 10, A. M., three hours, during which time the visits and lectures are made, and operations and autopsies performed. Now, Velpeau, attractive as he is, seldom has with him more than twenty or thirty students during his visit; as soon as he adjourns to the amphitheatre, which he always does at a regular hour, the number is greatly augmented by accesses from the other wards, and even from other hospitals. But during the hour of his stay in the wards he rarely has more students than I first stated, and because he has so many his visits are less profitable to students than those of his neighbor, Gerdy, for the very obvious reason that the few who accompany Gerdy have a much better opportunity for making a thorough examination of the cases. Bouillaud, although, as I have said before, one of the first clinical lecturers in the world, does not generally succeed in assembling more than ten or fifteen students, and consequently every one of them has an opportunity of examining the many interesting cases in which his wards so constantly abound.

French medical students well understand, as I suppose do all medical students who have seen hospital practice, that beyond a certain, and that quite a limited number, seeing becomes a thing quite impossible; and unless the student himself can see, hear and feel the patients, it is quite clear that he will walk the wards of the hospital for many a long day before he can become a diagnostician or practitioner. Merely breathing the atmosphere of hospitals is far from being adequate to rendering students competent physicians. A man, for example, can never learn diseases of the chest unless he auscult, and this he cannot do in a hospital if there be a large number of students. He can never educate his finger, so as to make it an intelligent servant in vaginal examinations, unless he has opportunities to use it. He may grow grey in looking at Hugier and Paul Dubois practice the toucher, and be none the wiser for it. It is indispensable, if he would become a physician, that he auscult, and percuss, and touch for himself. These are things that cannot be done by proxy, and the superiority of French hospitals over all others, consists in the facilities which they afford for these examinations in propria persona. In a single morning one may see a dozen cases of disease of the uteri, in Jobert's wards, and may auscult half this number of lungs in Bouillaud's wards, at least three times a week.

The industrious student in Paris may see in one morning the cases in both a medical and surgical ward, hear a clinical lecture, witness any operations that are to be performed, and be present at the post-mortem examinations. And if he be strong, and fleet of limb, he may
Facilities of Paris for Students.

follow Roux through his wards at the Hotel Dieu, Jobert through his at St. Louis, and hear Velpeau lecture at La Charité. No hospital, or library, or apothecary’s fees is necessary to all this. The matriculation ticket of the school of medicine, or a diploma from any other medical school, secures a card of admission to those hospitals; and in the absence of a diploma, a simple declaration of the fact of your being a foreign student or physician is sufficient, the ticket system having been introduced solely with the view of preventing improper persons from entering the hospitals, and even this obtains in only a few of them.

As I have already intimated, situations in the hospitals are neither bought nor given away; they are the reward of merit, free alike to the young and old, the rich and poor, to be obtained in but one way—by concours—which, with all the objections that may be urged against it, is, in my opinion, the best, and in truth, the only decisive test of merit.

Relative to that most important subject, anatomical facilities, one could not wish them greater than they are in Paris. There are two immense establishments set apart for dissections, the Ecole Pratique, and Clamart; the one within a few steps of the school of medicine, and used during the winter session; the other distant a mile or more, the most convenient, largest, and best appointed building of the kind in the world, and open both winter and summer. The demonstratorships and assistant demonstratorships are the reward of merit, conferred by concours. At the Ecole Pratique there are five or six rooms, each furnished with a demonstrator, and each containing eight or ten tables for subjects; and about as many rooms, containing four or five times the number of tables, at Clamart. The classes are composed of four or five members; the cost of the dissecting ticket is thirty francs a session; the number of subjects furnished is amply sufficient; the demonstrators are always at their posts, and are necessarily competent. Two courses on operative surgery are given annually: one in the amphitheatre of the Ecole Pratique, during the winter, the other at Clamart, during the summer. Besides these, which are embraced in the curriculum of the school of medicine, private courses can at all times be obtained from the different demonstrators, who also take, although contrary to the edict of the dean of the faculty, private classes on anatomy. Since I have alluded to the subject of private teaching I may remark, that the various internus and clinical clerks are but so many private instructors, whose services are to be obtained at the rate of five or six dollars a month, and it is by embracing the opportunities which these men afford that the student will learn most. Some years ago private clinical instruction in the hospitals was sanctioned by the administration, but being carried by the internus to too great an extent, the patients made such loud complaint that it became necessary to prohibit it. A physician, who was interne during the existence of the law permitting it, told me, that so great was the love of money or the love of teaching, he could not say which, a short time before the law was repealed, the internes spent almost the entire day.
in the wards, examining and re-examining the patients, very often rousing them from sleep before it was fairly light to begin the work of investigating their diseases, and, not satisfied with prosecuting it through the day, pursued it often by candle-light far into the night. Patients, at length, grew impatient and refused to submit to such torture; the law was abrogated, and under the present system private clinical teaching is conducted sub rosa. But the laws of a hundred faculties and administrations would be little heeded by the internes, when pecuniary reward was in question. Human nature can too seldom withstand the temptation of money, and French nature is not proof against it. Form a class of four, or even two, and offer an interne five dollars per month each, and the doors of the hospital turn noiselessly on their hinges, and the faces of the nurses wear a smile of welcome; the director never intrudes, the patients are your own, to be examined at your leisure, and the interne at your side to assist, direct and instruct you.

Orfila, strict, stern and severe as he was, never succeeded in suppressing private courses on anatomy and surgery at either Clamart or the Ecole Pratique, though he often swore he would make cadavres both of those who attempted to give and those who received them. They were given in spite of his watchfulness and in defiance of his threats, and would have been given had there been a score of deans all equal to Orfila. They are given now under Bouillaud’s administration, and will continue to be given till there are no students willing to pay five dollars a month for a course on the former, and ten dollars for a complete course on the latter subject.

Paris abounds in private teachers. Private instruction can be obtained on any subject. Magendie’s assistant delivers lectures on Physiology; Blandin’s assistant on Operative Surgery; Paul Dubois’ assistant on the Toucher; the keeper of Dupuytren’s Museum on Pathological Anatomy. The price of these tickets varies from six to ten dollars. Then there are Sichel’s, and Desmarres’, and Tavignon’s clinics on diseases of the eye, a clinique on diseases of the ear, etc., etc.

Another advantage that cannot be too highly estimated arises out of the circumstance that there are in Paris hospitals devoted exclusively to a certain class of diseases; as the Du Midi hospital to venereal diseases, St. Louis, a large portion of it, at least, to diseases of the skin, and other hospitals to other diseases.

Without extending my present and last letter to greater length, the advantages afforded by Paris may be briefly said to consist in the number, size, and wise and liberal administration of her hospitals, the abundance of anatomical material, the number of private clinics and private courses, the talent of her public and private teachers, the cheapness of instruction in all its branches, the number and reputation of her scientific bodies and associations, and the system of concours, which, while it secures the highest qualifications, is impartial in its operation, affecting alike the rich and the poor, the befriended and the friendless.

In bringing to a close this series of letters, extending now through
more than two years, and over six volumes of the Journal, I trust I may be indulged in a few words personal to myself. The correspondence was commenced without any definite plan, and without the slightest expectation that it would swell to such an extent, the chief motive which commenced it and has kept it up, having been a desire to lighten the editorial labors of one to whom I owe all that a son can owe a father; and if I have accomplished nothing else by my letters, it is a source of unfailing satisfaction to me to know, that I have at least been successful in this. The reader who has had experience in literary matters will not need to be told, that the preparation once a month for the press of a long letter, amid the labors of a medical student in Paris, is no small tax upon one's time and energies. But through all the toil and weariness of it I have been cheered at every stage by the assurance, that my communications were well received. The favor, indeed, with which they have met, far exceeds anything that I could have expected or hoped. With an expression, then, of my thanks to the readers of the Journal for their indulgence, and to my brethren who through the press have spoken so approvingly of my letters, I here bring the correspondence to a close.

Louisville, Ky., Oct. 29th, 1848.

The reader will recollect we have frequently before drawn from this same source, Dr. Yandell's letters, as issued from the press, during the past two years.


We acknowledge with pleasure the receipt of this excellent work. The numerous additions it has gained in passing through the hands of its able reviser, Dr. Robert Watts, jr., which enhance its value, and the manner of its execution, does justice to the well established reputation of its publishers. Its title page reads, "A Text Book of Practical Anatomy;" but in the present enlarged and improved condition of the work, it might well be denominatd, "The Library of Practical Anatomy," for it indeed contains all that the student can possibly require, in the prosecution of his studies. To sum up: we cannot better signify our approbation and commendation, than by stating the fact, that it is our old, much esteemed favorite, the Dublin Dissector of Robert Harrison, enlarged and improved, to adopt it to the wants of the American student, and these wants it most amply supplies.

H. F. C.

Here we have presented to us the most magnificent work on Anatomy ever published in this country. It is dedicated to Students of Medicine by the distinguished author, and we have no hesitation in saying, that is the Anatomy for them. Besides the clear, concise and correct description of the human system here so faithfully delineated, the whole subject is admirably illustrated with well executed engravings. But what renders this book so valuable is the important addition which it contains on microscopical Anatomy. This is what gives it a superiority over all others. We cannot too highly recommend this work to all studying Medical Science—the production of one of the most laborious and worthy members of the profession.


This, it will be perceived, is one of those reprints from English Medical Literature, to which the profession in this country is so much indebted. We thank the ever-industrious Publishers for remembering us in their distribution of copies.


This is another re-publication, for which we are indebted to its publishers in this country for a copy. We have already expressed our favorable opinion of this retrospect of Medical Science, and our frequent reference to its pages for matter under the head of extracts, is the best evidence of our estimate of its value.
On the comparative Efficacy of certain Medicines in Dysentery, and other Intestinal Fluxes of Hot Climates. By Dr. Papillaud, Brazil.—(Charleston Medical Journal.)

The treatment of dysentery has varied in different epidemics, and inflammation, once considered a cause, is only one form, alteration of secretion another; in the most decidedly inflammatory form, the purely antiphlogistic treatment is seldom sufficient, and often useless. In diarrhea the indication for sanguine emission is still less frequent—and even if it did exist, the physician is never called in, until the time for them has passed by. In Dr. Papillaud's private practice in France and in the hospitals of Paris, laudanum and starch injections, diet, and the extract of rhatany were usually sufficient, but he found since he practised in South America, that the former were insufficient, and that astringents usually aggravated the disease. In the province in which he lived, intestinal fluxes were very common, dysentery endemic and often epidemic towards the end of the summer. He experimented with castor oil, ipecacuanha, calomel, sulph. of soda; of the vegetable astringents, he tried rhatany and simarouba; of the mineral astringents, lime, acetate of lead, alum, and nitrate of silver; of narcotics, extract of opium and sulphate of morphia; from the result of these experiments, he determined to abide by sulphate of soda and opium, the effects of the other medicines being variable and uncertain. Castor oil does not sufficiently modify the intestinal secretions. Ipecacuanha is used not as an emetic, but as an antidysenteric. Introduced by the rectum, and causing neither vomiting nor purging, it is just as efficacious as when introduced into the stomach. Dr. Papillaud thinks its virtues have been overrated. The preparation and dose are not a matter of indifference. He prefers the infusion of the root, seven to thirty grains to four ounces of water, a table-spoonful every hour, as less provocative of vomiting than the powder. Calomel he rejects as uncertain, sometimes purging, sometimes being inert. The English practice of calomel and castor oil is very unsuccessful. The combination with ipecacuanha, in equal proportions in pills, is more efficacious. Sulphate of soda, he thinks, deserves the praise it received from Bretonneau and Trousseau, acting energetically and most rapidly. One or two drachms, dissolved in a small quantity of vehicle, and given in divided doses, usually arrest a dysentery in twelve, twenty-four, or forty-eight hours at the longest. Any acute dysentery which is not suppressed in this time by it, calls for the closer attention of the physician, either as presenting complications, or being of extreme gravity. No state of the pulse or tongue, counter-indicate its use in small,
moderate, or large doses. In twelve or twenty-four hours the bloody stools are replaced by natural ones, the number is diminished to three or four, and the tenesmus dissappears. In other intestinal fluxes it is equally efficacious. In only one very severe, advanced case, it increased the diarrhœa; in three, it was without effect. Rhatany and simarouba deceived his expectations. In the greater number of cases an amendment took place after the first twenty-four hours, but dissappeared the next day.

Mineral astringents he condemns altogether. They caused violent pain in the stomach and bowels, increased the fever, and were of no benefit. A syrup of lime was only successful in some chronic diarrhœas without general symptoms.

Opium he considers equal to sulphate of soda, and together they formed one of the most efficacious combinations. He preferred the extract of opium, one grain in three to four ounces of vehicle, given in divided doses, and increased by a grain each day, if necessary; if the disease resists four grains, one grain of the sulphate of morphia was substituted, and progressively increased in the same ratio.

The sulphate of soda and opium were united, both because separately they were so efficacious, and further, because the sulphate of soda, not acting as a purgative, but as a general and local modifier, the action was prolonged by its union with opium, which prevented or retarded its expulsion by the action of the intestines.

Two-thirds of the patients treated by sulphate of soda and opium were cured in twenty-four hours. The maximum duration of treatment was five days, the minimum twelve hours, the average two days. Opium alone gave fewer rapid cures, but the maximum and mean remained the same. Ipecacuanha alone or with calomel gave an average of five days and a maximum of eight. The deaths were as one in ten; with the former method as one in twenty. With astringents the treatment was inefficacious in half the cases—one forth died; the duration of the treatment was from five to thirty days. General bleeding was indicated once in every twenty-five cases—local once in every fifteen.

These observations were collected in a province of Brazil, in twenty-nine degrees south latitude, therefore in an extratropical, warm region, and if we compare the results there with what occurs in France, we may conclude that the medical power of astringents in the class of diseases decreases in direct proportion to their acuteness and severity, and also in direct proportion to the elevation of temperature of the regions where they prevail.
The summary of his remarks is contained in the following conclusions:

1. Opium and sulphate of soda are the remedies, *par excellence*, in the great majority of intestinal fluxes, acute or chronic, sporadic or epidemic.

2. Either one of these, or both combined, suppress dysentery, without any danger.

3. Ipecacuanha, so much used in these diseases, is not a reliable remedy. When it did cure, it was owing neither to an emetic nor purgative property; it was most efficacious when tolerated; its introduction by enema was useful.

4. Calomel alone was more faithless still; added to ipecacuanha it promoted its toleration and regulated its action.

5. Vegetable astringents were seldom useful, and often hurtful. In the few cases where they are indicated they should be combined with opiates.

6. Mineral astringents were still less valuable, and more injurious than vegetable astringents.

7. The indications for local bleeding were very rare; that for general bleeding occurred only as an exception.

*Prophylactic Indications to be observed against the Asiatic Cholera.*—(New Orleans Med. and Surg. Journ.)

At the time when Asiatic Cholera seems on the point of reaching us, we deem it our duty to make known to our readers an interesting report on the prophylactic indications to be observed against this terrible malady, a report of which the Belgian Academy of Medicine is now discussing the results. This report suggests painful reflections. In effect, while around us, in Germany, in England, in Belgium, everywhere, the public mind is pre-occupied with the coming of the Scourge, the French Government alone seems content to remain quiet and inactive. The following is the summary of the results of the report.

1. To improve the sanitary condition. 1st, in the ignorance which exists of the virtual or efficient cause of epidemic Cholera Morbus, to endeavor to combat effectually the auxiliary or predisposing causes, which singularly favor its invasion, and influence so powerfully its propagation, its malignity, its treatment and its termination.

2. To observe carefully the preservation of the public health; to seek by all disposable means to destroy, to correct or at least to diminish the causes of insalubrity, by placing the poor and laborious classes in physical conditions similar to those in which independent persons are generally found.
3. To provide for the healthfulness of cities and of the country, as well as for the improvement of the condition of the indigent and for their education.

4. To direct Magistrates to neglect nothing for the removal of whatever may favor the development of the disease.

5. To take care to preserve the greatest cleanliness in inhabited places, in dwellings, and of person and clothing.

6. In the imminence of the disease to have the streets, lanes, crossings, public places, markets, &c., in cities and towns, and villages, swept frequently, not only during the day, but even at night also, and never to suffer dirt, filth, sweepings, excrement, animal and vegetable matter, in a state of putrefaction, to remain there.

7. To facilitate the flowing off of rain water, slops, &c., falling on the surface of the ground, and to permit no where near habitations, the formation of muddy and putrid pools.

8. To cleanse the sewers, ditches, ponds, canals, flat ponds, dung heaps, &c., during the winter or at the commencement of spring.

9. To arrange the perimeter of marshes, ditches, and ponds, and even of rivers with a gentle current, whose beds are partly exposed during the summer, so that their waters may be constantly elevated and may keep the banks submerged unless circumstances may not permit them to be cleansed or desiccated before the appearance of the epidemic.

10. If the disease makes its appearance in any particular locality, to defer or to forbid the cleansing or desiccation of the surrounding stagnant water, unless imperious necessity compels a different course; to prevent at that time even fishing in the lakes and ponds when it cannot be done without first drawing off the water, and exposing the putrescible mud of their bottoms.

11. To cause the inspection and cleansing of wells, cisterns, fountains, pumps, and watering places.

12. Public and private privies, when it may be requisite, should be examined and emptied; and those of them should be closed up whose flagrant insalubrity is irremediable for the want of a regular drain, or other means suitable to insure their innocence.

13. To exercise a special and constant superintendence over all public institutions, where large masses of people are assembled together, such as Theatres, Barracks, Prisons, Hospitals, Schools, Colleges, Universities, as well as workshops, and factories, in order to maintain in them the most perfect salubrity, particularly those which are reputed to be insalubrious, likely to compromise the public health by being badly kept, and by
the noxious vapors which they diffuse, regarding private rights, however, as far as possible.

14. To pursue the same course towards slaughter houses, butcheries cemeteries, lumber yards, warehouses, shops, cellars, granaries, stables, stalls, furnished rooms, houses occupied by poor families, ragsmen, gut-spinners, cattle-merchants, persons who raise hogs, chickens, rabbits, &c., places in which the air is often, impure, contaminated, and imperfectly renewed.

15. To sprinkle chlorides frequently in necessaries and water closets, in kitchen sinks, in the sewers of slop water, in places where large numbers of persons assemble, in butcheries, slaughter houses, fish markets, in dead chambers, &c., in short, where ever noxious emanations are formed.

16. In situations other than those enumerated, (15) the best and the principal remedy is a free circulation and renewal of pure air.

17. The habitations of the poor should always be kept clean, and rendered healthy; they should guard against the crowding of lodgers, and where it exists, it should be speedily obviated.

18. At the approach of the disease, to disperse a part of the population which is crowded in narrow and unhealthy habitations, by procuring for them spacious lodgings, well aired and ventilated, until the danger is past.

19. Houses which have been recently invaded by the over-flowing of rivers should not be inhabited until after they have been perfectly dried and purified throughout.

20. To furnish necessary supplies, and to secure subsistence.

21. To cause to be inspected, and approved by experts, the condition of articles of food offered for sale, in all places whatsoever, to prohibit by severe penalties all those which are of doubtful or bad quality, as well as those which have marks of alteration or adulterations. Unripe fruits, vegetables, the flesh of swine, salted, smoked or dried meats,* pickled fish, melons, cucumbers, &c., demand above all especial attention on the part of the sanitary police.

22. To recommend temperance and sobriety, and the observance of a nourishing regimen, not exclusively vegetable, but composed of animal and vegetable substances.

23. To remind the municipal authorities of the principal duties prescribed by law with regard to food and drinks.

24. To warn the people, by every possible means of publicity,

* Viandes faisandées are the words of the original which I have translated dried meats. They mean meats which have been kept until they have acquired a taste of venison; or as an American would say, until they have become tainted, and would no longer require the practiced nose of an inspector to condemn them as articles of food.
that an improper regimen and acts of intemperance frequently provoke the development of the epidemic cholera, and that the use of indigestible food, excess in eating and drinking, the abuse of alcoholic liquors, drunkenness, incontinence, the use of ices and sherbets, the imbibing of very cold draughts, are also so many causes likely to produce the disease.

25. To persuade the people to abstain from the use of any remedy whatever, preservative or curative, without the advice and consent of a physician.

To make every preparation in advance for medical treatment.

26. Not to establish on the continental frontiers either cordons of health, or pest houses, or quarantines, for the purpose of preventing the invasion of the cholera, experience having shown that these means are more productive of inconvenience than of benefit.

27. Nevertheless if there should be in any of our maritime ports vessels on board of which there are cases of sickness or deaths from the disease, such vessels should not be permitted to have free intercourse with the inhabitants, but should be treated as evidently suspicious, and subjected to a quarantine of twelve days at least.

28. To increase the means of public relief afforded to the indigent sick, and to secure to the poor the means of subsistence; to procure for them clothes, fuel, blankets, and to distribute among them frequently fresh straw for their beds.

29. To establish in every community sanitary commissions for the purpose of observing every thing which concerns the public health. These commissions composed of the burgomaster, of notable inhabitants, of physicians and apothecaries, shall give advice as to the changes and ameliorations of which the localities confided to their superintendence may be susceptible, in order to arrest the progress of the Cholera, and to aid those who may be attacked with the disease.

30. In each division, district or section of cities to establish besides sub-commissions of health, whose business it shall be to examine the streets, public places, markets, public and private institutions, houses, &c., to investigate the causes of insalubrity and to make them known, in order to point out the danger to the inhabitants, persuading them to remedy these causes as much as possible, under the direction of the authorities. To these commissions might be granted all the powers which may be thought useful for the improvement of the condition of the poor and of the public health: they should correspond with the central sanitary commissions and the authorities of the community.
to which they belong, and should be composed of the curate or vicar of the parish, or of three notables, the head of the poor establishment, or a member of the Society of Benevolence, of a physician, a surgeon and an apothecary.

31. To persuade the heads of the poor, the members of benevolent Societies, the ecclesiastics of the parishes, and all charitable persons who have influence with the wretched and less enlightened portion of the population, to visit indigent families in order to make them feel that a want of cleanliness, humidity, crowding, want of air, of ventilation, and of solar light in their habitations and of suitable clothing, intemperance, prolonged exposure to the inclemency of the weather, excesses of every kind, especially drunkenness, favor the development of the disease and aggravate its effects. They should endeavor to prevent many patients from lying together, or being confined in a locality too small, or containing other individuals in good health.

32. To increase the number of physicians of the poor or of charity, so that all the sick without distinction may be visited and relieved without delay.

33. In each division of populous cities and in all the communities, to establish, under the direction of the Sanitary Commission, offices of relief, to which shall be attached two physicians at least, so that they may relieve each other when occasion may require, and that there may be always one in waiting, day and night, ready to give advice and attention to such as may present themselves for that purpose.

34. These offices of relief should be provided:

1st. With a covered litter furnished with a matrass, with blankets and every thing necessary for the transportation of the sick; 2d, with a medicine chest; 3rd, with utensils indispensable for the use and administration of the first remedies.

35. As the disease, from the time it has entered a house is not only formidable to those whom it has attacked, but threatens also the inmates who may be in good health, one of the principal means to be employed for the protection of the latter, is to cause them to remove, by procuring for them salubrious dwellings, remote from the foci of infection.

36. When the sick belong to the indigent class they should be prevailed on by persuasion to suffer themselves to be transported immediately to some of the hospitals destined for Cholera patients.

38.* It is indispensible that temporary Hospitals, well organized, should be established, combining every thing requisite

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*I suppose 37 is omitted as not applicable. I give the numbers as I find them.
for the treatment and cure of the sick, and the preservative of other individuals.

39. These asylums, opened by public benevolence to afflicted humanity, should not only receive gratuitously all the indigent who may be attacked with the disease, of whatever country they may be, but moreover every person who may demand to be admitted on paying so much for every day that he may remain.

40. These temporary hospitals should be furnished with whatever is indispensable for the medical service, and should have their directors, their physicians, their resident students, apothecaries and stewards.

41. In each city or community there should be at least one of these hospitals for every one hundred thousand inhabitants.

42. They should be on dry ground, in the most elevated or exposed situations, well ventilated, remote from the evaporation of rivers, ponds, marshes, sewers and ditches, and in cities near the districts inhabited by the poor, upon whom particularly the scourge exerts its ravages.

43. It would be better to increase these temporary hospitals than to diminish their number by giving each of them too great extent; the air of these large hospitals, the wards of which contain many sick, is the chief obstacle to their cure.

44. In cholera hospitals three divisions should be established: one for those who are suspected of having the disease, another for confirmed cases, and the third for convalescents.

45. If these temporary hospitals do not admit of the divisions just mentioned, houses of refuge or of health should be established near them, for those who are suspected of having the disease, and houses destined for the reception of convalescents.

46. To enjoin upon the Commissaries of the police and other officers to keep a Register of every event relating to the public health, which they should communicate daily to the Sanitary Commission of the place.

47. To request the proprietors and principal tenants of houses, hotel and innkeepers, lodgers, and all those who keep furnished apartments, to make known with as little delay as possible, to the nearest office of relief, all that relates to the Cholera.

48. When a sick person is in a condition to receive immediately the necessary relief, the director of the office should send him a physician without delay. After the administration of the first remedies, he should be removed to the nearest temporary hospital, if the patient or his friends consent.

49. To cause to be washed, bleached or disinfected, the litter,
linen and clothing which have been used by Cholera patients, before permitting them to be used by healthy persons.

50. The bodies of those who have died of the disease after having been sprinkled with chloride of lime, should be removed as soon as the death has been clearly ascertained, so that they may be immediately transported in carriages well covered, to the place destined for their interment.

51. The bodies should be interred in the ordinary cemeteries, or in some place set apart for that purpose, remote from habitations, never in churches, or chapels, or gardens, or private houses, and should be buried in ditches of a meter and a half in depth, without waiting, as the custom is, until other bodies have arrived.

52. To prohibit the exposure of the bodies of Cholera patients in the churches, where they might greatly prejudice the health of those who assist at the religious ceremonies.

53. To transport bodies to the cemetery during the night, before the rising or after the setting of the sun, without noise, without the ringing of bells, and without religious parade, from which it would also be well to abstain in going to administer the sacraments to the sick.

54. During the continuance of the epidemic the sounding of the agony or of the funeral knell should be forbidden; at the same time, as numerous assemblages are much to be feared, they should be avoided.

55. In short, to persuade the public, particularly the common people, to call physicians to their assistance, as soon as the first symptoms of the disease manifest themselves.

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Does Calomel really Expel the Biliary Secretion? By Dr. Michea.—(London Lancet.)

Dr. Michea has published, in L'Union Médicale, a very interesting paper on the above question. The author's object was to ascertain, by chemical analysis, whether the green colour which purgative doses of the chloride of mercury give to the alvine dejections (besides rendering the latter more copious and less dense) is really owing to a superabundant secretion of bile. Opinions, says Dr. Michea, are not agreed on this point either in France, Germany, or England. Mr. Higgins (who published his paper in L'Union Médicale) and M. Mialhe consider that calomel really excites the biliary secretion. MM. Trousseau and Pidoux, authors of an esteemed work on materia medica, express their doubts on the point. Actual experiments have been made by Dr. Franz Simon, Dr. Golding Bird, and
M. Siebert. The first of these inquirers found, after large doses of calomel, a great quantity of bile and biliverdine; the second discovered only a few traces with a hydrocephalic child taking mercury, and the third maintains that the alvine dejections following the use of this metal present no trace whatsoever of bile. The green stools resulting from the use of the Carlsbad and Marienbad waters are, on the other hand, denied by M. Kerstin, of Freiberg, to contain any trace of bile, and that physician thinks the colour to be due to green sulphuret of iron, by the reduction, in the stomach and intestines, of the sulphate of soda contained in mineral waters, into a sulphuret, which subsequently combines with the iron likewise to be found in these waters. This theory is founded upon the fact, that hydrochloric acid removes the green colour of the faces, and evolves a large amount of sulphuretted hydrogen. Dr. Golding Bird and Professor Schönlein are of opinion that the green colour given to alvine dejections by calomel is due, not to an excess of bile, but to an alteration of the haematosine. Startled by these dissimilar statements, Dr. Michea began a series of chemical analyses upon—1, the spontaneous alvine dejections of healthy men; 2, the same substance, of a more or less green colour, from men affected with gastro-intestinal inflammation; 3, the same, resulting from various doses of calomel; and 4, evacuations produced by neutral salts and resinous purgatives. The author prefers for his tests, the strong nitric acid of Dumas to the sulphuric acid and syrup of Pettenkoffer. The spontaneous alvine dejections of six healthy individuals, four adults and three children, were examined: their filtered solution remained unaltered by nitric acid. The evacuations of three patients affected with gastro-intestinal derangement were examined, and much bile was found in one case only. When the vomiting had subsided, the bile disappeared from the dejections. Calomel given to eight persons, five men and three women, in doses varying from twelve to fifteen grains, produced green stools in four patients only. These being analyzed, it was found that they contained a superabundance of bile, and that, with nitric acid, two principles of that secretion might be made manifest,—viz., biliverdine and albumen. The evacuations of two of these subjects gave, not a pure green by nitric acid, as this reagent will generally produce on biliverdine, but a dirty olive, (on this Dr. Michea grounds his belief, that he found bile, and not biliverdine alone;) this olive colour, however, assumed the same successive shades of purple, red, and yellow, which biliverdine will yield. In the two other instances, the nitric acid gave a drab or yellowish-red colour, almost without any subsequent shades. The author puts the question, whether this
might not have been the bilifulvine of Mülder. The evacuations of five persons who took neutral salts and resinous purgatives were never green, and exhibited no albumen on the addition of either by nitric acid or heat, whereas the albumen, as shown by a plentiful precipitate, was abundant with the four patients using calomel. This albumen was, according to Dr. Michea, furnished by the bile. These experiments would, then, tend to elucidate the practice.—First of English physicians, who regard calomel as a specific in liver affections; secondly, of Dr Schönlein, in typhus, who looks for green evacuations by fifteen-grain doses of the chloride of mercury; and thirdly, of Russian practitioners, who consider calomel the most efficient agent against cholera. Modern organic chemists look upon bile as partly of an excrementitial nature, and that the liver as well as the lungs removes from venous blood substances which have become unfit for assimilation, (the resin and fat to be found in the bile containing much carbon and hydrogen.) The more plentiful, therefore, the secretion of bile, the purer the blood. Thus it becomes clear how calomel may act beneficially in miasmatic contaminations, in typhus and cholera. We subjoin Dr. Michea's conclusions:—

1. Calomel acts in a special and direct manner on the liver: this salt occasions alvine evacuations of a peculiar colour, due to an excess of actual bile, as shown by the action of nitric acid, which points to the presence of its colouring matter (biliverdine) by change of colouration, and of its albumen by precipitating the latter.

2. This influence of calomel upon the biliary secretion is not constant. It varies according to certain conditions and circumstances.

3. The green evacuations produced by calomel are more frequent with men than women. (This the author supposes to be owing to the greater quantity of alkaline chlorides generated in the stomachs of men, which chlorides, according to Mialhe, would contribute to transform the chloride of mercury into a bichloride.)

4. These evacuations have a peculiar consistence—viz., a viscous liquidity, somewhat like oil, or white of eggs beaten up together.

5. In some affections of the intestinal canal, an excess of bile to be detected by reagents, may be found in the evacuations.

6. Spontaneous alvine evacuations in healthy people are quite free from an excess of bile.

7. Neutral salts and resinous purgatives exercise no direct or special influence on the liver. The alvine dejections which they produce contain no excess of bile, remaining unaltered by nitric acid or heat.
On the Sound of Circulation. By G. G. White, Esq., of New-
port, U. S.—(Ibid.)

An interesting article which appeared in a recent number of
the Lancet, from the pen of James Yearsley, Esq., revealing a
new remedy for deafness, induces me to communicate to your
columns a discovery which I made, some time ago, of the
sound of circulation, the result of which affords, I think,
an explanation of the causes of numerous cases of defective
hearing.

By inserting the ends of the fingers within the ears, or by
covering them with the hands, or any other part of the person,
we detect a rumbling sound; this sound proceeds from circula-
tion throughout the system, and is conducted to the hearing
through the fingers or the part applied. If another person
places his hands over our ears, we hear the circulation cours-
ing through his body. Other noises are excluded, and the
sound of circulation is carried with full force to the tympanum.
If a lifeless body is applied there, no sound is produced; so that
it may be determined by a reference to the organ of hearing
when the blood ceases to flow, and life becomes extinct. By
holding any conducting, though lifeless, object to the ear, we
may get the sound slightly, but it will proceed from the hand
or from the living body which supports it there. This may be
simply tested. By turning the head upon one side and standing
a cork within the ear, no rumbling will be heard, except, per-
haps, a very faint one, produced by its contact with the portion
of the orifice where there is a vein, from which it is conducted;
but by applying the fingers to the cork, and pinching it, the sound
is increased to an extent which will leave no doubt as to its
source.

In most cases of deafness, the patients complain of an inces-
sant buzzing or rumbling. Now it is evident that all sound
must come to the ear, as sight does to the eye, externally; and
if the orifice of the ear be not rightly formed—if it be a little
sprung, or swells, or projects into its own channel, it must convey
this rumbling sound, in the same manner as will the fingers or
any other part of the person; and it must, according to the
extent of the deformity or projection, shut out other sounds and
communicate its own. The same rumbling is sometimes pro-
duced in gaping; oftener, however, when the gaping organs
act with the mouth closed; also, to a slight extent in swallow-
ing. The action projects a portion of the sides of the orifice
of the ear into its own funnel, which conducts the sound. I
can, at any time, produce the buzzing in my own person, by a
contraction of muscles in the region of the ear, mis-shaping
thereby its channel to the drum. It will be readily understood that wax may produce, in some measure, the same rumbling, by its contact with the orifice, or a part of its lining, from which it may communicate the sound of circulation, at the same time closing the channel to other sounds.

If this theory of deafness and of rumbling, from defective construction of orifice, be true, (and I have no doubt it is,) could not a shaping frame be made to remedy it? Is there no way of correcting the form of the channel to the tympanum?

A Case of Cholera in which Chloroform was successfully given internally. By R. S. Strother, M. D., of Bardstown, Ky. (Western Journ. of Med. and Surgery.)

On a recent trip to New Orleans, I had an opportunity of trying chloroform in cholera. The vessel on which I returned had fifteen or eighteen cases of the disease on board, of which seven terminated fatally. In the spasmodic stage large doses of opium, morphia and musk were used, but without saving a solitary case.

The next case that offered itself was that of a negro man, who was seized with profuse diarrhœa. This was checked by opiates, and for thirty-six hours he took no medicine. At the expiration of this time I was called in haste to see him. The diarrhœa had returned; he was vomiting incessantly, and his cramps were violent, affecting the muscles of his arms, legs, and abdomen. He was in great agony, and apparently in a hopeless condition. I at once gave him a hundred drops of chloroform in a little sweetened water, the effect of which was to arrest the vomiting; he vomited but once after taking it, and in fifteen minutes every symptom of the disease had disappeared. His rapidly declining pulse returned, his extremities grew warm, and he remained in a half-intoxicated state, perfectly free from pain, and with pleasant sensations, for six hours, which interval I seized for the administration of other appropriate remedies. I left the patient convalescent, and apparently out of danger.

The other cases by being taken in time, were cured by the usual remedies. Had they advanced to the stage in which I found this man, I should have given chloroform, for the purpose of suspending the disease and gaining time. As an antispasmodic, it is unquestionably the most efficient article known to the physician, and, I am persuaded, not more dangerous than the preparations of opium.
Is the Cholera Contagious?—Extract from an article on this subject in the Annalist.

To make this subject of contagion more clear, let me in conclusion place in juxtaposition the well known and acknowledged characteristics of contagious diseases and cholera.

1st. All diseases indisputably contagious, have a regular period of incubation or interval between the time of exposure and the accession of the disease.

2d. Owing to the first characteristic, contagious diseases always spread slowly at first, and are easily traceable from the sick to their attendants and others more or less directly in contact with them.

3d. In all contagious diseases, an approximation to the bodies or clothing of the sick, is essential to the communication of the poison.

4th. The most contagious diseases known, may be limited in extent by rigid quarantine and non-intercourse regulations.

5th. Contagious diseases are propagated as readily in the country as in the city, in mountains as in valleys, in the housetop as in the basement, and during the extreme cold of winter as well as heat of summer.

Now, I would ask in all seriousness, by what rule of logic, or what principle of scientific induction, two diseases, whose prominent characteristics stand in such marked contrast with each other, can be ranked together in the same category? Certainly in no other way than by reasoning on the most loose and vague generalities.


In the sixth volume of the 'Abstract,' p. 77, an article is introduced on "Separation of the Sacro-Iliac Symphysis, by M.
Kluyskens; the following notice "On Dislocation of the Pelvis" has subsequently appeared in several of the journals:

M. Murville, in a memoir presented to the French Academy of Medicine, on luxations of the pelvic bones, relates the two following very remarkable examples of this accident. The first was the case of an officer, who fell from a second-floor window, and lighted on the tubera ischi. The sacrum was displaced downwards by the weight of the body. On examination, the crests of the ilia were found to be almost touching the false ribs; the os coccygis, much shattered, projected considerably below. The patient complained of great pain in the sacro-ilac symphysis, with paralysis of the bladder and rectum, small pulse, and other signs of collapse. He was restored somewhat by stimulants, and when reaction was fully established, he was treated antiphlogistically, the displaced bones being maintained as motionless as possible. No attempt at reduction was considered advisable. This treatment was marvellously successful; not only did the patient survive, but the paralysis diminished, and in ten days the patient was able to walk with difficulty.

The second case is unique. An officer, during a review, was run away with, the horse, at the same time, plunging violently; in one of the plunges he was thrown considerably from his saddle, upon which he descended again with such force as to lacerate the left side of the pelvic arch, without injuring the skin. A second plunge of the animal added to the mischief, completely rupturing the ligaments of the symphysis pubis. When examined, a large inguinal hernia was discovered on the left side, and in the perineum a tumour projected as large as the fist, which could be pushed upwards into the pelvis. The symphysis pubis was separated to an extent which allowed the hand to be insinuated between the osa pubis. The hernia was reduced, and the bones kept in apposition by bandages, and in three months the patient was able to walk. M. Murville, upon this case, founded some remarks upon the feasibility of the operation of division of the symphysis in labour. In a discussion which ensued, M. Malgaigne doubted that it was a case of simple dislocation, thinking it probable that there was also fracture.

Cholera in Nashville—relation to Limestone.—(Western Jour. of Medicine and Surgery.)

We have just received a letter from Dr. H. B. Walton, of Nashville, giving some interesting particulars in relation to the appearance of cholera in that city. He states that the pestilence
first appeared there about two months since, and that the average mortality from it had been about two a day. "The weather for the greater part of the time has been warm and wet. But," he adds, "the point to which I wish particularly to call your attention is the predilection of the disease for a certain quarter of the city. It has prevailed almost exclusively about a particular locality. At first, this appeared inexplicable; but since reading the remarks of Dr. Jackson on the connection between cholera and limestone regions, I have supposed that the cause was revealed. A large portion of the city of Nashville is supplied with water from the Cumberland; citizens in other parts use water from springs and wells which, of course, is largely impregnated with carbonate of lime. It is to the latter, with scarcely an exception, that cholera has been confined. Two cases presented themselves which, at first, I supposed, were exceptions to the rule. One was a lady, who resided in that portion of the city where hydrant water is used; the other was a negro man living in the same quarter; but, on inquiry, I learned that the former used water from a spring in the cellar of her dwelling, and that the latter had been laboring in the vicinity of a spring from which he obtained all the water that he drank.

"A large majority of the more aggravated cases have occurred in a small neighborhood, in the vicinity of a spring more highly charged with lime than any other in the city. Whether it is to the use of this water, or to some other cause, that the disease has prevailed in this locality while the city has been exempt from it, is a question not to be determined without farther observation. But the fact is instructive, and, as bearing upon the local origin of cholera, I have deemed it worthy of being recorded."

It may be interesting to remark, in reference to the suggestion of Dr. Walton, that cholera infantum has prevailed with much less severity in Nashville since the introduction of hydrant water, as we were assured by physicians there some years ago. Nevertheless, we are not prepared to give our assent to the doctrine that cholera is produced by drinking limestone water. That it manifested a preference for limestone districts, in its former visit to our country, we had occasion to remark two years since, when speaking of the bearing of geology upon disease; but it does not follow that the water had any connection with it. We attempted to show that it was particularly in regions where the older, or blue limestone is the surface rock, that the pestilence was most fatal. But this is not more soluble than the other limestones. The water at Louisville is as highly charged with the grey limestone, as the water at Lexington is with the blue. In Louisville, the epidemic at its height carried
off seven a day, in a population of 20,000; in Lexington, in a population of 5,000, sixty persons died in one day. At New Orleans, where there is no limestone, the disease was excessively destructive. At Cincinnati, Maysville, Lexington, and Versailles, all on the blue limestone, its mortality was great. At Nashville, again, at Murfreesborough, Shelbyville, and Pulaski, it appeared in a malignant form, and they are all upon this rock. A few miles south of the latter places, the formation changes, and the epidemic was heard of no where beyond them. These facts are curious. They seem to show a relation between cholera and our geological formations; but they do not reveal the cause of the pestilence.

PART III.

Monthly Periscope

Presence of Sugar in the Liver.—MM. Bernard and Barreswill have demonstrated the presence of a notable quantity of sugar in the liver both of man and animals. By fermentation they obtained alcohol from this sugar, a sample of which M. Pelouze exhibited to the Academy. Hitherto no means had been ascertained of obtaining from the liver other than a kind of molasses charged with salts, the sugar of which was uncrystalized. Repeated experiments have enabled MM. Bernard and Barreswill to establish the fact that the sugar, which exists in considerable proportion in the tissue of the liver, is not found in a normal state in any other organ, and that consequently the liver is, on this account, chemically distinguishable from all the other organs of the animal economy. They have satisfied themselves that the liver always contains the same large proportion of sugar, even in animals completely deprived of food containing either sugar or starch, and kept for a long time exclusively on animal diet. They conclude that the existence of sugar in the liver is a physiological fact completely independent of the kind of food taken.—[London Med. Gazette.

New Method of Detecting the Presence of Sugar in the Blood.—If a small quantity of diabetic serum is placed in a glass tube, with an equal quantity of a solution of tartrate of copper, and liquor potassae, which last is of a blue colour, and the mixture be cautiously boiled for a few minutes, the presence of sugar is detected by the conversion of the blue into a brick-red colour, with, at the same time, a precipitation of the oxide of copper.—[Prov. Med. and Surg. Journal, from Annales de Thérapeutique.

Creasote in Mercurial Salivation. By E. W. Faulcon, M. D., of Warren county, N. C.—"Two days ago, while looking over the last edition of 'Watson's Practice of Physic,' on the subject of 'Mercury
in Inflammation,' I recalled to memory a case that came under my observation six years ago, while I resided in another section of this State. It was one of severe salivation from the use of this mineral in remittent bilious fever.

"I suggested to the attending physician of the patient the following gargle: creasote 5ss., sage tea one pint. To be used every hour during that day, and its effects accurately noted. In thirty minutes after its first application, he felt a sharp tingling sensation along the angles of both jaws, and a slight convulsive motion in the muscles of the lower jaw. Shortly after the appearance of this last sensation, there was a marked relaxation of all the muscles of the face, and he expressed himself as feeling better (locally) than he had done for many days. In the evening there was a very great decline of the salivary discharge, and a great improvement in the appearance of the mucous membrane of the mouth and palatine region, which, prior to its application, wore that aspect so indicative of a near approach to sloughing.

29th.—Improving; discontinue creasote, but add to the strength of the sage tea. 30th.—So much improved as to require no further local treatment. Directed that the bowels be kept soluble by the use of mush and milk as diet, and occasionally aperient doses of the phosphate of soda. In a few days thereafter, he was 'dismissed cured,' or in other words, to receive no more visits from his physician.'

[Wood's Retrospect.

Nitrate of Potass in Rheumatism.—Prof. C. R. Gilman reports the following facts:

Case 1. A. B., a female, aged 48, had been under treatment for upwards of six months; has taken vin. sem. colchici, Tr. actæn racemosæ, and various other remedies, without marked effect. The nitrate was given in 3ss. doses twice a day for two days, then 3i. was given, and the patient began to improve; the dose was continued nearly three weeks, when she was discharged cured.

Case 2. C. D., a girl, aged 19, has suffered for months from sub-acute rheumatism. The remedies given to No. 1 were faithfully tried, and also Hyd. Potass. with Extr. Hyosciami. The nitrate was used in 3i. doses, and produced similar results as in No. 1.

"Case 3. E. F., a man, aged 40, admitted with sub-acute rheumatism; treated with colchicum, guaiac, &c. The nitrate was given in two drachm doses. He was entirely relieved when he had taken but two ounces."—[Annalist.

Polydipsia cured by Camphor. By M. Rayer.—The following case is curious, if not instructive. A healthy woman of 35 was awakened in the night by an earnest desire to drink. Having done so copiously, she was soon again awakened by a repetition of the desire to urinate and drink. This went on until the patient came to drink six pails of water a day, without quenching her thirst, and to urinate in the same proportion. She had headache, loss of appetite, dyspepsia, and emaciation. The specific gravity of the urine, not greater than that of
distilled water, excluded all idea of diabetes. She was put on the use of camphor in pills, and allowed light aliment. In a few days the thirst sensibly diminished, and in a few weeks she was cured. On leaving off her pills some time afterwards, the symptoms threatened to return.—[Annales de Thérap., from Wood's Retrospect.

Consumption cured by Digitalis. By D. K. Faure.—[This heading will attract great attention and inspire not a little interest. Its very rarity gives interest to what follows:]

Many physicians have recommended Tinct. of Digitalis as a means of curing phthisis, and assert their success. M. F. claims two for himself. The dose was first 20 drops a day, adding 10 drops every day, until in one case 200, in another 240 drops were taken. In one it was given 28 days, in the other 30, and was discontinued because of thecessation of the morbid phenomena. Both patients, on commencing the treatment, were confined to bed: the second had cavernous râle, continuous fever, with exacerbations, night sweats, etc. They were well fed, and the tincture caused no inconvenience. One case had lasted four years, and the other six months. It is not said whether there is any return of the disease, and the cases are at least encouraging.

Bayle recommended the Tinct. of Digitalis on the authority of Maginnis, who spoke of it in 1799. His success was astonishing, although B. says his memoir bears the evidence of authenticity and good faith. Many of the details are ample, and B. advises a trial of the remedy.—[Bulletin de Thérap., from Ibid.

Whooping-cough Prescription. By Dr. Heinrich.

Tobacco leaves, 4 grammes. (1 drachm 15 grains.)
Angelica root, 12 "
Liquorice " 15 "
Boiling water, 250 "

Dose—a tea-spoonful every hour to young children; for adults a table-spoonful. The severity of the paroxysms is much abated in two or three days.—[Russ'n Journ., from Ibid.

Delirium of Fever, Tartar Emetic and Opium in.—The practice recommended by Dr. Graves, of treating the cerebral excitement of fever by tartar emetic and opium, is highly approved of by Mr. Todd, in an interesting communication on the state of the brain in fever.—[Lancet.

Naphtha.—This is another of the many vaunted remedies for cholera, and is said to have been given with great effect in the Russian army. The dose is from ten to twenty drops. The dose was seldom required to be repeated.—[Ranking's Abstract.

Case of Neuralgia.—Local Anaesthesia.—Dr. Hays stated, that he had employed the chloroform to produce local anaesthesia with apparently the most happy effects, in a case of neuralgia, occurring in a
On the Treatment of Scabies. By G. Corfe, Esq.—Mr. Corfe states that he rigorously pursues the following plan with a patient affected with itch:

We provide him with old soiled linen and a worn out sheet; and each morning and evening he is ordered to make a good lather of yellow soap in his hands, and thus dip them wet into a basin of sifted or fine sand, and assiduously rub every part of the body on which the slightest trace of a vesicle exists. Having performed this ablution until the skin tingles smartly, he wipes himself dry, and then rubs the common ung. sulphuris firmly into the itchy parts. He is then enveloped in the winding sheet, and has a pair of old gloves on his hands, and he is left till night, when the same operation is pursued, and repeated daily until the fourth day, when he is ordered to indulge (and a great indulgence it is) in a warm bath, where he again lathers his body in plain soap and water, puts on fresh linen, and is provided with clean sheets, and the cure is from hence invariably effected. The vesicle of course is broken by the friction of the sand and soap; the acarus is exposed, and this ectozoon receives his death-blow by the inunction of the sulphur, which is oftentimes not accomplished by the mere application of sulphur ointment alone. The use of sand-soap balls is more elegant, though not more efficacious.—[Med. Times.]

Treatment of Lupus.—In the "Revue Méd. Chirurgical," M. Emery publishes the results of his experience in this disease. He has found that no treatment, whether internal or external, possesses the efficacy of cod-liver oil in large doses. The quantity of this medicine exhibited by M. Emery will doubtless astonish our readers. It is in doses from sixteen to thirty-two ounces daily that it should be used. With every deference to the learned physician of the Hôpital St. Louis, we must say that few patients will be able to keep on their stomachs such exaggerated quantities of a particularly nauseous medicine, and that, even if they succeeded in not rejecting it, it is questionable if anything like that amount can possibly be absorbed, oily substances being generally changed within the stomach into insoluble adipocerous compounds. M. Emery states, however, that, having had
occasion to treat seventy-two cases of confirmed lupus, twenty-eight were completely cured by a persevering use of this medicine.—[Med. Times.

New Adhesive Mixture.—Dr. Sanborn of Andover, Mass., has made a new adhesive preparation that is likely to prove a prominent rival to the collodion. Gutta percha is dissolved in chloroform, having about the consistency of melted glue. It is applied with a brush, and meets the decided approval of competent judges. The inventor says that he communicated the discovery of the properties of this combination to one of the Boston papers more than a year ago. The menstruum does not evaporate quite so rapidly as ether, consequently the gutta percha adhesive fluid is rather more economical than the colloidion, which rapidly disappears, after removing the cork.—[Boston Med. and Surg. Journal.

**Compression of the Carotids in Hemorrhage after Tonsillotomy.** By M. Gensoul, of Lyons.—In a case in which death was imminent, M. G. made pressure on both carotids, and particularly on the side whence the blood chiefly issued. The flow ceased. The compression being kept up for half an hour, the bleeding did not recur. Since then, he has always successfully adopted this plan, whenever the hemorrhage seemed too free, after removing the tonsils. It is applicable to all troublesome hemorrhages about the face and mouth, epistaxis, and neuralgia of the face.—[Rev. Med. Chir., from Wood’s Retrospect.

**Lotion for Burns.** By M. Thorel.
Chlorhydric acid, at 20° 50 grammes, 750 grs.
Powder of sulph. sod. 65 “ 975 “

Keep the burned part as much as possible in this liquid, or use it often as a lotion. It is adapted only to burns of the 1st and 2d degrees: causes the inflammation to cease immediately, and prevents the formation of phlyctenæ, or interrupts their development.—[Jour. des Con., from Ibid.

**Anthrax treated by Vienna Paste.** By M. Jobert.—When the patient dreads the knife, M. T. applies on the tumor a long track of Vienna caustic, comprising all the length of its vertical diameter. The caustic is left on for 15m. Pain ceases almost immediately, and the abnormal sensibility diminishes, so that the part may be handled in all parts without suffering on the part of the patient. The patient sleeps tranquilly all the following night. In about nine days the eschar falls and leaves a healthy sore, which soon heals.—Bulletin de Thérap., from Ibid.

**Subcutaneous Puncture in Hygroma.** By M. Blandin.—The radical cure of these bursal swellings is seriously difficult; simple puncture often fails, for the sac is oftenest multilocular, or may contain coagula, or albuminous bodies. To inject it, it must be opened largely, and excision is dangerous.
The following case illustrates M. B.'s practice: A man had an hygroma in front of the patella, the size of a small egg. M. B. slid in a tenotome to the distance of three finger breadths, entered the cyst and split it from side to side in different directions. He then compressed it with a compress and bandage. It did not recur. The compression must be sustained until the entire absorption of the contents of the tumor.—[Jour. des Conn., from Ibid.]

Local Application of Chloroform in Lumbago. By M. Moreau.—Three cases of this disease are detailed in which immediate and permanent relief was obtained by the application to the loins of a piece of lint on which some chloroform had been poured. Oiled silk ought to be laid above the lint, to prevent the evaporation of the chloroform. In a few minutes the patient complains of a burning heat in the part, which becomes red, and occasionally vesicles are formed; at the same time the rheumatic pain disappears. The author thinks that the cure cannot be attributed solely to the counter-irritation, as in one of the cases recorded sinapisms had been previously employed without success. He supposes the chloroform to reach by imbibition the cutaneous and superficial muscular nerves, on which it exerts its anaesthetic power.—[L'Union Médicale, from Ibid.

On the Action of Proto-Sulphate of Iron in the Treatment of Chancre, Gonorrhœa, &c.—The whole class of caustic agents, when applied to the Hunterian chancre, (though the potassa fusa cum calce be used, till the ulcer be "punched out," as recommended by M. Ricord,) form an eschar with pus still secreting; in fact the morbid cells have not been destroyed. The alkaloids and hydro-carbons are equally inefficacious.

If a chancre be perfectly freed from its eschar and the enclosed pus, at the bottom of the excavation may be observed minute white points or germs, secreting, slowly, the morbid virus. If, now, the proto-sulphate of iron, minutely pulverized, be dropped into this excavation, the parts will instantly assume a charred appearance, the metal is absorbed into the tissue, the morbid cells or germs will instantly cease to secrete pus, the cleared cavity will shortly granulate, and a smooth surface, without induration, will be the result of the use of the proto-sulphate of iron. The chancre is destroyed.

It is known to chemists that the proto-sulphate of iron absorbs large volumes of oxygen and nitrous oxide gases.

The proto-sulphate of iron, I have observed to be the most powerful agent for arresting decomposition in animal and vegetable substances. Inflammation and decomposition in the living tissue is likewise arrested by it.

In gonorrhœa, we have now an agent arresting the morbid cellular action in the salts which should be used in solution super-saturated. In leucorrhœa, and in simple ulcers, the morbid action is arrested or peroxidized by this metallic salt.

Large doses of this salt have been exhibited in obstinate diarrhœa, with great benefit.
The action of this salt will produce a great change in superseding mercury in the treatment of diseases of specific origin.—[Med. Exam.

Ergot in Retention of Urine.—M. Allier read a communication on the use of ergot in retention of urine. According to him—1st, ergot restored contractility to a bladder which had been paralysed by over-distension; 2d, it has succeeded when other remedies have failed; 3d, it has been equally successful in paralysis of the bladder following apoplexy; 4th, it does not exert any beneficial influence over hemiplegic limbs; 5th, it is useless in retention of urine from enlarged prostate; 6th, the medicine must be given in repeated small doses; but it may amount to a drachm and a half per diem.

[A case illustrative of the good effects of the ergot in retention of urine is related by Dr. Jeffreys, of Liverpool (now of Shrewsbury), in the ‘Provincial Journal,’ for 1844, p. 44. Dr. Ross, of Cambusmore, in the county of Sutherland, reports a similar case; see ‘London and Edinburgh Monthly Journal,’ for January, 1844, and ‘Provincial Medical Journal,’ vol. vii., p. 378. See also Johnson’s Medico-Chirurgical Review,’ for July and October, 1839.]-Prov. Med. and Surg. Journ., from Ranking’s Abstract.

Liquor Potassae in Strangury.—Dr. Mulock states that, in three cases of strangury from blistering with cantharides, he found speedy relief from liquor potassae, in thirty-drop doses every hour. He was led to the use of this preparation from its known effects in relieving irritation of the bladder in other cases. He thinks it may prove an antidote for cantharides taken internally, and suggests that a trial should be made when an occasion offers.—[Dublin Quarterly Jour.

Collodion for Carious Teeth.—A piece of fine cotton, thoroughly soaked in the transparent fluid, and then inserted into the hollow of the tooth, previously cleansed and dried, has been followed by complete relief to the toothache, and has maintained its position for several weeks.—[Amer. Jour. Med. Sciences.

Compliment to Professor Wood, in Ranking’s Abstract.—Among the newly published works which have reached us for notice in the present Report, we would make particular mention of a ‘Treatise on the Practice of Medicine,’ 2 vol. 8vo., by Professor Wood, of Philadelphia, as a production of no ordinary merit. It may be safely stated to be, for comprehensiveness and careful digest of matter, second only to the herculean labours of Dr. Copland, and has the advantage, not always perceptible in similar works, of being brought up strictly to the knowledge of the day. It must not, however, be looked upon solely as a compilation, for although, as must of necessity be the case, it is a digest of the opinions of the most reputable authorities, it is also enriched by the record of the actual experience of a physician whose opportunities of observation have extended over a period of thirty years, and who enjoys the reputation of being one of the most skilful and scientific practitioners of our sister country.—[Ranking’s Abstract.
MEDICAL INTELLIGENCE.

The Graduates of the Medical College of Georgia—Session 1848-9.

The Degree of Doctor of Medicine was conferred on the gentlemen named below on the 20th of March. The graduates were addressed by Prof. Le Conte, M.D., of Franklin College, in a most eloquent and appropriate Lecture, which we propose to publish in our next No.

Attending the course just closed were one hundred and thirty-three students, of which 100 were from Georgia, 18 from South Carolina, 12 from Alabama, 1 from Texas, 1 from Virginia, and 1 from New York.

The Faculty reported the following gentlemen as having complied with all the requisitions of the College, and undergone satisfactory examinations, viz:

S. L. Richardson, Alabama.  G. W. Holmes, Georgia.
L. B. Me Conn, Georgia.     J. F. Alexander, Georgia.
W. C. Ware, South Carolina. G. W. Fort, Georgia.
J. F. Groves, Georgia.      H. R. Pierre, Georgia.
A. M. Cox, South Carolina.  J. C. Calhoun, Georgia.
James McMichael, Georgia.   E. C. Jones, Georgia.
R. F. Seay, Georgia.        W. H. Montague, South Carolina.
Waldmar Moody, Georgia.     W. B. Johnson, Georgia.
J. A. G. Reeves, Georgia.   O. H. Paull, Georgia.
W. M. Pitts, Alabama.       A. D. Shewmake, Georgia.
J. F. Dickinson, Georgia.   B. F. Hall, Georgia.
Jasper Browne, South Carolina. T. C. Glover, Georgia.
J. C. Lanier, South Carolina. R. H. Etheridge, Georgia.
Petersfield Trent, Virginia. C. C. Thomas, Georgia.
G. W. Darden, Georgia.      Edward Girardey, Georgia.
S. C. Tatom, Georgia.       G. A. Williams, Alabama.
G. W. Mitchell, South Carolina. J. M. Bunch, Georgia.

The Meeting of the Profession in Convention, at Macon.—We give place, with much pleasure, to the following communication on this subject—rejoicing too to learn from other sources, that a more harmonious and profitable meeting for our time-honored profession, has never been held any where:

Macon, March 22d, 1849.

Dear Sir,—I have the honor to notify you of the official action of the late meeting of the Medical Convention and Society, held in this city. In pursuance of the call emanating from the Medical College of Georgia, and convened in by the Georgia Medical Society of Savannah and Macon, the Convention assembled at 10 o'clock, on the morning of the 20th. About eighty Delegates were present.

For the purpose of preliminary organization, Dr. Thos. Hoxey, of Columbus, was called to the Chair, and Dr. L. W. Burney, of Monroe county, requested to act as Secretary.

On motion, a committee of one from each County represented was appointed by the Chair, to select permanent officers for the Convention.

The Committee reported the following names:—For President, Dr. Lewis D. Ford, of Augusta; for 1st Vice-President, Dr. R. D. Arnold, of Savannah; for 2d Vice-President, Dr. Thomas R. Lamar, of Macon; for Secretary, Dr. James M. Green, of Macon; for Assistant Secretary, Dr. C. T. Quintard, of Macon.
The Convention being thus organised, on motion, the President designated the following gentlemen a Committee to draft a Constitution and By-Laws:—Drs. R. D. Arnold, J. M. Green, Thos. Hoxey, Chas. West, Hugh J. Ogilby, R. Q. Dickinson, James M. Gordon.

After some discussion and modification, the Constitution and By-Laws were unanimously adopted. The Convention then resolved itself into "The Medical Society of the State of Georgia."

The first business in order being the election of officers, a ballot was ordered, and the following gentlemen were declared duly elected:—President, Dr. Lewis D. Ford; 1st Vice-President, Dr. R. D. Arnold; 2d Vice-President, Dr. Thos. R. Lamar; Corresponding Secretary, Dr. James M. Green; Recording Secretary, Dr. C. T. Quintard.

The Society then proceeded to ballot for Delegates to the "American Medical Association." On counting the votes, it appeared that the following gentlemen were elected, viz: Drs. Thus. Hoxey, T. F. Green, H. S. Ogilby, E. L. Strohecker, Robert Campbell, I. E. Dupree, W. B. Stevens.

The following Committee was appointed to memorialize the Legislature, on the necessity of instituting a regular registration of marriages, births and deaths: Drs. Arnold, Strohecker, Ogilby, Geo. A. Winn, G. F. Cooper.

A Resolution was introduced and adopted, that a Committee of one from each congressional district, of which the President of the Society shall be chairman, be appointed to address the Profession at large on the expediency of forming auxiliary societies, and other matters. The President appointed the following: Drs. L. D. Ford, Thos. Stewardson, Chas. West, E. F. Knott, W. P. Beasley, Wm. N. King, W. L. Jones, Asbury Kingman.

The following named gentlemen were appointed a Committee to make proper arrangements for the next annual meeting of the Society:—Drs. J. B. Wiley, Jos. LeConte, Chas. Thompson, J. C. Gilbert, C. B. Nottingham—all of Macon.

A Resolution was passed, that the next annual meeting of the Society take place in the City of Macon, on the 2d Tuesday in April, 1850.

The Convention adjourned at 1 o'clock, P. M., on the 21st.

The Recording Secretary will, at his earliest opportunity, furnish you with a copy of the proceedings of the Convention and Society.

Very respectfully,

JAMES M. GREEN, M. D.,
Cor. Sec'y Med. Soc. of Ga.

To Paul F. Eve, M. D.,

A Suit for Mal-Practice—(Furnished by a medical friend unconnected with the parties.) The following is a report of the suit of Sidney Lanier vs. Dr. Chas. Thompson, for alleged mal-practice in the treatment of an injury of the forearm, near the wrist-joint, whereby great deformity and loss of motion have ensued. The amount of damage claimed was $10,000. The jury returned a verdict for the plaintiff, with one dollar damage. The case was tried before Judge Floyd, at the January term of the Superior Court of Bibb County, 1849.

Sterling Lanier, sworn. Called defendant to attend his son; went with him to and saw him take charge of son; cannot state the exact time, but thinks it was in January, 1847. Defendant said the arm was fractured. Thinks defendant pursued the usual course. The accident happened in the country; plaintiff's arm had bandages on when he returned; defendant took them off and pro-
Medical Intelligence. [April,
cured an apparatus* from Mrs. Wood. Thinks it was about two or three hours after the accident that defendant saw the case; can’t state the exact time.

(Cross examined.) Thinks the accident occurred in January, but cannot state the exact time. Plaintiff went to ride after dinner, and returned before night. When plaintiff returned, his arm had splints on: plaintiff stated that Mr. Basset had put them on; don’t know that they were well placed; don’t know anatomy. The arm was not much swollen then; it swelled afterwards. Instrument shown looks like that used by defendant, but not exactly like it—it appears a little smaller, but of the same kind. Thinks defendant didn’t dress the arm the first night, but is not positive; thinks he put on splints the next day. The arm was painful to the touch. Don’t know how long defendant attended the case; don’t know that another physician was called. The arm looked pretty well when the splint was taken off—did not take particular notice—it appeared a little crooked, but thought it would become straight. Thinks he was present at second dressing; don’t know how long defendant was attending the case; when attending, he was kind and attentive; cannot say whether bandages were loosened or not by plaintiff.

(Re-examined.) Don’t remember particularly whether the arm was much swollen or not at the first dressing. The arm is permanently deformed, its usefulness is destroyed—plaintiff does not use it as he does the other.

Mr. Obeor, sworn. Saw plaintiff soon after he had been injured; assisted him from buggy to his room. Saw most of the proceedings during the treatment. Plaintiff had splints on his arm; defendant took them off and put on others, of pasteboard. The arm was swollen. Defendant said he would set it in two or three days—inflammation would subside by that time; was not present when the arm was set. Defendant’s treatment was not interfered in by others; thinks the bandages were not removed—they were once clipped near the fingers, which were much swollen. Plaintiff has lost the use of his arm—he uses the other instead.

(Cross examined.) Was not with plaintiff all the time, but a great deal of the time; generally stayed until 11 or 12, P. M. Boards at Lanier’s yet. Does not think plaintiff loosened the bandages—would have known if he had done so—might have done so and tightened them again. The arm appeared straight. Don’t remember the exact time when the accident happened. Instrument shown appears like that used by defendant; did n’t see it taken off; plaintiff wore it four or six weeks. Saw the arm the day following that on which the instrument was removed: there appeared to be a little rising on it then; bandages were clipped by defendant’s orders. After instrument was taken off, defendant applied two splints, one on the fore and the other on the back part of the arm: defendant was very attentive.

R. Bassett, sworn. Plaintiff was taken into witness’ house about the 20th of January, 1847. Said he had been thrown from a horse. His arm was badly hurt—his wrist was dislocated—witness tried to pull it back. Lives one mile and a half from town.

(Cross examined.) Was n’t fractured, as he knows of, but was dislocated; witness reduced it; his brother helped; has set bones before; was n’t hard to get back: plaintiff’s arm was very painful and swelled fast: did not see plaintiff fall. One hour and a half after accident Mr. Brown took plaintiff home. Plaintiff did not object to witness’ course; witness thought he put it about right.

Dr. Wiley, sworn. Is a practising physician and surgeon; has once examined plaintiff’s arm; considers it permanently deformed. Knows nothing of the case; thinks the result might have been different had—[Here he was interrupted by defendant’s counsel, who objected to answers given as he was about to answer.]

(Cross examined, by Defendant.) Is aware of the great difficulty of discriminating the nature of injuries to joints; considers it necessary to be called immediately; a surgeon should attend a fractured arm four or six weeks; the muscles tend to displace the bones: it is difficult to keep the fractured bone in place; there is danger of sloughing from tight bandages.

* Whenever the term apparatus, splint, or instrument, is used, the article referred to is Roe’s Patent.
† This was the last time that the defendant saw the arm, until shown in Court.
[The Defendant here proposed to apply the same apparatus to the arm of any one present, and to dress it in the same manner as that in which he had dressed the arm of Plaintiff, and to ask the witness whether or not the application was proper,—To which Plaintiff's counsel objected, and the Court admitted the objection on the ground that no professional witnesses were present when plaintiff's arm was dressed by defendant, and consequently none were competent to state positively as to the precise manner.]

(Examination resumed.) Witness thinks the instrument used was well adapted to the purpose; has not used it. Where there is not much swelling, there is difficulty in diagnosing the causes. Three, six, or twelve months are required for these injuries to heal. Thinks plaintiff's ulna was dislocated and radius fractured. There are eight bones of the wrist. The ulna is seldom dislocated; when fracture and dislocation concur, the difficulty of treatment is increased. Surgeons do not generally see such cases until an hour or two after the injury has been received; two hours might increase the difficulty of diagnosis. The proper treatment is to place the fractured ends in apposition and endeavor to retain them there.

Dr. J. M. Green, sworn. Has examined plaintiff's arm; considers it permanently deformed; thinks the result would have been better had it been well treated, and had the patient submitted. Witness would have reduced the fracture and applied means to keep it reduced immediately,—thinks if such course had been adopted, the present deformity would not have ensued; when such course is not adopted, loss of power and motion is the consequence; plaintiff has almost entirely lost the use of his arm; he is disqualified in a measure from using it.

(Cross examined.) Has had many cases of fractured radius; don't remember exactly how many; has not had cases of dislocation of the ulna; thinks plaintiff's ulna is dislocated. When the radius has been fractured, thinks the patient should not use his arm in less than two months. The bones of the wrist are seldom injured except by direct force; there use is to break the force of an injury; they are seldom injured. There are two kinds of fracture, oblique and transverse; fracture of the radius is generally oblique; such fractures require care on the part of the patient as well as surgeon; thinks the fractured ends might be kept from slipping past each other; splint shown is as good as any—a good cure might be made with it; strong union would take place in four or six weeks; patients would do wrong to take off splints in that time; in a majority of cases there is some deformity, as a rule, still the bone retains its position. Thinks such cases might be treated successfully; thinks Professor Parker of New York an able surgeon—considers Cooper and Miller good authorities.

Mrs. Lanier, sworn. Is mother of plaintiff; was with him during his illness; defendant's directions to him were strictly followed. Plaintiff was confined about three months. When splint was removed it was by defendant's orders; plaintiff could not then turn his arm over; thinks the arm was never set; don't know that defendant set it; when defendant first saw the arm, he said he would set it in two or three days. Defendant saw the plaintiff immediately after his return home; never was set except by Bassett.

(Cross examined.) The arm was very painful, but not much swollen. Saw defendant apply paste-board and splints; the bandage was not cut during the night, except a little at the fingers. Did not hear defendant say that there would be deformity. Defendant was kind and attentive to the case; was present when splints were taken off—do not remember defendant's remarks; thought defendant was doing right; don't know whether arm was straight when defendant first saw it; don't know how long defendant attended the case; the accident happened in the latter part of January, 1817. No other physician took charge of son; Dr. Strohecker once looked at it; don't know that plaintiff refused to answer defendant's interrogatories.

The prosecution was here closed, and the following defence was made:

Dr. Strohecker, sworn. Is familiar with injuries of the wrist—has found much difficulty in treating them: when there is much swelling the diagnosis is obscure and difficult; in fractures, the action of the muscles tends to draw the broken fragments past each other. Saw plaintiff's arm on or before Feb. 18th,*

*This was twenty-eight days or less after the injury had been received.
1847—the entry is made on that day; was asked to see plaintiff before then, but refused because defendant was attending. When witness saw plaintiff's arm, the splints and straps were loose and doing no good; has never used the instrument shown; it would be easy to slacken the straps around it; thinks plaintiff's arm is fractured and dislocated: in such cases the physician should not quit his patient in less than two months—if he does so, the muscles cause deformity; callus is soft and may be compressed; muscular contraction causes a difficulty in setting the bone, and keeping it reduced in cases of fractured radius; thinks plaintiff's arm was obliquely fractured; mistakes in diagnosis of injuries of the wrist do occur; did not dress plaintiff's arm but once; don't know that any one else did; when witness took the case, plaintiff's father said defendant had been discharged.

(Cross examined.) The arm was not properly bandaged when witness saw it; witness would not apply apparatus immediately, if much tumefaction existed he would wait a few days. Plaintiff's arm was past remedy when witness saw it; knows nothing of defendant's treatment of the case—from result, thinks it might have been different; splint shown, was not on when witness saw it.

Dr. Benson, sworn. Does not think injuries of the wrist very difficult to diagnostic, unless there be much tumefaction; cannot say that good surgeons frequently mistake fractures for sprains, even where there is much tumefaction—good surgeons wait until the tumefaction subsides before they form a diagnosis. Fractures of the radius, near the wrist, are extremely difficult to treat—they generally result in some deformity; the instrument shown would answer in cases where only one of the bones of the fore-arm was fractured, but would be inapplicable to cases in which both bones were fractured. Have once examined plaintiff's arm. [Witness declined giving testimony without further examination, which he institutes.] Considers the case to have been one of simple fracture of the lower portion of the radius; states that there is not a dislocation of the ulna; considers the natural relation of the ulna to the radius to have been changed by the action of the muscles upon the lower fragment of the fractured radius: there is no fixed time at which fractured bones unite, sometimes months and even years elapse before bony union takes place, and in some cases it does not take place at all; aye, health, constitution and many other circumstances, modify the formation of callus; plaintiff's constitution appears good; thinks a fractured bone in him would unite without much difficulty; don't know any thing about defendant's treatment of plaintiff's case; cannot say that the fracture had not been reduced—it might have been reduced and afterward the action of the muscles have produced the present deformity; a surgeon should not abandon his patient until bony union has taken place, without reference to the time necessary to that result: patients always try to use a fractured limb before they should do so, and the surgeon's attention is as necessary at the time the callus is becoming firm, as in the first treatment of the case; fractures are not irremediable so long as the callus remains soft; does not distinguish between primitive and definitive callus, considers these but different names for the same substance, terms without practical value.

(Cross examined.) Cannot say the result would have been different, had proper treatment been adopted by the surgeon and submitted to by the patient, for sometimes circumstances contraindicate the use of splints or other apparatus, and deformity would be preferable to the consequences which might ensue from their use.

(Re-examined.) Knows Prof. Parker of New-York, personally and by reputation; would be sorry to find Dr. P's opinion in collision with his own—considers him almost as high authority as any surgeon in the United States.

Mr. Armstrong, sworn. Has seen plaintiff use deformed arm in managing his horse.

Mr. Bloom, sworn. Knows that the said horse is extremely difficult to manage—he once ran away with witness.

Although the answers of Prof. Parker and of Dr. Wells, of New-York, were not permitted to be introduced in evidence, on account of some legal objections, it is but justice to the defendant, whose professional reputation has been staked upon this trial, to give them. It is also but justice to the plaintiff, and to the
community who may be interested in this suit, that they should be reported; for without such report, the defendant’s friends might imagine them to be of greater importance than they really are; and with their report, the plaintiff’s friends can say that the whole defence, equitable and legal, is before the public.

Willard Parker, personally appeared before us, on this the sixth day of January, 1849, and being duly sworn, testifies that he is Professor of Surgery in the University of the State of New-York, and that he has been a practitioner of medicine and surgery 19 years. He also further testifies, that fractures of the lower extremity of the fore-arm are common; and when the surgeon has the full co-operation of the patient, his treatment, however skilful, will be followed almost certainly with more or less of deformity and impairment of motion. The radius is most frequently broken, and the solution is either just above the joint or through it. These fractures are usually produced by falls upon the palm of the hand. It is always difficult to make out the precise nature of the accident, especially if the surgeon do not see the case before swelling occurs.

In the treatment, every practical surgeon, however skilful, knows he cannot prevent all deformity, and that the patient has cause to congratulate himself if he recover the use of the joint in from six months to a year.

1st. The Pronator Radii Quadratus, by its action, destroys the natural parallelism of the bones of the fore-arm, and the six flexors and extensors of the hand and the flexors and extensors of the fingers, force the fractured ends by each other.

2nd. When the joint is complicated, inflammation must ensue, and as a consequence, the natural motion of the joint must be impaired for a long time, if not permanently.

In every actual fracture at the wrist or near it, there will be, in my opinion, some deformity.

Isaac E. Taylor, M. D., [l.s.]
A. B. Robeson, M. D., [l.s.]

Thos. Wells, personally appeared before us, on this the sixth day of January, 1849, and being duly sworn, testifies that he is a resident of the city of New York, and that he has been a practitioner of medicine and surgery thirty years; that he has treated many fractures of the lower part of the fore-arm.

He also further testifies, that in cases of fracture of the lower extremity of the radius, there is always more or less obscurity in the diagnosis, in determining the exact nature of the injury, and this difficulty increases as the injury approaches the radio-carpal articulation, and in proportion to the degree of swelling of the parts, at the moment the surgeon is called to take charge of the case—and it may very properly be said that the difficulty of treatment is increased in proportion to the difficulty of diagnosis in the case.

All writers on Surgery agree that fractures of the radius near the wrist, are among the most difficult to manage; to avoid either deformity or imperfect pro-nation or supination of the hand, or impeded action of the fingers; and too frequently all these evils are found to exist in the same case, after the most skilful management. To ensure a satisfactory result in this species of fracture, the case must be taken in charge early, before any considerable degree of effusion or swelling supervenes; the patient must be entirely submissive to the surgeon, following rigidly his directions in regard to the dressings and position of the arm, and they must be followed up for a period, varying from six to ten weeks of careful treatment, before the patient should be allowed to take his own course. After all, no matter what the case may have been, it is often a very long time—in some cases several years—before the free and easy action of the parts implicated is regained, even in cases where success is finally complete. But in a large proportion of such cases, the patient is doomed ever after to submit to more or less deformity, or impeded action of the parts. To guard against the latter, should rather be the main object of the surgeon, even at the expense of a good deal of deformity.

Isaac E. Taylor, M. D. [l.s.]
A. B. Robeson, M. D. [l.s.]

Thos. Wells, M. D.
**OBITUARY NOTICE OF A MEDICAL STUDENT**

At a meeting of the Faculty and Students of the Medical College of Georgia, held March 8th, 1849, the following preamble and resolutions were unanimously adopted:

Being suddenly called to lament the death of Mr. D. W. Jacobs, one of the matriculated members of the present class—a candidate for the degree of Doctor of Medicine; and feeling (for the second time during the present session) this dispensation of Divine Providence in the death of our friend and companion whose estimable character had won for him our highest esteem—

*Be it therefore, Resolved, That we deeply deplore the death of this our friend and associate who has been thus suddenly stricken down in the morning of life, and just as he was about commencing his career of hope and usefulness in an honorable profession.*

*Resolved, As a mark of respect for the dead, we will wear the usual badge of mourning for thirty days.*

*Resolved, That a copy of these resolutions be forwarded to the parents of the deceased as a manifestation of our unaffected sympathy and condolence in this their severe bereavement.*

*Resolved, That these proceedings be published in the city papers, the Hamburg Journal, the Greenville Mountaineer, and the Southern Medical and Surgical Journal.*

P. TRENT,
T. B. LAMAR,
A. D. SHEWMAKE,

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9 Fair days. Quantity of Rain 90-100 of an inch. Wind East of N. and S. 4 days. West of do. do. 23 days.