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SKETCH OF THE EARLY HISTORY OF ANATOMY.*

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The origin of anatomy, like that of many other sciences, is lost in the mists of ages. The embalmers among the Egyptians must have had some rude knowledge of the human frame acquired in their process of preserving the dead, but, as they belonged to the lowest class, and were abhorred and despised on account of their occupation, what rough knowledge they may have got concerning the arrangement of the internal organs was kept secret, and so not used for the general good of the community.

It has been asserted by some that the Greeks of the time of Homer were well acquainted with anatomy, and that Homer, in describing wounds, showed an accurate knowledge of the structure of the human frame; but the fact is, that the terms used by Homer were then the common ones employed by the people, and had no exact scientific significance. In later times these same terms were used by all anatomists in special treatises on the subject, and conveyed a certain definite meaning; thus Homer's knowledge appeared much greater than it really was. Eusebius states that Athotis, a traditionary monarch of Egypt, wrote several treatises on anatomy. Hamilton, who wrote a

* Enlarged from an introductory lecture delivered before the Anatomical Class of McGill University, October 1884.

History of Anatomy and Medicine in the first quarter of this century, speaking of this tradition, quaintly remarks that "when we learn that the æra assigned to this fabulous monarch by the wild and improbable chronology of the Egyptians would carry us back to an age prior by many centuries to the formation of Adam, we can easily estimate the degree of credibility to which such a fable is entitled." Acmæon, who flourished some time before the advent of Hippocrates, paid considerable attention to anatomy, and is said to have made dissections, principally of the lower animals. Among other things, he asserted that goats breathed through their ears.

Hippocrates, who lived four or five hundred years before the Christian era, and who has been called the Father of Medicine, was the first individual who wrote a work on anatomy; his knowledge of anatomy was superficial and often most erroneous, and probably rested more on shrewd analogical conjecture than on actual observation. He, however, had a fairly accurate acquaintance with osteology. It is asserted by Pausanias that he hung a bronze model of a skeleton in the temple of the Delphian Apollo as a testimony of his own knowledge and for the instruction of posterity. It is highly improbable that he ever dissected a human body.

Diocles of Carystius, who lived a century after Hippocrates, and who is called the second Hippocrates, is said to have devoted much of his time to the study of comparative anatomy. He did not, as was the custom in those days, make a secret of his anatomical knowledge, but taught publicly, and was the first to write a manual of Dissection of Animals, an art, previous to his time, confined to a few families, and handed down from father to son by oral instruction. Diocles also wrote on Cookery, and held it to be as much a science as that of medicine—an opinion with which Plato altogether disagreed.

It is with the appearance of Aristotle, the preceptor of Alexander, that we must first date the systematic cultivation of the science of anatomy. To him, without doubt, should be awarded the credit of having founded Comparative Anatomy. Many of his admirers, without much reason, claim for him an

intimate knowledge of human anatomy; that he dissected animals is no doubt true, and also that he had a marvellously accurate knowledge of marine animals, but to say that he was a profound anatomist is absurd, and is not substantiated by what we find in his writings. For instance, in his writings he states that the kidney of man resembles that of the ox (which consists of many reniform bodies), and is not smooth like the sheep, that the human uterus is double, that the back part of the skull is empty, that the brain is without blood, and many other things equally absurd. His knowledge of osteology was also limited. He asserted that man had no astragalus (a bone in man forming the keystone of the arch of the foot), "neither," he says, "have many-toed animals, nor solid-footed animals." Now this bone is never absent in mammalian animals with limbs, and it is evident that Aristotle never looked for it, but asserted that these animals were without it on theoretical grounds alone, for in one of his works, "*De partibus Animalium*," he gives elaborate reasons why certain animals have no astragaloid bones. He also stated that the bones of the lion had no marrow, and that the necks of wolves and lions consisted of a single bone and had no flexibility. These points he could easily have made clear by actual examination. He, like Hippocrates, thought that nerves, ligaments and tendons were the same thing; he gave, however, a fairly accurate description of the great blood-vessel, the aorta, and distinguished the windpipe from the gullet; he also had some acquaintance with the structure of the larynx, and knew that the ear and throat communicated. No doubt Aristotle, for his time, was a good comparative anatomist, and some of his observations are valuable, but he so mixed up his facts with fiction that it is not easy to separate the one from the other. He was the first to write a treatise on Comparative Anatomy.

Plato, although he did not study anatomy practically, frequently refers to it in his writings. His references represent, no doubt, fairly well the condition anatomy and physiology had reached in his time, for all philosophers were supposed to know much of physic, under which anatomy was included, but sup-

position and assertion are so substituted for facts that his anatomy appears nearly altogether fanciful and imaginary.

The name of Praxagoras of Cos, the last of the family of the Asclæpiadæ (B.C. 341), has been handed down as the individual who distinguished the arteries from the veins, and who first asserted that the arteries were air-tubes (hence the name *ἀρτηρία*), an opinion which was held for several hundred years by his successors, and to which I shall refer later on.

Up to this time all knowledge of anatomy had been acquired from the dissection of the lower animals, but we now enter upon a new era of great and rapid progress in anatomical knowledge.

In the division of the empire which took place on the death of Alexander (323 B.C.), Egypt fell to the lot of Ptolemy Soter. He and his successors, Philadelphus and Euergetes, ardently encouraged the study of letters and the sciences. At Alexandria, a great library was established and a school of philosophy founded.* Alexandria, under the fostering care of the Ptolemies, soon outstripped its many rivals not only in literature and science, but in wealth and commerce. Learned Greeks, glad to escape from the dissensions of their native states, flocked to Alexandria, where they were sure, not only of protection, but of a hearty welcome; thus whilst the rest of the civilized world, distracted by intestine troubles and ravaged by frequent foreign wars, was fast sinking into a state of semi-barbarism, the Egyptian Greeks, protected by the wise and peaceful government of the Ptolemies, not only kept alive the flame of literature and science, but added not a little to its volume. The Alexandrian School of Medicine, participating in the general prosperity and advance, attained a renown far exceeding that of any school which had previously existed, attracted pupils from all parts, and produced many emi-

* Ptolemy founded the Museum (or University) of Alexandria, which was an establishment for the cultivation of literature and science. To it were attached botanical and zoological gardens for the purpose of practical study. One of the most important features of the Museum was its public library, which was supported with the greatest liberality; whenever manuscripts of acknowledged merit were offered for sale, they were immediately purchased, and the whole known world was ransacked for curious and useful MSS. The list of teachers in the Alexandrian school includes such names as Euclid in Geometry, Strabo and Eratosthenes in Geography, Archimedes in Physics, Hipparchus and Ptolomæus in Astronomy, and Erasistratus and Herophilus in Anatomy and Physic.

nent physicians. Among these were two who did more than any previous individuals to advance the science of anatomy. These men were Erasistratus and Herophilus. They both wrote large works on anatomy, which are, unfortunately, lost, but from which Galen, Oribasius, and others quote extensively. Herophilus and Erasistratus were probably the first who ever dissected the human body, for Philadelphus and Eurgetes gave orders that the bodies of all criminals should be handed over to the School of Anatomy for dissection. Thus at this early period, when the dissection of a human body was looked upon with horror and as an act of desecration, the enlightened and far-sighted Ptolemies, in spite of vulgar prejudices and religious scruples, enabled the School of Medicine of Alexandria to make a great stride forwards in learning, knowledge and reputation. It is said that Herophilus dissected 700 bodies, and that both he and Erasistratus made a common practice of opening living bodies in order to discover the origin of life. Tertullian, a learned father of the Church, who lived at the end of the second century, charges Herophilus with this crime; he says, "Herophilus, that physician, or rather butcher, who dissected 600 men in order to find out nature, who hated man in order to learn the structure of his frame, could not by these means come to a more perfect knowledge of his internal structure, since death produces a great change in all parts so as to render the appearance after death different from what it was before, especially since they did not die a natural death, but expired amidst all the agonies to which the curiosity of the anatomist was pleased to subject them." Celsus, who lived about 20 B.C., also says that Herophilus and Erasistratus vivisected human beings; he mentions it incidentally, as if it were a well-known fact, and does not appear at all shocked at such a proceeding. It is very probable that these anatomists did occasionally vivisect a criminal, since human life in those days was considered of little value, and the people were accustomed to see criminals cruelly tortured before being put to death, so that *vivisection* would, perhaps, be regarded with less horror than *dissection* of a dead body. It is the custom of historians to attribute these charges against Herophilus and Erasis-

tratus to blind and ignorant superstition, and to utterly repudiate them as unworthy of belief, but for the reasons given above the story seems to me a very probable one.

Herophilus, whether the charge against him of vivisecting human beings be true or not, was an able physician, an accomplished anatomist, and a learned man. Galen says of him, "He was an accomplished man in all branches of physic, excelling particularly in anatomy, which he learned, not from the dissection of beasts alone, as physicians usually do, but principally from that of men." He discovered the lacteals and the pulmonary artery, and described correctly the liver and organs of generation; he also described the blood-vessels, and a large blood cavity in the skull is, to this day, called the "Torcular Herophili." It is said that he was the first one who operated for cataract by removing the crystalline lens. Gabriel Fallopius, one of the most distinguished anatomists of the 16th century, said that he would almost as soon think of contradicting the Gospel as the authority of Herophilus.

Erasistratus is supposed to have been a contemporary of Herophilus, and to have flourished in the reign of Seleucus (B.C. 300). He was an able anatomatist, and accurately described, for the first time, various parts of the human frame, as the brain, nerves, valves guarding the orifices of the heart, etc. He it was who first divided the nerves into motor and sensory. He believed that the arteries carried air and the veins blood, also that the only use of respiration was to fill the arteries with air. This has been adduced by some as evidence that he had never vivisected human beings, for had he done so, say his defenders, he must necessarily have found out that the arteries were full of blood, but, as I shall show later on, this argument can have no weight.

Erasistratus was much opposed to bleeding and purgatives, and treated his patients solely by diet and regimen. He condemned strongly complex prescriptions, and, in fact, left everything to nature; he might with truth be called an "expectant physician." Herophilus, it is said, held opinions in physic diametrically opposed to those of Erasistratus, and believed in actively interfering with disease.

From the time of these two anatomists to that of Celsus little was done to keep alive the science of anatomy. Celsus, who lived towards the end of the last century before the Christian era, gives in his works, which are valuable repositories of the medical and surgical knowledge of his time, fairly accurate anatomical descriptions, but he himself does not seem to have done any original work in anatomy.

The first Roman anatomist whose name has been handed down to us is Marinus, who, according to Galen, described the muscles accurately, and also mentions the mesenteric glands. Soon after Marinus, Ruffus of Ephesus, a Greek physician, appeared. He vivisected animals and devoted himself to physiology and comparative anatomy; he made some discoveries regarding the abdominal viscera, and especially the uterus.

Of all the physicians of antiquity, none attained to so great a fame as Claudius Galenus of Pergamus. His reputation is deservedly great, for none did so much as he to advance the knowledge of physic. He was born A.D. 130, and was educated by his father Nicon, a mathematician of repute, as well as an architect and astronomer. Nicon early initiated his son into the mysteries of Aristotle's philosophy, but Galen also studied philosophy in the schools of the Stoics, Academics, Peripatetics and Epicureans. With the exception of the Epicureans, whose doctrines he utterly repudiated, he is said to have taken from each what he thought to be the most important part of their systems. At the age of seventeen he began the study of medicine; he soon outstripped his teachers, and early exhibited proofs of the greatest ability. His renown spreading abroad, he was brought to Rome by the Emperor Aurelius, and in that city he practiced till his death at the age of 90 years. Over his contemporaries he acquired great ascendancy, and held the same position in the medical world that Aristotle held in the world of general science. For hundreds of years after his death his doctrines and opinions held sway, and his sayings were regarded as oracular. Few ventured to oppose his tenets, and up to the 16th century all the medical books were merely commentaries explanatory of Galen's work. If any one advanced

a new theory as to disease, or stated what he believed to be a new fact, it was quite sufficient to show that it was opposed to the opinion of Galen, to bring down shame and disgrace upon the heretical innovator. Although Galen studied, among other places, at Alexandria, it is very probable that his knowledge of anatomy was gained chiefly from the dissection of animals whose structure was supposed to come nearest to man, hence his anatomy is not always the most correct.

Previous to Galen's time, it was thought the arteries carried vital spirits or pneuma, and so convinced were the ancients of this "physiological fact" that, although they were fully aware that when an artery was wounded it bled, they used all their ingenuity and powers of reasoning to explain how it was that a tube containing air *should* bleed when cut. They held that the air first escaped through the wound and then blood came from the veins by communicating channels, to fill the vacuum. Galen fully exposed the absurdity of this belief, and, by experiments on animals, showed that the puncture of an artery by the finest needle immediately gave rise to hemorrhage, and that no discharge of vital spirits took place. He also placed ligatures on the arteries at two points, and demonstrated that the portion of the artery between the two ligatures contained only blood. The Alexandrian anatomists said: "Nature could not have made two kinds of vessels, both intended to contain blood." But Galen replied: "You might as well say that the several stomachs of ruminating animals were not all intended as the recipients of the food, but that one was meant for solids, one for liquids, and one for spirits; they are all the recipients of the same thing, but each, nevertheless, has its separate use. So it is with arteries and veins." (Galen's *Opera Omnia*, Vol. IV, p. 722; quoted by Dalton.) Galen could not explain why two sets of vessels existed to carry blood, but he knew both contained blood, and this he satisfactorily proved by experiment. He did not, as was then (and is now) too commonly the case, start a theory and endeavor to make the facts dove-tail into it, but founded all his theories on experiment and observation, as every true philosopher should. It is very improbable that there were any opportunities

at Rome for dissection of human bodies; for Galen advises students to visit Alexandria in order to study the human skeleton, and not to trust to book descriptions. It is evident Galen himself had few opportunities of studying even the human skeleton, for he expresses great delight and astonishment on one occasion when on his travels he had the opportunity of examining a skeleton which had been exposed by the washing away of the earth which had covered it.

Galen added but little to our knowledge of human anatomy, yet by his researches and arrangement he brought together all that was known up to that time, digested and systematized it, and made it the basis of a medical education. He was a good comparative anatomist, and most of his original descriptions are derived from the dissection of monkeys. His style is clear and correct, and there is not so much confusion as is seen in the authors preceding him. Many of the names he gave to different parts of the body, especially those about the brain, are retained to the present day.

With Galen's death anatomical science declined—nay, was almost extinguished. For many centuries the men that followed him looked upon anatomy as a completed science, and Galen's works on the subject were regarded as sacred and infallible. It is strange that in ancient times all the great names in anatomy are those of Greeks, the Romans, though rich in soldiers, statesmen, poets and orators, never produced any one who was great in physic or any of the sciences.

With the fall of the Roman Empire and rise of Christianity, all learning, especially that having its origin in Greece, declined, for it was thought by the Christians to be the cause of all heresies. Anatomy suffered with the rest, principally owing to the prejudice which existed against the dissection of the human body. Dr. William Hunter, in a lecture delivered over a hundred years ago, remarks that "when faith was thought to be all that was worth acquiring, and prayer almost our only duty, there was an end of liberal education and every ingenious inquiry."

From the second to the eighth century but little progress was made in anatomy. The names of writers in anatomy during this

period are those of mere compilers, such as Oribasius, Meletius, Theophilus, and Soranus; the last mentioned appears to have dissected the human subject, but he added nothing to what was already known.

About this time, what little of science and learning there was in Europe was transferred to Asia; this transference of learning and science from the West to the East is coincident with the capture of Alexandria, which was then one of the chief seats of learning. There the Saracens were first brought into contact with the literature of Europe. When the Northern Vandals overran Europe, they drove from it all that remained of learning and culture, and ignorance was universal. A few monks and quacks practised the healing art in a rude way, but anatomy was altogether neglected. The lamp of science was kept feebly burning by the Saracens, who, although at first despising learning, later encouraged it. The philosophers of the West found refuge in Asia, and were protected by the wise rulers of the Saracens.

It has been for ages a common belief that at the capture of Alexandria its huge library was committed to the flames by the conquerors, and all its treasures, both literary and scientific, destroyed. The only authority for this story is Abulpharagius, who flourished about the middle of the 13th century, nearly six hundred years after the capture of the city. He relates that John Philiponus, the celebrated peripatetic philosopher, requested Amrou, the Saracen General, to spare the celebrated library of the Ptolemies. The General referred the matter to the Caliph Omar, who replied, "If these writings of the Greeks agree with the Koran, they are useless and need not be preserved; if they disagree, they are pernicious, and ought to be destroyed." Abulpharagius goes on to state that the library, in conformity with this decision, was destroyed, and that the books furnished the Arabs with sufficient fuel to heat the baths of the city for six months. Now, in the various histories of the siege and capture of Alexandria, written soon after the event, no mention is made of the destruction of the library. Besides, it is well known that the destruction of such treasures would be utterly repug-

nant to the Mohammedan precepts, which distinctly declare that religious books of Jews and Christians should never be committed to the flames, and that works of profane science may be lawfully applied to the use of the faithful. In addition to this, the Saracens took a great interest in medicine, and it is even said that the prophet himself wrote a book of medical aphorisms. So it is most unlikely that the Saracens would destroy the numerous works on that science which were contained in the library. Again, it is well known that Alexandria preserved its reputation as a school of science for a considerable period after its change of masters. Possibly part of the library was destroyed previous to the capture of the city by the mob of Christians led by Archbishop Theophilus in A.D. 391, and the rest was gradually dispersed in various directions, as happened after the destruction of Constantinople. (*Hamilton, History of Medicine.*) The Saracens ardently encouraged the study of medicine; the Caliph Almansor, the founder of Bagdad, offered large premiums to the translators of Greek works into Syriac and Arabic; schools, hospitals and libraries were established in Bagdad, Cordova,* Seville, and other cities. At one time Bagdad has as many as 6,000 students. Soon a race of learned Arabians arose, who did much to preserve what had, up to that time, survived the sanguinary conflicts and destructive fires of the dark ages. In the department of medicine, chemistry and pharmacy are most indebted to the Arabians, and many terms employed by them are yet in use, as alcohol, syrup, julep, etc. Little or no progress was made in anatomy, as, owing to the strict rules of Islam, which declared him defiled who touched a dead body,† dissection was never practised; nevertheless, they deserve credit for having preserved Galen's works, and in this way prevented anatomy from being altogether a lost science. Some anatomical terms remain as the only trace that anatomy was once in the keeping of the Arabians.

* Alhakem established an academy at Cordova which was frequented by all the Christians of the West. In the 10th century the library contained 224,000 volumes: and in the 12th century 70 public libraries existed in the parts of Spain subject to the Moors.

† The Mussulman faith taught that the soul did not take wing at once, but clung to the body after death, crept from limb to limb, and afterwards took refuge in the chest.

The era of Saracen learning extends to the end of the 13th century, when the empire, which was already showing signs of decay, was overthrown by the Ottoman. The Turks, despising learning, destroyed all the schools and abolished every kind of study in Bagdad, and from this time Europe again became the seat of the little learning that survived. There, the study of the Greek authors was encouraged, and a taste for literature and art was rapidly developed. The University of Bologna now begins to attract notice as a school of literature, medicine and law; in the 13th century it had over 10,000 students in attendance on its classes. In the early part of the 14th century, the chair of Medicine, which included anatomy, was filled by Mondino di Luzzi, called the Restorer of Anatomy; his is the first name of note in anatomy following Galen's. Mondino, in 1315, was fortunate enough to get Royal permission to dissect the body of an unclaimed female subject, the first human subject which had been legally dissected for more than a thousand years. One can well imagine the excitement which must have existed in the old University when it was announced that on a certain day a human body was to be publicly dissected. With what feelings of awe even students and physicians, who had never witnessed such a desecration of the dead, must have regarded the sight, and how such a mutilation of the sacred bodies of the dead would have aroused the animosities and prejudices, not only of the common people, but even the most highly cultured. Mondino himself was not entirely free from these prejudices and superstitions, since he declined to open the head and examine the brain in fear of committing mortal sin. (*Fisher.*)

Martianus, physician to Frederick II. of Naples, induced that monarch to grant permission to allow a public lecture on the actual subject at least once in five years. All the physicians and surgeons in the neighborhood were commanded by Frederick to attend these demonstrations. At these lectures the professor sat on a high chair, with the subject in front of him, and surrounded by his pupils. He demonstrated the various structures as they were laid bare with a huge broad-bladed knife or razor by the barber who was employed for that purpose. An engrav-

ing of such a scene forms the frontispiece of some of the editions of Mondino's Anatomy. It is said that Mondino dissected two female subjects, and shortly afterwards published a description of the human body, illustrated by rude engravings. The title of the book was "*De omnibus humani corporis interioribus membris Anathomia.*" This work was very little different from that left by Galen—in fact, most of the errors of the latter were perpetuated. The Government undertook the publication of Mondino's Anatomy, and the statutes of the University of Padua prohibited the use of any other anatomical text-book. Mondino's Anatomy existed in manuscript alone for 150 years, and first appeared in type in 1578, twelve years after the introduction of printing into Italy. It went through numberless editions, and for more than 200 years was looked upon as an authority. It is quite a small book of 175 pages, and gives a most superficial and crude description of the various parts of the body. It is full of inaccuracies, the arrangement is confused, and the meaning often obscure, still it was the best work in anatomy which had up to that time appeared. The first chapter shows how man differs from the animals; one difference is that man has no tail, "because, being naturally erect, he rests himself by the sitting posture, and a tail would interfere with his sitting down." His reasons for the erect posture are amusing. "First, man is erect because he is of a lighter, more spirituous, and aërial character; secondly, he contains a greater quantity of heat, which is naturally lifted upwards; thirdly, he has, among all animated creatures, the most perfect form, which he shares in common with the angels and the intelligences which rule the universe; and fourthly, the sense of sight, through which most of our intelligence comes, needs to be placed at the highest point of the body, like the sentinel on the watch-tower." (Dalton.) Mondino divided the body into three cavities: the upper (head), containing the animal members; the middle (thorax), containing the spiritual or vital members; and lower (abdomen), containing the natures. His description of the heart is singularly correct, and he seems to have had some notion of the uses of the valves, for he calls them *ostiola*, or little doors.

From the time of Mondino to the 16th century, there is little to relate about the progress of anatomy; during that period most of the anatomists were blind followers of Galen, and learned nothing by actual observation. There were one or two exceptions, men who worked diligently and observed closely, though their opportunities were few and their minds still somewhat obscured by the mysteries of the Arabian school. Among these were Matthew de Gradibus, who first accurately represented the ovaries, and Achillini of Bologna, who discovered the small bones of the ear and also gave an accurate description of the brain and intestines.

Leonardi da Vinci, the great painter, was one of the first who gave an impetus to the study of anatomy by the introduction of anatomical drawings. He not only made drawings of human anatomy, but carefully and accurately described and figured the various parts of the anatomy of the horse whilst modelling his gigantic equestrian statue of Francesca Sforza. His anatomical drawings are still extant, and are very correct.*

(*To be continued.*)

NOTES ON A CASE OF ACUTE FEBRILE PEMPHIGUS.

By CHARLES E. GOODING, M.D., St. Philip, Barbadoes, W.I.

It having been my fortune lately to have under treatment a patient suffering from acute febrile pemphigus, I thought that a history of such a rare case might not prove wholly uninteresting to the readers of the Journal.

M. R., negress, aged 31, agricultural laborer, mother of several children, no miscarriages; always enjoyed good health; no specific history; nothing special in family history. Sixteen days ago first noticed several small, slightly raised spots on her chest, which were attended with a moderate amount of itching. Feeling fairly well, she went about her work as usual, but towards evening became somewhat feverish, and complained of slight headache and general malaise. These symptoms gradually increased in intensity, but it was not until the end of a week

* Some are at Windsor Castle, others at the South Kensington Museum, London.

that she took definitely to bed. About a day after the spots were first noticed, small vesicles appeared on them, and these increased in size until, in a few days, they became large bullæ. During this time new vesicles began to show themselves between the old ones on the chest, and then successively spread to the abdomen, back, face, head, and, last of all, the extremities—in fact, over the entire body, except the legs, palms and soles. The bullæ, originally filled with clear fluid, soon became opalescent, then pustular, and finally burst, being replaced by large masses of scabs, from beneath and between which pus kept constantly oozing. Such was the account I obtained when called sixteen days from the beginning of the attack. The people being very poor, put off calling a medical man as long as they could.

On my arrival I stopped about ten yards from the door, and could even then notice a great commotion among the "carrion flies" which were congregated in large numbers outside the house. Their presence only imperfectly prepared me for the revolting sight which awaited me inside, for never in my life have I beheld anything half so loathsome. The stench when I entered the door was well nigh insupportable, being aggravated by the intense heat of a tropical sun. A human creature (though she was scarcely recognizable as such) was sitting on a stool in the centre of the room. Her face—so swollen that her features were scarcely distinguishable—was covered all over with crusts. Her body was in the same condition, only intensified. The entire surface was, or had been, covered with scabs. These were divided very symmetrically by cracks, giving the body the appearance of being enveloped in a coat of mail. Through the cracks a purulent discharge of a most nauseating odor was oozing. In some places (especially on the back) large masses of scabs had been detached, leaving raw, bleeding surfaces. The thighs and arms were found in a similar state, though to a less degree. Here the eruption could be beautifully seen in all its stages, from the small vesicle to the large pustular bleb and its subsequent scab. Some of the bullæ were as large as hen's eggs, discrete in many places, but in others coalesced to

form masses much larger. From the knees upwards, I doubt whether a piece of healthy skin could have been found large enough to place a shilling on. Considerable pain in swallowing was complained of, and the throat was found swollen and injected, while several dark patches, like bits of diptheritic membrane or superficial sloughs, were seen on the pharynx and about the base of the uvula. On detaching one of these, the membrane bled readily. The external genitals were also covered with crusts, and a highly offensive discharge was issuing from the vagina. At the time of my visit, the pulse was 122, temperature 103°½; bowels open; sleeps very little; slight nocturnal delirium.

I ordered all clothes to be removed from the patient, and for her merely to be covered with a fine piece of muslin to keep off flies, etc.; carbolized carron oil to be kept constantly applied; ammonia and bark internally, with brandy, and plenty of liquid nourishment at regular and frequent intervals.

17*th day*.—Condition much the same. Passed a very restless night. Ordered a sleeping draught of chloral and bromide.

18*th day*.—Slept better last night. Bowels very free. Sleeping draught repeated, and bismuth and Dover's powder for the diarrhœa.

19*th day*.—Diarrhœa moderated; otherwise condition unchanged.

20*th day*.—In spite of the utmost care, a large number of the crusts have been torn off the body. Diarrhœa returned, and she is much weaker.

After this, the diarrhœa resisted all efforts to control it, and she gradually sunk, dying from exhaustion on the 24th day.

Remarks.—The main peculiarities of the case are its acute course and rapidly fatal termination in a previously perfectly healthy individual. The rarity of the disease may be judged from the fact that its very existence is denied by many writers. The great Hebra is said never to have met with a case. I regard the patches in the throat as identical with the eruption on the surface of the body, their appearance being modified by their occurrence on a mucous membrane. I could not obtain

permission to make a post-mortem examination, but it would have been very interesting to see whether the gastro-intestinal tract was similarly affected. The marked diarrhœa would favor such a supposition. The fact of the mucous membranes being involved in pemphigus is not generally admitted, but this case, to my mind, goes far to prove it.

A PRACTICAL DEMONSTRATION OF THE CONTAGIOUS NATURE OF TUBERCLE.

By GEORGE WILKINS, M.D.,
Professor of Medical Jurisprudence and Lecturer on Histology, McGill University.

At the meeting of the Canadian Medical Association, held at Chatham in September last, the entire lungs of two rabbits which had been inoculated with tuberculous sputum, as well as portions of lungs of other rabbits, all showing tuberculous nodules, were exhibited. Ten microscopes were used for the demonstration, several of them with Abbe's condensor. The lenses used were Zeiss' homogenous $\frac{1}{8}$, $\frac{1}{12}$, and also dry systems magnifying from 120 to 600 diameters.

In drawing attention to the various specimens, the following remarks were made by Professor Wilkins :—

June 17, '83.—I introduced into anterior chamber of eye of two rabbits, by means of hypodermic needle, a tiny drop of sputum which I had previously ascertained contained numerous tubercle bacilli. This was taken from a patient who died shortly after of phthisis. I also introduced into anterior chamber of another rabbit a small quantity of fæcal matter from a typhoid patient.

June 22, '83.—In presence of Dr. Osler I inoculated five more rabbits with some fresh sputum from same patient.

The rabbit into whose eye I introduced the fæcal matter completely recovered from the effects within four days, leaving no trace of injury further than a few enlarged vessels at margin of cornea.

The other two rabbits had complete opacity of cornea within twelve hours, and in forty-eight hours the chamber was in a suppurative condition. Five days subsequent to inoculation the

cornea sloughed, and on the seventh day ulcer was three mm. in diameter.

Four of the other rabbits had complete opacity of cornea within fourteen hours. The other one, a large buck, had very slight opacity; this had almost quite disappeared within forty-eight hours. In this rabbit, on the fifth day, I thought I could perceive some small tubercles on the iris. About the fourteenth day some slight enlargement of the glands at the back of jaw was perceptible. The glands of the other rabbits commenced to enlarge about the tenth day; their temperature, which was taken only twice at this time, was 102° in the rectum. All, except the large buck referred to above, commenced to waste rapidly. Unfortuately, five of them met with a violent death, having been torn to pieces by dogs. I secured the lungs of two of these, and it is from one of these animals that I prepared the specimens for microscopical examination which I show you to-day. Another animal lived to die naturally in the ninth week. His lungs I now show you, completely covered with tuberculous nodules.

At about this time I killed the buck, who seemed to be but little affected, as far as appearances were concerned, and also his eating abilities. I wished to use him for normal histological purposes, consequently injected by the carotid a carmine gelatine mixture. I had not intended to utilize his lungs, as I thought the tuberculous inoculation had failed with this animal, but on taking them out I found them studded over, much to my surprise, with beautiful tubercles. These I show you now, with the tuberculous nodules uncolored, the injection mass not having entered on account of its non-vascular nature. The liver also contained a few tubercles, but I could discover none in any of the other organs.

In the other rabbits, I found tubercular masses in both liver and kidneys. Through an oversight, I did not examine glands in neck.

Besides the two lungs just referred to, I show you to-day, under the microscope, the sputum of hospital patient containing bacilli. These have been stained red, after Gibbes method. I

show you the lung of the individual by whom this sputum was expectorated. It has been prepared according to Weigert's modification of the Koch-Ehrlich process. Some portions of this lung are here shown teeming with bacilli. I also show you the lungs of two of the rabbits, containing exactly similar bacilli, prepared after the same method. The bacilli in this case have arrived here through the lymph path. In the anterior chamber of the cornea the bacilli found a suitable nutritive fluid and another most important condition: they were undisturbed, consequently developed rapidly. The lymph cells of the iris and vicinity carried them throughout the system, and permitted them to germinate in those localities in which they found a suitable nidus, as well as other favorable conditions.

The microscopes on the tables show the bacilli all stained red.

CASE OF CHRONIC LEAD POISONING.

By W. M. SCOTT, M.D., Gladstone, Man.

S. T. W., aged 35 years, hotel-keeper, a robust, muscular man, sent for me on the evening of Friday, the 19th of October. His condition, on my arrival, was as follows: Temperature 100½°; pulse 80, and regular; perspiring freely; countenance anxious, restless; vomiting occasionally; abdomen distended and tympanitic; acute pain in hypogastric region; anorexia; tongue coated with a white fur; bowels constipated; urine scanty and very high-colored; considerable headache. His past history is good, but for the past few years he has drank pretty heavily, though irregularly. He had been feeling poorly for some time past, his appetite being variable and capricious. He dated his illness from a week before, when he ate a hearty meal of greens, and he declared that the greens still remained in his stomach like a log, notwithstanding that he had vomited several times, and had eaten very little since. The day previous to my seeing him he took a fancy for canned plums, and devoured about half a can. During last week, bowels were constipated and urine very scanty and dark. On examination, I found the abdomen as before stated, but no special pain in left iliac region, and no gurgling. The pain had been in this region the day previous,

but had moved to above the umbilicus, and I noticed that it was not markedly increased by pressure. The liver was of normal dimensions. Lungs and heart normal, but breathing was rapid and shallow. I took it to be a case of acute gastric catarrh. Ordered an enema, hot fomentation to abdomen, and calomel and opium internally. On Saturday he was much the same, but that the temperature was normal, and the pain increased in intensity, causing him to writhe in bed, and it was confined to the umbilical region. I immediately looked at the gums, and discovered the *blue line* beautifully developed. This changed the appearance of things at once, and though the vomiting of bile-stained fluid still continued, I knew I had a case of colica pictonum to deal with. The pain was not in the least relieved by the hot fomentations, so I gave him, hypodermically, Morphiæ Sulph. gr. ¼, Atropiæ Sulph. gr. 1-150, which quieted the pain in a few moments. And just here let me say, that I have found it a good plan, in giving a hypodermic, to oil the needle, for which purpose a small vial can be carried in the case along with your tablets. It very greatly diminishes the pain of the operation. I never saw this done in hospital, nor is it, so far as I am aware, to be found in a text-book. My instinct led me to try it, and though simple, it is worth knowing. The patient was ordered Pot. Iodid. grs. v. t.i.d., and sulphuric acid lemonade. I had to repeat the hypodermics morning and evening for three days, but for the past two days he has required it only once, as he is improving very rapidly. I find that the man's wife and sister-in-law are suffering from the same cause, but in a mild form. The blue line on the gums is developed to a slight extent, with indigestion and a brassy taste in the mouth. I forgot to mention that my patient has not remarked a metallic taste, though he does complain of the taste being disagreeable. Now as to the source of the lead. I examined the well and pump, but found nothing there. I need scarcely have looked there, for water, for a considerable time past, has been too thin for him. I found that he had been in the habit of taking, the first thing in the morning, what is commonly called a "stone fence"—that is, whiskey and cider, the latter of which was of the manufactured

variety, was kept in the cellar, and was connected with a pump in the bar by means of a lead pipe, of which there was about 16 feet. I analyzed the cider, and got strong indications of lead.

QUARTERLY RETROSPECT OF OBSTETRICS AND GYNÆCOLOGY.

By WILLIAM GARDNER, M.D.,
Professor of Gynæcology, McGill University; Gynæcologist to the Montreal General Hospital.

The Treatment of Pelvic Abscess in Women by Incision and Drainage.—At a recent meeting of the New York County Medical Society, Dr. P. F. Mundé of New York city read a paper on this important subject. Inflammations of the pelvic peritoneum and cellular tissue constitute, according to some authors, the most common but one, of the diseases peculiar to women, the exception being cervical endometritis. There can be no doubt that this statement, if not absolutely true, is very nearly so. A small proportion only, however, end in suppuration. This may, however, be more common than is generally laid down in text-books. A moderate quantity of pus may easily be passed unnoticed from the rectum, bladder, or vagina. In the majority of such cases the abscess closes spontaneously. In not a few, however, a chronic discharging sinus persists for months or years, and may kill the patient. Hence the importance of Dr. Mundé's subject, in his treatment of which he, however, did not lay claim to anything new. He believes that abscess far more often follows cellulitis than peritonitis. Certain of those who took part in the discussion did not agree with him. Dr. Mundé gave the histories of ten cases, and at the close of his paper formulated the following conclusions:—

1. Pelvic abscess in the female is not very common, in proportion to the great frequency of pelvic exudation, and probably does not occur in more than ten per cent. of all cases, the majority of exudations terminating in spontaneous absorption.

2. Pelvic abscess may be either extra-peritoneal, the result of cellulitis (by far the most common variety), or intra-peritoneal, the consequence of pelvic peritonitis. If intra-peritoneal, the

adhesive inflammation between pelvic viscera and intestines may so seal the abscess-cavity as to render it *practically extra*-peritoneal. Abscess of the ovary and pyo-salpinx do not belong to the category of "pelvic abscess" proper, and do not fall under the same therapeutic rules, unless when, by agglutination to the abdominal wall or to Douglas' pouch, they become virtually extra-peritoneal.

3. Small, deep-seated pelvic abscess, not exceeding a capacity of two ounces, and minute multiple abscesses in the cellular tissue, can often be permanently cured by evacuating the pus thoroughly with the aspirator. The surrounding exudation is then rapidly absorbed.

4. About one-half of the abscesses open spontaneously into the vagina, rectum, bladder, or through the abdominall wall and ischiatic fossa. These cases may gradually recover without treatment, or the sinuses may persist until closed by surgical interference.

5. Abscesses containing more than two ounces of pus should be opened by free incision along an exploring needle or grooved director, cleared of debris by finger or blunt curette, and drained and irrigated, if necessary, through a drainage-tube.

6. This incision should be made where the pus points most distinctly, which is usually the vaginal vault.

7. In a certain number of cases the pus points through the abdominal wall, generally in the iliac fossa, and the incision should then be ample and free drainage secured.

8. When the pus has burrowed deep into the pelvic cavity, and a probe can be passed from the abdominal incision down to the vaginal roof, mere abdomino-cutaneous drainage will not suffice, and a counter-opening must be made in the vagina, and a drainage-tube carried through from the abdominal wound into the vagina. This drainage-tube may have to be worn for months. In making this incision, care should be taken not to wound the bladder.

9. The opening of a pelvic abscess which points through the abdominal wall, does not differ from, and is no more dangerous than, the same operation elsewhere on the cutaneous surface of

the body. It is not an "abdominal section" or a "laparotomy" in the sense that those terms are used to indicate the surgical opening of the peritoneal cavity.

10. Chronic pelvic abscesses, which have burst spontaneously and have discharged through the vagina, rectum, or elsewhere for months or years, are exceedingly difficult to cure. This is particularly the case when the opening is high up in the rectum. A counter-opening in the vagina, or enlarging the opening if there situated, the curette, stimulant irrigation, etc., may occasionally succeed, but usually fail.

11. A perityphilitic abscess may point through the abdominal wall, and simulate a pelvic abscess proper. Aspiration will settle the diagnosis; the treatment is the same.

12. The majority of cases of pelvic abscess recover, at least the mortality is small.—(*N. Y. Med. Record.*)

Shortening of the Round Ligaments for certain Uterine Displacements.—Dr. Alexander of Liverpool read a paper on the operation now known by his name at the meeting, on June 10th, of the British Gynæcological Society. Dr. Alexander has operated in 80 cases, and reaffirms his great confidence in the value of the operation. He gives minute instructions in the method of performing the operation. These ought to be carefully read by every one who contemplates performing it.

After discussing the anatomical and physiological basis of the operation, the author comes to the results, and this part of the subject he discusses—1st, With reference to the mortality of the operation; 2nd, With reference to the beneficial results that accrue by its performance to those who survive. As to the first consideration, the mortality, Dr. Alexander said this may be set down as *nil*. Some deaths have occurred, but these he claimed were all from preventible causes. He knew of three. One of these occurred in his own practice. The operation is therefore not to be trifled with. The most important point, then, is the second—the beneficial results. These the author considers under two heads: 1st, Its permanent utility in correcting uterine displacements; and 2nd, Its effects in relieving the patient's symptoms. In his own practice, Dr. Alexander has

never seen a relapse of any backward displacement corrected by the operation. In prolapse, the results in this direction, although good, are not quite so favorable for the relief of the patient's symptoms. It has been valuable for the relief of these so far as they depend on displacements, and not on complications or associated conditions. Obviously great care in making a complete diagnosis will be necessary in order to avoid disappointment. The author concludes by saying: "It may be performed in any case of prolapse and backward displacement in which the surgeon and patient may wish it to be performed, except those incurable, miserable cases where bed and bandages are the only available remedies. By a more timely adoption of the operation, such extreme cases would never occur. To secure success, the operation must be properly performed, and the after treatment must be very rational, so that no strain be placed on the ligaments until sound union has taken place."—(*British Gyn. Journal.*)

Parametritis Posterior.—At the last meeting of the Association of German Physicians and Naturalists, held at Strasburg, Nieberding of Würzburg read a paper on this subject in the gynæcological section. The great frequency of certain forms of pelvic cellulitis and peritonitis is tolerably well appreciated, but every consultant must know how often general practitioners fail to appreciate the great frequency and pathological importance of the disease now under consideration. Velpeau, Sommer, E. Martin and others have alluded to the subject, but to Schultze of Jena must the greatest credit be given for its elucidation. It consists in an inflammation of the peritoneum of the Douglas's pouch and the utero-sacral ligaments which bound it, structures which contain cellular tissue and muscular fibre. Exudation occurs, and as this is absorbed, very frequently a shortening of the ligaments, with consequent dragging backwards of the uterus, anteflexion of the uterus, retroversion, traction on the urethra, and, as a consequence, frequent and perhaps painful micturition. Nieberding expresses surprise that so little attention has been given to this condition, and explains it by the growing interest which all surgical procedures excite in gynæcologists in these

days. This leads to a neglect of many departments of gynæcology. He has found the condition to be present in 10 per cent. of his patients. He quite agrees with Schultze as to the genesis of the affection. It arises frequently in the puerperium, but more frequently under other circumstances. It is often unaccompanied by any acute general or well-defined local symptoms, or if these occur, they have been of short duration. The whole course is insidious and chronic. The symptoms in the chronic stage are pelvic and sacral pain, of a wearing, aching character, increased by exertion, occasional acute pelvic pains, pain in defecation, dysmenorrhœa and other menstrual troubles, bladder symptoms, constipation, with more or less profound impairment of digestion and nutrition, and numerous reflex symptoms, headache of the vertex and other neuroses, and neuralgia. The causes in the lying-in woman are septic, the absorption being through lacerations and abrasions of the genital tract. In the unmarried, young girls and others, it is due to septic infection of fissures of the rectum from hardened fæces, and by extension of endometritis, specific or other.

The diagnosis is to be made by a careful bimanual examination, the patient being in the dorsal position, when the uterus will usually be found anteflexed or anteverted, the cervix drawn up and backwards, while through the posterior *cul-de-sac* masses of exudation, or tense, more or less sensitive bands will be felt stretching from the posterior uterine wall in the direction of the sacrum. Nieberding does not allude to the treatment, which, indeed, is often unsatisfactory. It is that of chronic pelvic inflammations generally, and that best suited to the impaired general health.—(*Cent. für Gyn.*, No. 41, 1885.)

Intra-uterine Treatment of Chronic Uterine Catarrh.—At the same meeting, Kugelmann of Hanover related his experience with iodoform, which he was induced to try by its good effects on a nasal and laryngeal catarrh in his own person. His method of application of the drug is by insufflation with a metallic catheter, with lateral openings near its beak, by which the powder is taken up, and being inserted within the uterus, it is expelled by compressing an elastic ball at the other end. The

applications are made twice a week. The method is painless and free from danger, and has been very successful in the author's hands. Previous dilatation by laminaria or other tents, or by metallic dilators, may be necessary.—(*Cent. f. Gyn.*, 41, '85.)

Uncontrollable Vomiting of Pregnancy cured by Feeding through an Œsophagus Tube.—Brünniche of Copenhagen reports a case. An unmarried woman of 33 suffered from obstinate vomiting and cardialgia. She was reduced to extreme weakness, almost collapse, the gums were bleeding, and the general appearance cadaverous. The diagnosis was gastric ulcer. A tube was passed into the œsophagus, but only a short distance down the gullet to avoid injury to the supposed ulcer of the stomach. Milk, broths, hare soup, and other soups were thus introduced within the stomach. Nausea and vomiting ceased forthwith. The woman soon learned to use the tube herself. After three weeks she was able to dispense with it. Pregnancy was now discovered. The case is of interest with reference to the sensitive point whence the irritation which excited the vomiting appeared to start, viz., the upper part of the œsophagus. The bearing of the case on other forms of obstinate vomiting is obvious. This is not due alone to morbid conditions of the stomach.—(*Cent. f. Gyn.*, 41, '85.)

Electricity as a Therapeutic Agent in Gynæcology.—This is the title of a long paper contributed by Dr. P. F. Mundé to the *American Journal of Obstetrics* for December, '85. The author first alludes to the uses of the faradic current in obstetrics, and especially in the treatment of that most formidable condition, extra-uterine pregnancy, and then proceeds to say that his object in writing the paper is mainly to show that no special talent or prolonged study of electricity, nor the possession of expensive apparatus, is necessary "to employ the electric current in gynæcology, and in many cases with considerable benefit."

The following resumé of the most important practical points given by Dr. Mundé will be of interest:—

1. Galvanic current the most useful, inasmuch as, soothing, anæsthetic and alterative effects are oftenest indicated.

2. A mild, steady, painless current always to be used.

3. When a constant current causes pain, or increases existing pain, it is doing harm, and must be reduced in strength or stopped.

4. Always begin with a weak current, and, if necessary, increase its strength.

8. In order to give permanent relief, or do appreciable good, the treatment must be employed for a long time—at least twice a week, but better three times a week, or daily. In many cases the treatment must be continued over a period of from three to six months.

9. Pain may be relieved or completely removed, but a permanent cure, complete absorption of exudation, a restoration of the organ to health in hyperplasia, chronic oöphoritis, cellulitis and peritonitis, is seldom achieved. This, however, applies with equal force to other remedies.

Dr. Mundé gives the following list of conditions in which electricity has been proved to be beneficial: deficient development of uterus and ovaries; amenorrhœa; dysmenorrhœa, obstructive and neuralgic; superinvolution; subinvolution (with or without menorrhagia); hyperplasia uteri; chronic ovaritis and salpingitis; chronic cellulitis and peritonitis, and lymphangitis; pelvic neuralgia, local and reflex; uterine displacements; erosions of cervix; uterine fibroids; ovarian tumors.

The conditions in which the two varieties of the electrical current act most beneficially may be summarized as follows:—

FARADISM.	GALVANISM.
Deficient development of uterus and ovaries.	Hyperplasia uteri.
Amenorrhœa.	Chronic ovaritis and pachysalpingitis.
Subinvolution and menorrhagia.	Chronic cellulitis and peritonitis, and lymphadenitis.
Superinvolution.	Pelvic neuralgia, local and reflex.
Uterine displacements.	Dysmenorrhœa, neuralgic and obstructive.
Uterine fibroids (interstitial).	Erosions of cervix.
	Subinvolution.
	Uterine fibroids (sub-peritoneal.)

(*Amer. Jour. Obstet.*, Dec., 1885.)

Cocaine in Gynæcology.—This is the title of a short paper by Dr. C. H. Thomas of Philadelphia, appearing in the *Philadelphia Medical News* for Nov. 21, '85. After speaking of the well known effect of this drug in producing pallor and shrinkage, as well as anæsthesia of the tissues to which it is applied, the author remarks that the former effect is not so well known. It is also of longer duration than anæsthesia, and in some cases is permanent. Dr. Thomas generally uses a four per cent. solution, but in cases where considerable pain is anticipated he employs a ten per cent. solution. He has found it very useful in some cases of cervical endometritis, in which, without much erosion or discharge, there is great tenderness about the internal os uteri, cases in which a probe easily brings blood, and applications cause severe radiating and ovarian pain. Cocaine applied with the syringe or cotton carrier prevents pain and bleeding. In the treatment of urethral caruncle and other painful affections of the urethra, it is most valuable. In cases of vaginismus, before introducing instruments and before making applications, its value has also been proved. In a case of painful irritability, with spasm of the bladder, simulating cystitis, entirely unrelieved by the opium suppository and other measures, the author was enabled to afford complete and permanent relief by a single injection of one grain of cocaine thrown into the bladder.

A new Diagnostic symptom of Rupture in Extra-uterine Pregnancy.—Dr. J. J. E. Maher of New York city relates a case of extra-uterine pregnancy ending fatally, verified by autopsy, in which he observed a symptom which he believes will be of value in diagnosing such cases, and so aiding a decision of the sometimes difficult question of whether to operate or not. The symptom alluded to is remarkable abdominal heat, with a subnormal temperature in the axilla. The author remarks:—"It was observed that a diagnosis of abdominal hemorrhage had been presumed in my case. It was founded on the following evidences: The symptoms of shock, accompanied by great weakness; the sudden onset of severe pain in, and distension of, the abdomen, and that remarkable abdominal heat; both subjective and objective, presenting so striking a contrast to that of

the rest of the body. This symptomatic abdominal heat does not appear to have hitherto attracted any attention in the cases already recorded; yet if it be remembered that there is beneath the abdominal wall a clot of warm blood varying in bulk from one to two quarts to as many gallons, it becomes an easy matter to appreciate the importance of this symptom in its bearing upon the diagnosis. Indeed, this symptom alone, *cæteris paribus*, would seem to be unequivocal in differentiating abdominal hemorrhage from purely nervous shock."—(*N. Y. Med. Record*, Jan. 2, 1886.)

Perineorraphy.—The operation for ruptured perineum has recently been discussed in the British Gynæcological Society and in the *British Medical Journal*. In the latter *Journal* for October 24th, 1885, Dr. Fancourt Barnes publishes a note on twenty-seven cases of perineorraphy. Sixteen of these were done by the old method—dissecting off an area of mucous membrane and bringing the freshened surfaces into symmetrical apposition. All were successful, but, as is usual in all such cases, morphia suppositories were necessary till the sutures could be removed. The last eleven cases were done after Mr. Lawson Tait's method, which Dr. Barnes had since learned. This operation is difficult to understand without illustrations. The best description of the operation is that in Dr. Arthur Edis' Manual of Diseases of Women. At least Mr. Tait himself gives Dr. Edis this credit. He (Tait) had previously described it in a paper read before the London Obstetrical Society in November, 1879. The method differs from others in that there is no removal of tissue, and therefore, if it fail, the patient is in as good a condition as ever for successful operation. The recto-vaginal septum is split with a pair of curved, sharp-pointed scissors in such a manner that the lower flaps are opposed and turned into the rectum, while the upper are turned upwards to the vagina and also opposed The stitches are inserted at the point of reflection of the two flaps, made by splitting the septum. They are not passed through skin at all. By this method it is claimed that no pain severe enough to require morphia is suffered. The bowels are kept open by daily enemata. The operation, Mr.

Tait claims, can be done, splitting the septum and putting in sutures, in from five to eight minutes.—(*Brit. Med. Journal.*)

Oöphorectomy for Bleeding Fibroids.—Dr. Goodell exhibited the ovaries and related the case from which they were removed at the Obstetrical Society of Philadelphia on November 5, '85. There was severe hemorrhage and multiple fibroids; six tumors could be made out. The womb measured 7.5 inches. The ovaries were removed without difficulty. They were enlarged by follicular degeneration, a condition which Dr. Goodell had repeatedly seen in cases of uterine fibroid. The effect of the operation on the tumors, especially the main one, was astonishing. After two weeks the uterus had diminished in length nearly a hand-breadth. Forty seven days after the operation the uterine cavity measured only 3.25 inches, a diminution of 4.25 inches. Dr. Goodell remarked that every successful case in which he had removed the ovaries for fibroid tumor of the womb had been followed by menopause and rapid diminution in size of the tumor. But in his hands and in those of others the operation had been more fatal than that of ovariotomy. This is doubtless due to the occasional great difficulty of the operation. During the discussion, Dr. Montgomery stated that in his experience menopause did not always at once occur; in some of the cases not for two years after the operation.—(*Phila. Med. News.*)

In a clinical lecture on *Painful Menstruation and Sterility from Flexion*, Dr. Goodell of Philadelphia reiterates his previously expressed statements of the great value of rapid dilatation of the uterus. At the outset of his lecture Dr. Goodell points out the fallacy of conclusions arrived at by certain authorities with reference to the effects of certain deformities and displacements of the uterus. "But in the great majority of cases neither anteflexion nor, for the matter of that, anteversion, is pathological. In almost every unmarried or barren woman you will find the womb either bent forward or tilted forward, and resting on the bladder; for this, in varying degrees, is its natural position. The mistake made is in attributing to this natural position of the womb the various forms of pelvic trouble, especially that of irritability of the bladder, to which women are so

liable. But the kinship between the brain and the bladder is a remarkably close one. This has lately been studied by two Italian physiologists, Mosso and Pellacani, who go so far as to contend that 'every mental act in man is accompanied by a contraction of the bladder.' The irritability of the bladder is, then, one of the first symptoms of loss of nerve control. Everybody is liable to it. You, on examination day, will be annoyed by it. Many a lawyer, before pleading an important case, and many a clergyman, just before delivering a discourse, is compelled from sheer nervousness to empty the bladder. So it is with the lower animals, which, when frightened, micturate involuntarily. A nervous bladder is, then, one of the earliest phenomena of nervousness. Now, a hysterical girl, or a woman whose nervous system has collapsed under a strain of domestic cares, consults a physician for such symptoms of nerve prostration as wakefulness, utter weariness, a bearing down feeling, backache, and perhaps, above all, an irritable bladder. Upon making a digital examination, he, of course, finds the fundus of the womb resting on the bladder, and at once jumps to the conclusion that the whole trouble is due to the pressure of the womb on the bladder, viz., to the existing anteflexion or to the anteversion, as the case may be. He now makes local applications, and racks his brain to adapt or to devise some pessary capable of overcoming the supposed difficulty, forgetting that the upward, or shoring pressure of the pessary on the bladder, must be greater than the corresponding downward or gravity pressure of the womb. There is, in fact, no pessary but the dangerous stem-pessary, which can meet the end without pressing upon a fold or double thickness of the bladder. But, very fortunately, anteflexion is not often pathological. It is certainly not pathological in the foregoing instance; for the symptoms, especially the vesical ones, are not due to the pressure of the womb upon the bladder, but to sheer nervousness, or nerve prostration, which is the thing to be treated, and not the womb. There are exceptions to this rule, but not many; for instance, a womb, heavy from subinvolution or from the pressure of a fibroid, may make uncomfortable pressure on the bladder."

Dr. Goodell firmly believes that in many cases of uterine flexion there is obstruction to the escape of menstrual blood and other discharges, and explains the advent of dysmenorrhœa some time after a sterile marriage by a thickening of the endometrium, with narrowing of its calibre, the result of the congestions from sexual intercourse. But we also see the dysmenorrhœa of the unmarried increasing with age. "Nature intends that the periodical congestions of the womb should be interrupted by pregnancy and lactation (during which period menstrual congestion is arrested), and without these interruptions the mucous lining of the womb is liable to thicken, and by its thickness to narrow the canal." Dr. Goodell has performed thorough dilatation under ether nigh 350 times, with a large measure of success, in completely curing dysmenorrhœa or greatly relieving it.—(*Philadelphia Med. News*, Dec. 12, '85.)

Correspondence.

NEW YORK, Dec. 24th, 1885.

The medical profession is considerably agitated over the recent verdict of a case brought against two practising physicians. The facts of the case are briefly as follows:—In November, 1879, Drs. A. E. M. Purdy and A. S. Purdy diagnosticated smallpox in a patient named Miss Angelina Brown. The former saw her later in the day with Sanitary Inspector Dr. C. E. Lockwood, who also diagnosed smallpox. The patient was sent to the smallpox hospital. On her arrival, the house physician, Dr. Bowen, confirmed the diagnosis, and reported to the Board of Health accordingly. He subsequently reversed his diagnosis, and certified that Miss B. was suffering only from eczema, and told her she need not remain in the hospital. She voluntarily remained there, however, for some days. After leaving the hospital she brought suit against Drs. Purdy, claiming damages to the extent of $10,000. The case was tried last November, in the Superior Court, before Judge Ingraham. The counsel for the defence moved to dismiss the complaint, on the ground that the Board of Health was responsible for sending Miss B.

to the smallpox hospital. His Honor denied the motion, and ordered that the trial proceed before the jury. Drs. A. Flint, Keyes and George H. Fox testified that, from the recital of the symptoms and character of the eruption, as detailed by witnesses, Miss B. was undoubtedly suffering from smallpox at the time referred to. The jury brought in a verdict of $500 against the defendants. It is not the correctness of the diagnosis or otherwise that makes the case so important to the profession of this State. A physician is legally bound to report every suspected case of smallpox, or other infectious disease, to the sanitary officer. In accordance with the decision of Judge Ingraham in sending the case before the jury, the physician becomes liable for any damage arising or claimed to have arisen through the subsequent acts of the Board of Health. The Medical Society of the County of New York have taken the matter in hand. A committee has been appointed, and if sufficient funds can be collected, an appeal will be made to a higher court. To this fund Dr. A. E. M. Purdy has subscribed $1,000, Dr. Agnew $500, and other subscriptions of $100 and under have been received.

At the last regular stated meeting of the Academy of Medicine, Dr. T. G. Thomas read an important and exhaustive paper on "Vulvar and Vaginal Enterocele." He drew attention to the slight treatment the subject had received in systemaatic works on gynæcology. His own book shares the general criticism, which brought a smile to the countenance of many of his hearers. He particularly emphasized the importance of making a correct diagnosis, which, he said, was enough, if one always exercised due care and kept in mind the probability of the occurrence of this form of hernia. A case that occurred in his own practice forcibly illustrated the danger that might follow an error in diagnosis. "A patient called upon me with the following history: She had had an abscess just below the external ring, which, after poulticing, had been evacuated by her physician about a month before the time of her visit to me. After this she had felt well until a week before, when, after a muscular effort, the pain had returned with all the original signs of abscess, and these had continued, although she had painted the part

steadily with tincture of iodine, as she had been directed to do in case of such an occurrence. Being in great haste at the moment, I examined the enlargement while the patient was standing, and under a recent cicatrix, which was painted with iodine, I discovered what I supposed to be a re-accumulation of pus. As the patient came to me in absence of her physician, merely for the evacuation of this, I placed her in the recumbent posture, and, lancet in hand, proceeded to operate; but, to my surprise, I discovered that change of posture diminished the size of the enlargement. This excited my suspicion, and upon further examination, I found that a recent hernia had occurred under the old cicatrix."

The paper embodied the report of a remarkable case of extreme vaginal hernia. About six years before, the patient noticed a small lump at the vulva. This kept steadily increasing in size until it had come down to the middle of the thighs, on the right side. The patient's life was miserable. She could neither stand, walk nor sit with any comfort. She was willing to undergo any operation that gave promise of the least relief. Dr. Thomas proposed "to perform laparotomy, with an assistant to keep the hernial sac well within the pelvis by one hand in the vagina, seize the tumor at its most dependent portion, drag it up into the abdominal wound and fasten it there by suture, sustaining the heavy sac, meanwhile, by two knitting needles passed through and lying flat across the abdomen." In performing the operation as above sketched, he found in the pelvis a soft, fibrous tumor, which evidently had been pushed up from below, on a level with the symphysis pubis. He removed this by splitting the peritoneal covering, tying a number of bleeding vessels, draining the sac with a glass tube, and fastening the sac into the abdominal wound. The patient made a good recovery, and so far, a month after the operation, there has been no return of the hernia. Dr. Thomas confesses, however, that he feels apprehension about the future.

NEW YORK, January 21, 1886.

An event of considerable importance took place yesterday within the walls of the Academy of Medicine in this city. Some months ago Dr. James B. Hunter conceived the idea of forming

an association of those who had served on the resident staff of the Woman's Hospital of New York, to meet twice yearly for the purpose of interchanging ideas and spending a few social hours together. The happy conception bore good fruit, and yesterday witnessed the first semi-annual meeting of the Alumni Association of the Woman's Hospital. Judging from the number of valuable papers read and the good attendance, the meeting was a great success. The benefits derived from such an organization will not be limited to its members, but will be shared by the general profession. The Alumni now number 56, and each year adds four to the number. These men are naturally scattered all over the Union. This influence upon the practice of gynæcology in this country cannot be but great. It will be interesting, as the chairman (Dr. Hunter) said in his address, to note how far the various men have diverged from the original teaching in the hospital. The address of the chairman contained some interesting facts, one of which was that the first alumnus was none other than the honored and renowned present senior surgeon, Dr. T. A. Emmet. This incidence, which had not generally been known before, was received with a spontaneous burst of applause. There is a laughable circumstance connected with this first appointment. At that time it was a law, recorded in the by-laws of the hospital, that the surgeon's assistant or nurse must be of the female sex. In the following year, however, the young assistant asserted the right of his sex. The above by-law was now changed to read: The surgeon's assistant shall be such an assistant as the exigencies may require. The exigencies required that he should be a man.

Dr. Emmet's first connection with the hospital dates back to 1857, and from this date until the present he has been uninterruptedly identified with the various vicissitudes of the institution. The success of the hospital owes more to him than to any other one man, living or dead. There was a time when its fortunes were beset with heavy black clouds, when its chief surgeon resigned, when the general profession would take no interest in it, and when it seemed as if a special hospital for gynæcology in the city of New York would be a failure. But Dr. Emmet remained

faithfully at his post. By continued perseverance, by getting the leading members of the profession interested in its welfare, by that continued devotion to its interests (even at his own personal loss) which has characterized him since his first connection with the hospital, Dr. Emmet succeeded in extracting the hospital from the mire into which it had fallen and raising it to its present importance and celebrity.

It was a fit event that the first alumnus should entertain the Alumni Association at its first semi-annual meeting. The members of the Obstetrical Society were also invited, and a most pleasant, enjoyable evening was experienced. The hum of voices was continuous, the wine flowed freely, the fumes of tobacco curled gracefully from several mouths, and the "lacerated perineums and cervices" could be overheard here and there in the conversation; the general tone was one of pure and simple enjoyment, without any admixture of professional jargon.

Another striking proof of the difficulties attending the diagnosis of pelvic tumors was afforded by a case in which Dr. Mundé operated a few days ago at Mount Sinai Hospital. The patient had been suffering from symptoms referable to the pelvic organs for some time past, and about four months prior to her admission into the hospital a tumor was detected in the right side of the pelvis. This tumor, immediately before the operation, was diagnosticated by Dr. Thomas as a sarcoma. Dr. Mundé did not commit himself as to the nature of the tumor, but felt certain it was a solid growth of some kind. At the operation it was found to be a cyst, about the size of an infant's head, filled with the products of a suppurating dermoid. The operator removed the cyst, cauterized the pedicle with a pacquelin, allowed it to remain intra-peritoneal, and introduced a drainage-tube in the lower angle of the abdominal wound. I learn the patient is progressing favorably towards convalescence. If a mere tyro may be allowed to express an opinion upon so weighty a matter, it would be this: that in diagnosticating pelvic tumors too much value is attached to physical signs and not enough attention is bestowed upon the patient's antecedents and history. *Appropos* of this, Jonathan Hutchinson has recently made some apposite

remarks (*vide American Journal of Medical Sciences*, Jan. '86). "Growths," says he, "have a clinical history which, often, is more characteristic than what the microscope can tell us." In the case of pelvic growths, we may substitute "the sense of feel in our finger's ends" for the microscope.

Through the kind courtesy of Dr. Mundé I was enabled to witness the above operation, as well as another of considerable interest since. It was an Alexander's operation for the shortening of the round ligaments in an intractable case of retroflexion. The operator experienced considerable difficulty in reaching the ligaments, which, instead of taking the usual oblique course, passed almost vertically downwards into the pelvis. Dr. Mundé, in drawing attention to this fact, remarked that writers on the subject had failed to mention the occasional occurrence of such a condition.

That the profession—here, at least—has lost none of its interest in gynæcological matters was evidenced by the large attendance at the meeting of the Medical Society of the County of New York on 28th December last, when Dr. Mundé read a paper on the treatment of pelvic abscess in women by incision and drainage. He said that in the majority of cases of pelvic exudation following cellulitis and peritonitis, the exudate became absorbed and the patients recovered without the formation of abscess. Sometimes the process of absorption might be very long, extending over months. In some cases the exudate broke down and formed an abscess, an occurrence most likely to take place when the exudate was large and formed rapidly, and when the patient's recuperative powers were below par. Cellulitis was the common factor of abscess, peritonitis only occasionally. Of 400 cases of pelvic cellulitis and peritonitis of which he had records, only 48 terminated in abscess. This percentage was thought larger than usual, because many of the cases (21) were seen in consultation, 23 of the cases opened spontaneously, 8 were treated by free incision and drainage, 6 through the abdominal wall, and 2 through the vagina. All of the cases operated upon recovered. In a suspicious case, he always verified his suspicions by the introduction of an aspirating needle.

When the amount of pus did not exceed two ounces, he was in the habit of treating it by simple aspiration. If a number of small abscesses were suspected, the aspiration was repeated until all were supposed to be evacuated. When the amount of pus exceeded the above stated amount, free incision was the better method. When the abscess opens spontaneously through the rectum, the opening is usually too high up to reach and divide. This, even if feasible, is not always advisable, as the contact of the fæces would interfere with healing. Brief reference was made to some of the unusual forms of pelvic abscess. The pus might find its way down to the perineum, or the point of fluctuation might be found at the crest of the ilium on one side. If fluctuation appeared near the crest of the ilium, the aspirator should be introduced, and, if pus was found, the grooved director should be introduced and an incision made with a blunt-pointed bistoury. The reader of the paper condemned the operation of laparotomy for true pelvic abscesses; it was unnecessary, and and exposed the patient to too great a risk.

In the discussion that followed, some sharp-shooting was indulged in, which enlivened the proceedings of the meeting.

Dr. Polk took issue with Dr. Mundé on several points. He thought the percentage of mortality was much greater than the reader of the paper had stated. Laparotomy, he thought, was the best treatment for many of these cases. We never can tell in a given case if it is a uni- or multilocular cyst, and in the latter, laparotomy was the safer and quicker method of treatment. Moreover, it was difficult to diagnosticate these cases from pyo-salpinx, and if the latter condition was found to exist, the treatment (laparotomy) adopted would be proper.

Dr. Lusk thought that such a paper embodying so many practical points was much needed, as the general profession was still hazy on that subject. He had been recently told by a country practitioner that all such cases in the country die!! He agreed in the main with the reader of the paper.

Dr. W. Gil Wylie disagreed with the author as to the pathology of these cases. He thought the majority of them started in connection with the Fallopian tubes, the ovaries, and broad

ligaments. He would be in favor of performing laparotomy in all cases that did not point in a favorable condition.

Touching congress matters in Philadelphia, an interesting vote was taken a few weeks ago which indicates clearly the feeling of the profession in that city. At a meeting of the County Medical Society for the election of delegates to the State Society, and to the American Medical Association there were two tickets, one representing the Shoemaker faction and in favor of the action of the Association, and the other, headed by Dr. D. Hayes Agnew, opposed to it. The latter carried the day by a vote of 167 to 36. H.N.V.

Reviews and Notices of Books.

A System of Obstetric Medicine and Surgery, theoretical and clinical, for the Student and Practitioner.—By ROBT. BARNES, M.D., Obstetric Physician to St. George's Hospital, &c., and FANCOURT BARNES, M.D., Physician to the Royal Maternity Charity and to the British Lying-in Hospital. Illustrated with 231 woodcuts. Philadelphia: Lea Brothers & Co.

A modern work on obstetrics has an immense field to cover. No branch of medicine has made more advances than this, and there is none in which it is of the greatest moment for every general practitioner to find himself thoroughly *au fait*. The additions to our knowledge of the causes of suppuration and of septic processes in wounds have been very remarkable, dating from "Listerism," and now used in the various forms of so-called "antiseptic" surgery. The same principles have been invoked in the case of the puerperal woman, especially in lying-in hospitals, and the success obtained, as shown by greatly reduced mortality, has been very striking. Dr. Fancourt Barnes has been one of the strongest advocates of "antiseptic midwifery," and has done much to show the superior advantages of some form of antisepsis under these circumstances. This point is merely mentioned as one of the most prominent at the present day, which is necessarily to be found fully discussed only in the most

recent writings. Many others might similarly be added to this. Dr. Robert Barnes has long been one of the leading English obstetricians, and his work and special writings (especially upon the obstetric operations) are well known in this country. It is, therefore, with pleasure that we draw attention to the appearance of his systematic treatise upon the whole subject. Some of the earlier chapters upon Embryology have been contributed by Prof. Milnes Marshall. It is a very handsome book, profusely illustrated, and will be found invaluable for the advanced student and for purposes of reference.

Acne: its Etiology, Pathology and Treatment. A practical treatise based on the study of 1500 cases of Sebaceous Disease.—By L. DUNCAN BULKLEY, A.M., M.D. New York and London: G. P. Putnam's Sons.

This is a treatise on a very common affection of the skin, which is a source of trouble and anxiety to young people of both sexes. Like the work on Eczema by the same author, it is based on the clinical study of a number of cases, and the whole work is arranged in much the same way. The anatomy and physiology of the sebaceous glands are first dealt with, and then a chapter is devoted to nosology and varieties of acne. There is also a chapter of statistics and one on the etiology of the disease. It is not till the fifth chapter is reached that the author really warms to his work, and describes the different forms of acne and their treatment. These chapters (V and VI) are valuable, and really tell us something about the various forms of acne. The author evidently regards acne as an affection which is significant of a deteriorated state of health. In this we cannot agree with him, as the most healthy young people are often afflicted with acne, and, in fact, few persons pass through the period of adolescence without having had some form of acne; on the other hand, the most debilitated not unfrequently have the clearest complexions. Minute directions are given as to diet and hygiene, and these will greatly please "acne hypochondriacs," who delight in centreing their thoughts on their own persons and in magnifying their ailment. The common forms

of acne are peculiar to adolescence, and as Hebra remarks, "*tempus varos curat.*" It is the privilege of the well-to-do to enjoy treatment by alteratives, dieting and local applications, which, at the most, can be of only temporary benefit. The poor arrive at the same result by allowing time to cure the disease. We confess we cannot see any reason to magnify such a disease as acne by devoting a book of nearly 300 pages to its pathology and treatment. Life is too short and books too many for any ordinary individual to be able to read a large work on such a comparatively unimportant disease as acne, when a much more concise and useful account can be obtained from any good text-book on skin diseases. To show how it is necessary to pad works of this kind, we might mention that no less than eighteen pages are devoted to Bibliography, nine to a "Synopsis of the Classification of Sebaceous Diseases by writers on General Medicine and Dermatology," and five to the "Names applied to sebaceous diseases in the literature of dermatology, with equivalents and synonyms." The work is well illustrated and the typography excellent. The book itself tells us all that is known about acne and its treatment, and is, in parts, a valuable contribution to the literature of the subject of which it treats, notwithstanding its prolixity.

Epitome of Diseases of the Skin.—By L. A. DUHRING, M.D. Philadelphia: J. B. Lippincott & Co.

This little book is composed of sixteen lectures delivered by the author before the graduating class of the University of Pennsylvania. It is not intended that it should take the place of the larger text-books on diseases of the skin, but is meant to be an aid to students. It is a handy little book, can be easily put in the coat-pocket, and will be very useful to students attending skin dispensaries and the out-door departments of hospitals. It is supplied with a good index. The various skin diseases are shortly and clearly described, and in describing the treatment, formulæ are given. It is a capital little *vade mecum* for students, and very cheap.

The Management of Labor and of the Lying-in Period. A Guide for the young Practitioner.—By HENRY G. LANDIS, A.M., M.D., Professor of Obstetrics and Diseases of Women in Starling Medical College; Fellow of the American Academy of Medicine; Member of the American Medical Association, &c. Philadelphia: Lea Brothers & Co.

Dr. Landis is already well known as the author of "How to Use the Forceps" and of "A Compend of Obstetrics." In the first of these works he very clearly expresses his views on the mechanism of the descent of the head through the pelvis, and makes a strong plea for the Davis forceps, which he maintains will fulfill all the legitimate uses for which obstetric forceps have been designed. In the present work, which is intended to serve as a guide to practice, the author sets forth briefly and with clearness his views as to the proper management of labor and the puerperal period. He first treats of the management of simple labor, and then considers the treatment of irregular or abnormal labors. The part of the book calling for particular remark is that which pertains to the use of the forceps. The author still cleaves to the Davis forceps, insisting, as he did before, that the blades shall be applied to the sides of the child's head. From some experience in the use of this instrument, we concur in this essential requisite. For this reason we also think that for the young practitioner not expert in digital examination this instrument is not the best or safest. Its use necessitates accurate diagnosis of the position of the head, and without a clear knowledge of the position, we think that the Davis forceps is neither easy to introduce nor safe to use. The advantages of the instrument are its great head curve, which prevents slipping when properly applied, and also the width of the blades, which enable them to fit closely to the head. The great head curve and broad blades make them, however, more difficult of introduction, which is a serious bar to their safe use by a tyro. The objections to the use of the Davis forceps do not apply at the outlet, where the head has rotated, so that if the blades are applied on opposite sides of the pelvis they will fit on the sides

of the child's head, but they do apply when the arrest of the head is at the inlet, where it is situated obliquely, and where, if they are properly applied by skilful hands, this instrument gives excellent results.

The physician engaged in active obstetric practice will find the pages of this little book, which are devoted to the application of the forceps and the mode of making traction, well repay perusal. The method of making traction is peculiar, and consists of a combination of two forces, namely, a direct traction *on the handles* with one hand and a pressing downwards and backwards in the axis of the inlet with the other hand *in front of the lock*. In this way we get "axis-traction," the great advantage of the Tarnier forceps. The old leverage or swaying from side to side movement of the forceps is very properly condemned. As the author states, "The practice is one of great antiquity; it was begun in ignorance of the true mechanism of delivery, and it is continued only by those who are wilfully blind to its nature." The chapter on Cæsarean section, Porro's modification of this operation, and gastro-elytrotomy, as recommended by Thomas, is short and to the point. Altogether, this modest little book is well worthy of careful study, and can be recommended, especially to the young practitioner, as a good general guide in the management of this very important branch of his profession.

Practical Suggestions respecting the Varieties of Electric Currents and the Uses of Electricity in Medicine. With Hints relating to the Selection and Care of Electrical Apparatus.—By A. L. RANNEY, M.D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-Graduate Medical School. New York: D. Appleton & Co.

This will be found to be a convenient and trustworthy work on the practical application of electricity in medicine. The author tells us it is the first instalment of a complete work on the nervous system. It will be found very useful to those practitioners who desire to have a scientific groundwork for the use of electricity. It differs in this respect from previous American works

on electricity in medicine. Were it not for the unexampled greed for money of the manufacturers of electrical apparatus on this continent, the use of the different batteries would be much more common than they are. The prices charged for both faradic and galvanic batteries is practically prohibitory to the majority of general practitioners. There is little use for good works on the use of electricity when it is not possible to conveniently obtain reliable batteries at moderate rates.

A Practical Treatise on the Diseases of Children.—By A. VOGEL, M.D., Professor of Clinical Medicine in the University of Dorfal, Russia. Translated by H. RAPHAEL, M.D. Third American from eighth German edition; revised and enlarged. New York: D. Appleton & Co.

A work that has been before the public for twenty years, that has been translated into all the principal languages, and of which the translations have run through many editions, requires no further commendation from us. It appears to us to owe this unusual success to its terse, clear and accurate symptomatology. Many of the pictures of disease in children are the clearest we have read. In general, the pathology has been revised, and in most subjects corresponds with recent German thought. The therapeutics are eminently judicious, but the prescriptions are very German—*e.g.*, root juniperi. Of many drugs of recent date no reference is made. Still, we speak of it as an old friend when we say we can cordially recommend it, especially to those who do not confine themselves to only one treatise on this subject. The translation is an eminently readable one.

A Treatise on the Diseases of Infancy and Childhood.—By J. LEWIS SMITH, M.D., Clinical Professor of Diseases of Children in Bellevue Hospital Medical College, &c. Sixth edition; thoroughly revised. Philadelphia: Lea Brothers & Co.

With the beginning of the new year, the sixth edition of this now standard work is issued from the press. In the preface, the author states that a considerable part of the book may be

considered new. The articles on scarlet fever, cerebro-spinal fever, pseudo-membranous croup and infantile diarrhœa have been entirely rewritten. That on scarlet fever is a most exhaustive one, occupying nearly 70 pages, and is well worth careful reading. One recommendation in it we may mention here—the use of boric acid as a preventive and antidote to the scarlet fever poison, as well as in diphtheria. The substance of the additional matter in the other articles has appeared in recent contributions to the medical journals. Throughout the work, special attention in the revision has been given to the therapeutics. We know of no work we can recommend with so much confidence to both student and practitioner. Though many additions have been made to it, the book is still kept at its former size.

A Text-Book of Pharmacology, Therapeutics and Materia Medica.—By T. Lauder Brunton, M.D., D.Sc., F.R.S., Fellow of the Royal College of Physicians; Assistant Physician and Lecturer on Materia Medica at St. Bartholomew's Hospital; Examiner in Materia Medica in the University of London, &c. Adapted to the United States Pharmacopœia by F. H. Williams, M.D., Boston, Mass. Philadelphia: Henry C. Lea's Sons & Co.

The author of this work has been known for a number of years as one of the most active and painstaking laborers in the field of modern pharmacology. When the announcement was made that a work on this subject from his pen was to appear, there was a natural expectation that it would be one of a high order, and we feel confident in stating that these expectations are more than realized. The work is one which will take the first rank as a text-book for students and as a work of reference for practitioners. It is divided into two parts—the first dealing with general pharmacological subjects, while the second is devoted to materia medica and to general pharmacy, together with a description of the actions and uses of individual drugs. This part resembles the majority of text-books on materia medica in its scope and mode of arrangement. The first part is of great value,

as it is the first complete and systematic attempt in an ordinary text-book to explain fully the methods by which the action of drugs is determined, and the manner in which each function of the body is modified by medicinal agents. Another new feature in this work is the prefacing of the mode of action of drugs on the different functions, by an account of the physiology of the various organs. In the case of the heart and kidneys, this account is very full and elaborate. At times the author discusses also pathological questions. In this way the practical application of scientific pharmacology is made clear.

The author, in his preface, laments the amount of pharmaceutical and other unnecessary details required by the medical examining boards of the United Kingdom. It is a pity, we think, that he did not have the courage of his opinions and leave out of his work what he so much and very rightly objects to. Our medical boards in Canada are, unfortunately for our students, just as exacting in the matter of burdensome and useless knowledge of the materia medica as any of the English boards. Surely the day has arrived when examinations in scientific pharmacology and therapeutics should take the place of materia medica examinations. We feel confident that Dr. Brunton's work will do much to bring this desirable change about.

The work as issued from the Philadelphia publishers is much more convenient for reference and reading than the volume of the English publishers. The therapeutical index at the end of the volume will be found of service. There are also copious general and bibliographical indexes.

Manual of the Diseases of Women: Being a concise and systematic exposition of the Theory and Practice of Gynæcology. For use of Students and Practitioners.—By CHAS. H. MAY, M.D., late House Physician, Mt. Sinai Hospital, New York, &c. Philadelphia: Lea Bros. & Co.

A small work, arranged with chapters upon all the more important diseases and disorders of the female pelvic organs, and with headings to make reference easy. It seems to have been carefully put together, and no doubt will be found useful for the purposes intended.

The Extra Pharmacopœia, with the additions introduced into the British Pharmacopœia of 1885.—By WILLIAM MARTINDALE, F.C.S., late Examiner of the Pharmaceutical Society, &c. Medical References and a Therapeutic Index of Diseases and Symptoms by W. WYNN WESTCOTT, M.B., Lond., Deputy-Coroner for Central Middlesex. Fourth edition. London: H. K. Lewis.

The appearance of a fourth edition of this work since its publication two and a half years ago shows that it is well received. The present edition opens with an account of the changes in the recent edition of the British Pharmacopœia. The authors consider that it was unfortunate that no working medical practitioners or practical pharmacists had a voice in the production of the pharmacopœia. We consider this little work of much more value to the practitioner than the pharmacopœia. It contains a vast amount of important information on improved methods of administering drugs not obtainable elsewhere. It is a work we think that every practitioner should have. The therapeutical part of the volume has been brought up to date, at least as far as English literature is concerned. We would be glad to find references in future editions to foreign literature as well. All that is good in therapeutics does not appear in English medical literature. The therapeutical index would be greatly improved if it contained less empiricism and more science. The description of some recently-introduced agents on page 137, *et seq.*, is too short to be of any value.

An Atlas of Clinical Microscopy.—By ALEXANDER PEYER, M.D. Translated and edited by ALF. C. GIRARD, M.D. New York: D. Appleton & Co.

A Manual of Microscopic Technology, &c.—By DR. CARL FRIEDLANDER. Translated by S. Y. HOWELL, M.A., M.D. New York: G. P. Putnam & Sons.

The first of these books is a most useful one to every medical man possessing a microscope. Most of the substances obtained from the fluids of the body, in disease (except those from tumors), will be found figured here. Nearly one-half the number of plates

are devoted to urinary deposits and substances found in urine. Fourteen plates represent substances present in sputum. Other plates are devoted to blood, vomit, contents of stool, etc.; in all, ninety plates. The American public owe a debt of gratitude to Dr. Girard for the English translation of Dr. Peyer's useful little book. In the act of translation, however, it has really been TRANSLATED, as it is more than twice the dimensions of the German first edition, with only eleven extra plates. In this condition it certainly makes a much more imposing volume. The plates are all well executed, and reflect great credit on the publishers.

Friedlander's manual translated by Coe has already been referred to on page 227 of this JOURNAL. Dr. Howell's translation has the advantage of a few foot-notes, but the disadvantage of having no index. Either of these editions would be a most useful and in many respects an almost necessary accompaniment of Peyer's Atlas.

Without the slightest hesitation we advise every practitioner or medical student having a microscope to secure both these valuable additions to our literature.

Books and Pamphlets Received.

BRAIN-REST: Being a Disquisition on the Curative Properties of Prolonged Sleep. By T. Leonard Corning, M.D. Second edition. New York and London, G. P. Putnam's Sons.

PSYCHIATRY: A Clinical Treatise on Diseases of the Fore-brain, based upon a study of its structure, functions and nutrition. By Theodor Meynert, M.D. Translated by B. Sache, M.D. Part I.—The Anatomy, Physiology and Chemistry of the Brain. New York and London, G. P. Putnam's Sons.

BASIC AURAL DYSCRASIA AND VASCULAR DEAFNESS: A New System of Aural Therapeutics and Pathology. Also, Notes on the Deafnesses. By R. T. Cooper, M.A., M.D., Univ. Dubl. London, Baillière, Tindall & Cox.

LECTURES ON SYPHILIS. By G. Frank Lydston, M.D. Chicago, A. M. Wood & Co.

TEXT-BOOK OF OPHTHALMOSCOPY. By Edward G. Loring, M.D. Part I. New York, D. Appleton & Co.

THE FIELD AND LIMITATION OF THE OPERATIVE SURGERY OF THE HUMAN BRAIN. By J. B. Roberts, A.M., M.D. Philadelphia, P. Blakiston, Son & Co.

PUERPERAL CONVALESCENCE AND THE DISEASES OF THE PUERPERAL PERIOD. By Joseph Kucher, M.D. New York, J. H. Vail & Co.

LETTERS FROM A MOTHER TO A MOTHER ON THE FORMATION, GROWTH AND CARE OF THE TEETH. By Mrs. M. W. J. Philadelphia, Welch Dental Co.

TRANSACTIONS OF THE ACADEMY OF MEDICINE IN IRELAND. Vol. III. Edited by Wm. Thomson, M.A., F.R.C.S. Dublin, Fannin & Co.

Society Proceedings.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

Stated Meeting, Dec. 8th, 1885.

JOHN L. BRAY, M.D., PRESIDENT, IN THE CHAIR.

(*From our own Correspondent.*)

Scirrhus of the Pancreas.—DR. TYE exhibited this specimen, also portions of the liver and lungs of the same subject, showing secondary deposits to a marked extent. The duodenal end of the pancreas was chiefly involved, although hard masses were scattered through the entire organ. The gall-bladder was shrunken and small. The stomach appeared normal. The patient, aged 55, had always been a healthy man. When first seen by Dr. Tye he had a tired, worn, anxious look, and complained of persistent pain in the epigastric region. This pain, which was referred latterly more to the right hypochondriac region, and emaciation were the only marked symptoms he suffered from. He rarely vomited or complained of nausea. Bowels were usually constipated, probably due to the opiates required to alleviate his sufferings. There was no tenderness, no elevation of temperature at any time, and no jaundice. Fatty foods did not apparently disagree with him, and the fæces were natural whenever examined.

A Case of Placenta Prævia, with Albuminuria.—DR. HOLMES narrated a case of "central implantation" at which he had been in attendance during the past two days. He was called to the country early yesterday morning to see the patient, aged 18, a primipara. She had been flowing some during the previous two days, with this exception, there had been no loss of blood during her pregnancy. An examination revealed a placental presentation, the cervix being dilated sufficiently to admit the forefinger. She had slight pains and a fair pulse. Nausea and headache during the past few days led to an examination of the urine, which was found to contain considerable albumen. A tampon saturated with a solution of corrosive sublimate 1 to 1500 was at once introduced. Ergot was administered, and pains became stronger and more regular. Towards evening, as the result of a consultation, the tampon was removed, and was immediately followed by a profuse gush of blood. Another tampon was quickly introduced, and the hemorrhage at once controlled. The loss of blood by this procedure, amounting to not more than a small cupful, made a very marked impression, from which she

did not rally for some time. About midnight she had a slight convulsion, became pulseless, and seemed almost in *articulo mortis*. Two drachms of ether were injected subcutaneously, and had an almost instantaneous beneficial effect. Shortly after, to give rest and quiet to the nervous system, ¼-grain of morphia was given hypodermically; this was repeated in an hour, and produced several hours of quiet sleep. Nutrient enemata of beef peptonoids and peptonized milk were used every two or three hours, her stomach not retaining any nourishment. At one o'clock to-day the tampon was again removed and the cervix found fully dilated, and placentæ about completely separated, there being no hemorrhage. Ergot was again given hypodermically, and pains soon followed; the placenta, shortly after, expelled into vagina and removed; forceps applied, and child extracted. The mother was still alive, but in a very precarious condition. Dr. Holmes remarked in conclusion that he regretted the removal of the tampon in the first instance, and considered that if a tampon was antiseptic, and there was no elevation of temperature, it should be allowed to remain until forcibly expelled or bulging is pronounced.

Report of an Outbreak of Diphtheria.—Dr. McKeough read a lengthy history of a recent epidemic of diphtheria which occurred in the parish of Pain Court. This district, which is inhabited by about 250 families, exclusively French Canadians, adjoins the Dover Plains, in the County of Kent, notorious for its malaria and ague. The land is low and flat, the soil a rich clay, and the locality an agricultural one. From one end to the other runs a creek which is the principal source of drainage for the entire district. This creek is a running stream during the spring months; throughout the remainder of the year it is either dry or contains stagnant water. The greater number of the inhabitants live along the banks of the creek. Malarious fevers are common to this region; typhoid fever is rare; scarlatina and diphtheria occur sporadically, but there has been no cases of either during the past two years till this outbreak, the first case of which occurred in September. Regarding its origin, in the first family afflicted there were two possible factors in the causation. 1st, The fact that two years previously diphtheria ravaged this family, and the poison remaining dormant may have again become active. 2nd, The presence of the stagnant, filthy creek which passed not twenty yards from the house. The most careful inquiry failed to elicit any other possible source of contagion. The second case occurred within a week of the first in a family living five miles distant down the source of the creek.

There was no communication whatever between the two families. The creek passed directly in front of the infected house, a few large elm trees intervening. The bed of the creek is deeper here than in other parts of its course, and the rain-fall during the past summer being heavy, as a result there had been a pool of stagnant water here some months. In this case the health of the child afflicted may have predisposed it to the disease, having been unwell for some weeks and suffered from a "sore throat." Drs. Wood and Formand state that the inflammation of an acute pharyngitis is capable of developing the common micrococcus of the mouth into a condition in which it becomes capable of producing all the characteristic phenomena of diphtheria. It is possible, also, that the germs of the disease in the cases which occurred two years ago may have been carried down the creek and lodged in this stagnant pool, lying latent, and becoming active at this time from unknown reasons. Whatever may have been the immediate origin of this outbreak, there can be no doubt that its diffusion was owing to its contagious nature. Contact with or close proximity to an infected person was the chief mode of communication. There were instances, however, in which the poison was conveyed several miles to children by a parent not affected with the disease. The first family affected lived on the verge of the parish surrounded mainly by English-speaking people thoroughly aware of the contagious nature of the disease, which ideas were imparted to their more immediate French neighbors. As a result, although five in this house contracted the disease, no evidence could be obtained of the disease spreading from this family. On the other hand, the second family attacked were surrounded, somewhat thickly too, by French-Canadians, who did not believe in the contagious nature of diphtheria. Here the disease spread most rapidly and disastrously. Within three months 47 cases occurred, with 18 deaths—16 from laryngo-tracheal diphtheria, 1 from asthenia, and 1 from paralysis of the heart. Only 7 of the 47 cases received medical treatment; 2 of these were seen after "croup" had developed, and both died, the other 5 recovered. With the exception of the strong tendency of the disease to affect the larynx and trachea, the epidemic was not of a malignant type. The membrane was of a pearly greyish-white color, and thin; there was but little hyperæmia and œdema of the fauces; not much glandular induration even in those cases in which the membrane was limited to the fauces. An analysis of the deaths in reference to age bears out previous statistics. Between the ages of 1 and 5, there were 22 attacked, and 17 deaths; between

the ages of 5 and 10, there were 21 cases and 1 death; between the ages of 10 and 15, there were three cases and no deaths; and one adult only sickened with it. Clinical evidence was plentiful towards proving the intimate relationship between diphtheria and the so-called "true croup."

DR. RUTHERFORD, in the discussion upon this paper, referring to the constitutional nature of diphtheria, related the history of a case in which a father who nursed a child through a severe attack of the disease, and who at no time felt any throat symptoms, still, some three weeks subsequently, had paralysis of the soft-palate.

HAMILTON MEDICAL & SURGICAL SOCIETY.

(From our own Correspondent.)

The annual meeting of this Society was held at the Royal Hotel, Hamilton, January 5th, 1886, a large number of members being present.

Dr. Cochrane teudered his resignation, which was accepted.

The following officers were elected for the ensuing year:—President, Dr. Stark; Vice-President, Dr. McCargow; Secretary-Treasurer, Dr. F. E. Woolverton.

DR. SHAW related a case of *Hemorrhage from the Bowels in an Infant*, which occurred in his practice. The child was born on the 24th December last. The labor was natural and easy. On the 26th, fifty hours after birth, the child passed blood from the anus in considerable quantity, and looked pale and feeble. It was nursed on the third and fourth days, but died shortly afterwards. It was the mother's third confinement. There is a history of phthisis in the family. Dr. Shaw, after giving the causes and treatment of this condition, stated that Dr. West had seen 23 cases of hemorrhage from the bowels in infants, with a mortality of 50 per cent.

DR. MACKELCAN said he saw two cases, one proving fatal. Family history good.

DR. MALLOCH saw a case in January 1880, which terminated fatally.

CANADA

Medical and Surgical Journal.

MONTREAL, FEBRUARY, 1886.

THE INTERNATIONAL MEDICAL CONGRESS.

In our last issue we published gladly a letter fram Dr. Brodie of Detroit, whose opinions on the subject of the International Medical Congress are doubtless shared by a considerable section of the profession in America, but, in spite of his communication, we still adhere to the position taken by us in December. We then said that, to attract the workers of other countries, the sections of the Congress must be controlled by the men most eminent in their respective departments, and we maintained that the officers so far nominated did not, with a few exceptions, rise above respectable mediocrity. In the spirit of the "Declaration of Independence," we agree with Dr. Brodie that the gentlemen in question are "the peers of any member of the profession in the United States," but the Congress is a *scientific organization*, and the executive and sections have, heretofore, been composed of the best minds of the country in which it has met. What we maintain is that many of the sections, as at present organized, are controlled by men who, evidently, have not the confidence of the scientific workers in the United States, and are unknown abroad. At present, the prospect is that the *peers* of the men who organized the London Congress will be absent from the Washington meeting—the men who, in the United States, occupy positions in the medical world corresponding to those held by Gull, Jenner, Wilks, Erichsen, Paget, Fraser, Flower, and others who made the gathering of 1881 so brilliant. As well may we suppose that the British profession could have made that meeting the success it was without men of this stamp as that the American profession can do without the co-operation

of such men as Agnew, Bigelow, Hamilton, Da Costa, Pepper, Mitchell, Loomis, Bowditch, Billings, Dalton, Martin, Leidy, Lusk, Thomas, Barker, Jacobi, Wood, Bartholow, and others who remain irreconcilable. Bombast and bluster will not cover up the disagreeable truth which is quite evident to outsiders, if not to Dr. Brodie, that, unless the present executive of the Congress patch up this unseemly quarrel, the meeting of next year is doomed to failure. The recent attempts to effect a compromise do not appear to have been successful, and we can assure Dr. Brodie that, if matters remain as they are, "the most perfect and elaborate arrangements" will avail but little to attract foreigners in the absence from the sections of such a number of the men who have made American medicine and surgery what it is to-day. We sincerely trust that at the next meeting of the American Medical Association steps may be taken to secure the needful harmony, without which, we repeat, it would be better to abandon the Congress.

THE ANTI-VACCINATION LEAGUE.

We received a few days ago the prospectus of the "Canadian Anti-Compulsory Vaccination League." From the name we would imagine that the object of the Society was only to resist compulsory vaccination, but on reading further we find, also, the "object and purposes of the League is (*sic*) to enlighten the public mind on the fallacies and perils of vaccination." There is the usual howl about the natural rights of man and liberty. *Right* to give smallpox to their neighbors, and *Liberty* to send thousands to an early grave. Why, they might as well advocate the right of any man to set fire to his house, and so, perchance, destroy the property of his neighbors; but it is useless to argue with such people. Their disbelief in vaccination does not arise from evidence, and so will not yield to evidence. Partial statistics from the Civic Hospitals are given of smallpox in the vaccinated and unvaccinated which are utterly unreliable, and garbled extracts are quoted from certain works on medicine. They are careful not to give any statistics of the comparative mortality from smallpox in the vaccinated and unvaccinated. The usual ridiculous assertion is made that vaccination during

an epidemic of smallpox propagates the disease, and for proof it is said that as soon as the demand for increased vaccination began in Montreal so did the death-rate increase. This is a *post-hoc* argument with a vengeance. But why say more of a prospectus which is full of such assertions? The fact that the *League* boasts for its president a person who has made himself notorious by the publication of circulars of the most unprofessional kind—dealing wholly with sexual matters, and carefully calculated to take in the young, the foolish and the unsophisticated—a person who was reported to have dealt with the diploma-monger Buchanan for a degree—is sufficient. This man is now posing as the friend of the oppressed and the champion of anti-vaccination.

We are surprised to see some respectable names in such company, and associated in a crusade against reason and common sense. Of course in every community there are a certain number of cranks, irrationals and fanatics who will join any society which has *anti* emblazoned on its flag, and so the League will not want for members. The advisory council is composed of no less than four medical men (three French). The advice of such men who are unable to draw proper deductions from the overwhelming evidences in favor of vaccination will, we opine, be of no great value. If it is not too presumptuous, we should like to offer this young society a motto which to us seems very suitable, "*Suppressio veri, suggestio falsi.*"

ORIGIN OF THE SMALLPOX EPIDEMIC.—The sub-committee of the Board of Health appointed to enquire into this matter have made a report, which they have caused to be published. They addressed enquiries in writing to those persons whom they believed capable of aiding in their investigations. Most of these sent replies, and upon them the report is based. The conclusions arrived at bear out in every way the account already given in this JOURNAL (issues for April and July, 1885). This city up to February last was free from smallpox. On the 28th February, a Pullman car conductor was admitted with that disease into the Hotel-Dieu Hospital (the former

Civic Hospital being at that time closed). No evidence is adduced to show that isolation was carried out. On the 1st of April one Pelagie Robichaud died in the same institution from smallpox. This woman was a servant in the hospital, and there is reason to believe had had access to the patient above alluded to. "Her decease is immediately followed by such a large number of other cases among the persons in the establishment that it is thought necessary, to save the establishment itself, to dismiss all the patients presenting no symptoms of the contagion and who could go home. What must have been the consequence for the city of sending away the patients at the Hotel-Dieu by the decision of the 14th of April, when the Rev. Sister Superior of this house said to us that 'From the 8th to the 18th of April we counted sixteen cases of smallpox removed from the Hotel-Dieu to the Civic Hospital?'" The folly of this step we have previously discussed. Thus, the report clearly attributes the outbreak to the original focus in the Hotel-Dieu, which, having attained within its walls a certain force, was allowed to expand itself in all directions by sending to their homes many persons already in the stage of incubation. The Committee then proceeds to make certain suggestions to prevent the possible recurrence of a similar calamity in the future. They are sound, and are chiefly as follows:—That a civic smallpox hospital should be *always* open, provided with such a staff as circumstances may indicate. That the Medical Health Officer should be well posted as to the sanitary state of the various cities on the railroad lines communicating with Montreal. That any case of smallpox in the city should be at once isolated in the hospital. That steps be taken to guard the city against contamination from the surrounding municipalities. Finally, they urge the systematic vaccination of all young children, and to this end recognize the necessity for a register of births. The report and the evidence taken are published *in extenso* in pamphlet form, and is an official history of the outbreak. It is to be devoutly hoped that the practical suggestions made will never be lost sight of by our Board of Health.

A FILTHY ADVERTISEMENT.

In one of the leading dailies of this city of a few days ago our attention was directed to an advertisement which, for pure filth and deceit, exceeds anything we have ever seen printed in a paper which finds its way to the hearths of many thousand families in our land. It is headed in large type—"*Errors of Youth! Sufferers from Nervous Debility! Youthful Indiscretions! Lost Manhood! Be your own Physician.*" And to revive the drooping spirits of the afflicted, there is a cut of an anchor, with the word "Hope" written across it. The "errors of youth" are to be speedily and certainly cured by the following prescription :—

℞	Cocaine, - - -	ʒ ss.	
	Jerubebin, - - -	ʒ ss.	
	Helonias Diocia, -	ʒ ss.	
	Gelsemin, - - -	gr. viii.	
	Ext. Ignatiæ Am.,	gr. ii.	
	Ext. Leptandra, -	gr. xl.	
	Glycerine, - - -	q. s.	M.

Make 60 pills. Two to be taken daily.

It is adapted for either sex, and the advertisers are particular in stating that if it cannot be made up by the local druggist, they will be glad to forward sixty such pills for a dollar.

As the sixty pills contain $10 worth of cocaine alone, it is plain that it is all a fraud; but this, unfortunately, is not the worst feature of it, as every medical practitioner knows. The amount of harm, mentally, morally and physically, produced by such an advertisement is very great, and it is a lasting disgrace to the paper that publishes it. It is said these advertisements pay well. Of this there can be no doubt. If some of our newspapers, however, are ready to publish anything and everything that brings them money, it is time that the Legislature should prevent them. We have laws to prevent the importation of obscene literature from abroad. Let us, by all means, have laws to prevent newspapers publishing what is infinitely worse.

COLLAPSE OF THE LUNG.

Dr. Theodor Dunin of Warsaw has recently published in *Virchow's Archives* an account of the minute anatomical changes occurring in collapse of the lung from compression. This study being almost the only literature on the subject, though pulmonary collapse through bronchial obstruction and pulmonary cirrhosis from extension of fibroid pleurisy, are fairly well understood. Three fatal cases and twenty experiments on cats and rabbits (by external pneumothorax and pleural effusion from repeated small injections of gelatinue solution) have led him to conclude that the essential results of compression are at first flattening of the alveoli, compression of their capillaries and degeneration of their epithelium, and, later, that the flattened alveolar walls themselves, their capillaries now completely obliterated, are formed into fibroid strands and meshes. He considers the change a degenerative one, largely due to interference with the blood supply, and differing from collapse through bronchial obstruction by the absence of any active catarrhal pneumonia. A small-cell proliferation about the smaller bronchi going on to fibroid change he attributes to irritation from the retained bronchial secretion. The fibrous tissue both from this source and from the degenerated alveolar walls would have, he thinks, but little influence in preventing the re-expansion of the lung compared with that exerted by external pleuritic adhesions—a theory which certainly accords with the clinical features of these cases, since a lung, even if long compressed, may expand perfectly, provided the pleura be not much thickened. It would be interesting to know how far these changes may proceed without precluding the possibility of complete recovery. None of the cases observed were complicated by tubercle.

A NEUROTIC FORM OF GANGRENE OF THE EXTREMITIES.

The rare, but very interesting, disease known as symmetrical gangrene has been a prolific subject of debate from the time of Quesnay's description of it in 1749 up to the recent publications of Profs. Pitres and Vaillard. At one time it has been looked

upon as of vascular origin, while at other times its neurotic origin appeared to have most supporters. Ragnaud and Weiss have advanced the theories that the essential starting point is a functional derangement of the vaso-motor centre, through which a permanent contraction of the vessels is brought about—the arterioles, according to the former, and the smaller veins according to the latter. From the recent researches of Prof. Pitres and Vaillard, it appears that these views can be no longer maintained, but that we must look upon the disease as a neuritis of the peripheral nerves. They report in full, two cases of this disease where autopsies were obtained. The first occurred in a girl 24 years of age, who enjoyed good health up to her eighteenth year. From this out she became weak, and her limbs trembled and contractures of the lower extremities set in. On the 5th December, 1883, she was admitted into the hospital with gangrene of both feet (symmetrical). Two weeks later there were two symmetrical patches on the back; six weeks afterwards there was spontaneous amputation of the left foot at the ankle joint, the right foot hanging by a few threads. In various parts of the body there was superficial sloughs. Death occurred just two months after the disease was first noticed. At the autopsy, the nerves of the gangrenous parts presented marked alterations. The right anterior tibial nerve had hardly a healthy fibre left. The nerve fibres of all the affected parts had lost their myelin sheaths, and between them was situated fat-drops and leucocytes.

The second case occurred in a woman aged 56. It began with loss of sensation in the soles of the feet, followed, four months afterwards, by vesicles and swelling of the feet. When admitted into hospital in January, 1884, the patient had a normal temperature. There was great œdema of the left foot, with ecchymotic patches under the nails. The whole foot had a bluish appearance. It was cold and devoid of feeling. The right was similarly, although not so extensively, affected. There was neither sugar or albumen in the urine. The patient died two weeks after admission in a comatose state, the gangrene in the meantime having made such progress that both feet were in a mummified condition. The only changes of moment noticed at the post-mortem were the extensive alterations in the nerves of

the gangrenous parts. The internal plantar and the posterior tibial nerves showed the most extensive alterations. In some parts there was complete destruction of the fibres, while in all parts they had suffered more or less. There was no clotting in any of the vessels of the limbs.

An account is given of a case of gangrene of both lower extremities in an old man from embolism, where the most careful histological examination failed to find any changes whatever in the nerves of the gangreneous parts.

The authors consider that they are justified in coming to the following conclusions from the observations they have made on the three cases just briefly detailed :

1. That there is a form of symmetrical gangrene of the extremities which is not brought about by the commonly recognized causes of this disease, as cardiac and circulatory disturbances, septic infection, or traumatism.

2. That in this form there is in the nerves of the parts deep changes, constituting parenchymatous nephritis.

3. The neuritis is not caused by the gangrene, as it is not found in gangrene from occlusion of the vessels. It is probable that the neuritis causes the gangrene.

4. In addition to the usual form of spontaneous gangrene of the extremities, there is a so-called neurotic gangrene which resembles, in its symptoms and development, other forms of trophic disorders which follow inflammation or degeneration of the peripheral nerves.

THE BOWMAN LECTURE.

The Bowman lecturer for the present year was Dr. Hughlings Jackson. His subject was " Ophthalmology and Diseases of the Nervous System." The address, which is a masterly one, had for its main object the setting forth of the necessity for specialism in medical work, especially specialism combined with co-operation. In scientific as well as in social progress, there were four degrees or stages to be noted. The advance of scientific medicine depends upon increased differentation of work and definiteness of observation, combined with increased integration of knowledge and co-operation of workers. " Specialists have to justify them-

selves to justify their differentation. Increasing differentation without increasing definiteness would only be confusion." That the ophthalmologists have justified their differentation there is abundant proof; the lecturer specially noted the work done by them in ocular paralysis and on abnormalities of refraction. As a justification for neurology, the lecturer instanced Charcot's work. If justification was needed for the neurologists, it would be more than found in Dr. Jackson's own splendid achievements in this field.

The address was principally taken up with a description of idiopathic epilepsy, showing how necessary it was for the full and complete elucidation of this subject to have the special work of a large number of specialists. The neurologists, the alienists, the ophthalmologists and the physiologists will all find in this one subject work of a special character, and it is only by the co-operation of such a band of workers that we will be enabled to understand the disease in question.

Incidentally the lecturer advanced the hypothesis that there is atrophy of cells of centres for organic parts, like the atrophy of cells of the anterior horns. Diabetes may be owing to progressing atrophy of cells of that part of the great vaso-motor centre which especially governs the hepatic artery. It was also suggested that Graves' disease and myxœdema have a somewhat similar central pathology. The rich suggestiveness of these and many other hypotheses advanced by Dr. Jackson will well repay the physician's closest attention. Dr. Jackson's utterances to the medical world are all characterized by great originality and honesty, and this his latest production is no exception.

PRESENTATION TO DR. MEWBURN.—Dr. Mewburn, who was formerly resident medical officer in the Montreal General Hospital, has served during the past four years as house surgeon of the Winnipeg General Hospital. In this capacity he has gained the respect of the hospital authorities and the profession generally. He has now left Winnipeg to take medical charge of the Galt Coal Mines. Before leaving, he was presented with an address, together with a gold watch and chain, by the members of the profession in the city, to express the great

esteem in which he is held. The students of the medical school also made a presentation, with many good wishes for his future prosperity. We congratulate the Doctor, and wish him success in his new sphere.

Dr. D. W. Eberts, who was serving as resident medical officer at the Montreal General Hospital, has been chosen as Dr. Mewburn's successor, and has gone West to assume his new duties. He carries with him the best wishes of his friends in Montreal for his advancement and success.

—We observe that Dr. Piffard has retired from his editorial connection with the *Journal of Cutaneous and Venereal Diseases*. The *Journal* will be continued under the sole editorial charge of Dr. P. Morrow. We may remind our readers that this is the only publication in the English language devoted to skin and venereal diseases, and during the three years of its existence it has won for itself a high reputation for scientific excellence as well as practical utility. In addition to presenting all that is new and valuable in these special departments, the colored lithographs and wood engravings with which the original articles are illustrated are worth more than the price of subscription.

—At the annual meeting of the Huron Medical Association, held in Seaforth on the 16th ult., the following officers were appointed for the ensuing year:—President—Dr. Campbell, Seaforth; Vice-President—Dr. Young, Londesboro'; Secretary—Dr. Worthington, Clinton. The attendance at the meeting was good, and the number of cases presented exceeded that of any previous meeting of this vigorous and progressive medical society. In our next number we hope to give a full account of the proceedings.

Personal.

Dr. Phillippe Wells of Quebec has been appointed member of the Central Board of Health, to fill the vacany caused by the death of Dr. Marsden.

Dr. C. S. Parke of Quebec has been named commissioner of the Marine Hospital of that city, to replace the late Dr. Marsden.

Prof. Strümpell, of Leipzig, has been appointed to succeed Leube as director of the medical clinic of the University of Erlangen. Prof. Strümpell is one of the most active and hard working of German physicians.

Medical Items.

—The conduct of Dr. Heywood Smith in reference to the girl Eliza Armstrong has been investigated by the Royal College of Physicians, and at a meeting held on the 18th December the following resolution was adopted: "The College having considered the statements made by Dr. Heywood Smith and his apology through the Censor's Board, while acquitting him of deliberate attempt to do evil, desires to put on record an opinion that he has committed a grievous error in connection with the Armstrong abduction case, which has brought discredit on himself and the profession to which he belongs. The College, therefore, regards his conduct as deserving the severest censure, and requests the President to express the views of the College and to reprimand him accordingly."

MEDICAL HONORS.—Dr. Paget of Cambridge and Dr. William Roberts of Manchester have received the honor of knighthood. Dr. Paget, who was until recently the President of the General Medical Council, owes his elevation to the active and distinguished part he has taken in founding what is now one of the most important medical schools in the United Kingdom—the Medical School of the University of Cambridge. Dr. Roberts is well known as one of the leading scientific physicians of the present time. His work on the kidneys is a classical production, but in his contributions to the therapeutics of digestion we have a still more enduring memorial of what can be done by a physician who who has the will to work. The great practical results that have been already achieved by his method of treating cases of difficult digestion in the course of acute and chronic disease prove it to be one of the most important therapeutic advances of the past decade. It is to be hoped that both these gentlemen will long be spared to wear their honors and grace our profession.

—The *Medical Age* thus discourses: "The rectum bids fair to be a bigger bonanza to the doctors than ever the womb has been. It appertains to both sexes and all ages. From the great-grandfather to the neonatus, the rectum offers itself for inspection and treatment. And the beauty of it is, it suits all tastes in its tolerance of attention. The surgeon can cut it, tear it, cauterize it; blister and burn it; he can expand it, contract it, pinch it and pucker it; plug it and unplug it. The barber can barber it; the leecher can leech it; even the midwife can anoint it, syringe it and empty it. The doctor can doctor it in any way he pleases. It takes big doses with composure and little doses with a quick response. It is susceptible

of medication both directly and indirectly, and it is a portion of the economy so universally necessary to the comfort, health and life of every single member of the human family, that in its possibilities there is, so to speak, no end to it. However it may be treated, whether by expert or neophite, it is senseless, earless, eyeless. However much the viscus may be damaged, in the course of its experiences, its hapless owner can't see it and be a reliable witness to malpractice in a court of justice. He can't by sight count its scars, measure in inches the depth of his sphinctral misery. Any error in diagnosis or failure in treatment, while necessarily fundamental and possibly serious in its consequences, is easily covered up, for, with a little alum or tannin properly applied, so far as giving anything away is concerned, the rectum may be rendered as 'tight as a drum.' The failure, should it occur, may be attributed to a 'cold,' or some indiscretion in diet, or to atmospheric or telluric disturbances, to all of which the rectum is highly sensitive. A sudden and unforeseen onset of microbes may upset the calculations and predictions of the most skilful and astute physician, and render negative his best endeavors. To the coming doctor the rectum presents an opening compared to which a malposed womb or dislocated ovary is nothing worth a thought. In a word, the womb of the future is pregnant with golden possibilities regarding the rectum."

"MELLIN'S FOOD.—This preparation is, in fact, an excellent attempt to give the extractive and soluble portion of Liebig's food, without the cellular and indigestible part of the meal. In other preparations of this class this was partially avoided, but not wholly so, by straining. There is no evidence of starch remaining in this preparation, it having been all converted into grape-sugar and dextrine, and there is no reason to believe that it is prepared from anything but malt and wheat. As a food for delicate infants, there can be no question as to its great value."—*Medical Press and Circular, London.*

LACTOPEPTINE.—We have used this article for some time in cases of indigestion, and can recommend it as a valuable remedy. Being a compound of the five active agents which are contained in the process of digestiou, it cannot fail to aid the system in preparing the food for assimilation. It is an invaluable remedy in the summer diarrhœa of children. Owing to its great impairment of the vital forces, and feeble powers of the digestive tract, food frequently irritates and increases the difficulty. For such cases we learn of no agent in the Materia Medica as reliable as Lactopeptine.—*Cal. Med. Jour.*