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Read before the Manchester Medico-Ethical Association, May 6, 1892.

PROPOSED REGISTRATION OF STILLBORN CHILDREN.

BY ROBERT READ RENTOUL, M.D.

Mr. President.

Before speaking of the evils arising from the absence of a law providing for the registration of stillborn children, I shall first refer to those Acts which regulate the present system of registration of Births and Deaths.

I do so because the Act refers to the burial of stillborn children ; because registration should be carried out by the present registrars ; and because a study of the Act may prevent us from perpetuating some of its recognized flaws.

As regards the registration of births and deaths, we see that the legislation regulating it has been built up piece by piece, no effort having been made to deal comprehensively with it. Previous to 1836 registration was carried out by the clergy, who kept Parish registers. After this the 6th and 7th William IV was passed, and by it the office of Registrar General and District Registrars was formed. By this Act registration was voluntary. To rectify this the Act of 1874 was passed, and by it registration was made compulsory, penalties for neglecting to register being provided. Referring to the registration of births, the law enacts that notice must be given to the Registrar within 14 days, by any of the following persons:—A. the father and mother ; B. the occupier of the house in which to their knowledge the birth occurred ; C. the person present at the birth ; D. or the person having charge of the infant. The informant signs the register and pays a fee of three pence for a copy of the certificate. The penalty for neglecting to register is £2. Attention is called to this because I shall, later on, show that a declaration made by any of the above is all that is required when a supposed stillborn child is to be interred.

Regarding the registration of deaths, any one of the following must notify the fact of death : A. the relative of the deceased present at the death, or in attendance

during the last illness; B. the nearest relative resident in the sub-district; C. any person present at the death: D. the occupier of the house in which the death occurred; E. the person causing the body to be buried; or F. the coroner by order when an inquest has been held. Notice of death must be given within 5 days next following the death, the informant signing the register. The informant generally takes a certificate of the cause of death, signed by a registered practitioner, which the registrar retains, giving a certificate of registry to the informant, who, finally, or through the undertaker, delivers it to the person who buries the body or performs any funeral service over the body.

From the above it appears the law is more concerned in having the fact of death registered than the cause. Thus, according to the 53rd Annual Report of the Registrar General, 562,248 deaths were registered, but of this total the cause of death was certified by registered practitioners in 514,720 cases; 31,587 were certified by coroners after holding inquests; while 15,947 were not certified. 25,883 deaths were entered under the ambiguous heading "ill defined and unspecified causes." These figures show that the cause of death is not certified medically in a large proportion of cases. For instance, take the cases certified after a coroner's inquest. Here the fact is not mentioned whether a post-mortem has been made or if medical evidence was called. And remembering some of the findings of coroner's juries—such as "found dead," "death from natural causes," or "death from visitation of God," we can form an idea of the value of a coroner's certificate of the cause of death. Again, take the cases over which the coroner is given power, by Section 3 (1) of the Coroners Act 1887, to order the registrar to register a death when no inquest has been held. This includes all "reported to the coroner independently of the registrar." To explain—a child is found dead, and the fact is reported to the police. No medical certificate of the cause of death is obtained because previous to death the child was not under medical treatment. Here the police constable steps in, asks a few questions, sends off his report to the coroner, and the latter, on receipt of this report, sends a certificate to the registrar, stating that he "does not consider it necessary to hold an inquest respecting such death." A special form of certificate is provided by the Registrar General (see form). Again, notice those deaths referred to the registrar and where no medical certificate of the cause of death is obtained. Here the registrar asks some questions of the informant, and if satisfied registers the death, adding, it is "not medically certified." If the registrar is not willing to accept the risk, he refers the case to the coroner, who orders his official to make inquiries. If this officer is satisfied, so generally is the coroner, and no inquest is held. Such systems are open to the greatest abuse. The abuse springs partly from the facts that the coroner does not wish to increase the costs of his office, and because the police do not care to interfere unless they are certain of obtaining a conviction if a prosecution is instituted. They are aided by some coroners who seem to think their whole duty is to detect crime and not to find the cause of death.

These defects would be removed if: A. The office of registrar of births and deaths were held by medical practitioners, as is the case in Ireland; B. if the medical certificate of the cause of death were sent by practitioners *direct to the registrar*, and not to the relatives, and that it would be illegal for any practitioner to use any Form of certificate of the cause of death other than that provided by the Registrar General; C. if no body could be buried until the death had been registered; D. if the

informant's signature to the fact of death had to be witnessed by two witnesses; E. if the law provided for the payment of the certificate of the cause of death; and F. if the medical certificate of the cause of death were so altered that the practitioner be called upon to certify of his own knowledge that the person of whom he has given a certificate of the cause of death is actually dead, instead of stating "he is informed" the person is dead. I think our present certificate could be so altered, because Section 44 of the Act of 1874 provides that it shall be lawful for the Local Government Board, by order, to alter, from time to time, all or any of the forms contained in the Schedules of the Acts from 1837 to 1874, or to prescribe new forms, or to revoke and alter any regulations.

It would be much better if a medical inspector were appointed to examine the dead body when no medical certificate of the cause of death is obtainable, instead of sending a police constable or a coroner's beadle to do this. In France and Germany, and in Brussels, Vienna, Switzerland, and other Continental countries, the law enacts that every dead body, without exception, must be examined by a medical inspector —while no body can be interred until this has been done.

In Paris the Mayor appoints a medical officer for each district, and when a death occurs it is reported to the civil authorities. These communicate with the Medical Inspector, and await his reply. In this country, the bodies of stillborn children should be visited and reported upon, also at least all deaths registered under "ill-defined and unspecified causes." It would be best if the Medical Officers of Health were appointed to act as medical inspectors. In Denmark, by the Inspection of the Dead Act, 1878, all dead bodies—stillborn included—are inspected by legally qualified medical practitioners.

The only part of the Births and Deaths Act which refers to the burial—not the registration—of stillborn children is Section 18. After enacting that a person shall not willfully bury, or cause to be buried, the body of any deceased child as if it were stillborn, it goes on to enact that "a person who has control, or ordinarily buries in any burial-ground, shall not permit to be buried, or bury in such burial ground, any stillborn child before there is delivered to him, either a written certificate, signed by a registered medical practitioner, that he was in attendance at the birth of the child, or that he has examined the body. If such a certificate cannot be obtained, then a Declaration, provided for in the Act, must be made and signed by some person who would, had the child been born alive, have been called upon to certify—that is, the father and mother; or the occupier of the house; or the person present at the birth; or the person in charge of the child; or an order of the coroner, when he has held an inquest. Any person contravening this Section may be fined £10.

A "Book of Forms of Medical Certificates of Stillbirths" was issued by the Registrar General's office to registrars of Births and Deaths as late as March, 1891. These Books are free to medical practitioners. Each certificate consists of two parts: one to be filled up when the practitioner was present at the birth; and the other when he had examined the body, but was not present at the birth. Both require him to certify that the child was not born alive and that the woman named was delivered of a child—two difficult questions to answer, as will be seen when we consider the signs of still-birth. The certificate is handed to the person having control over the burial ground, and not to the Registrar of Births and Deaths. (See Book of Forms.) When no medical certificate is obtained, the person bringing the body for interment must sign a Declaration, stating that the body is the child of so and so, that no practi-

tioner was present at the birth, that no practitioner has examined the body, and that the child was not born alive. This is signed by the informant and retained by the sexton. (See form.)

These regulations for the burial of children supposed to be stillborn are very imperfect. The burial—if burial there be—takes place without the intervention of the registrar of births and deaths, and frequently without a medical certificate. Who controls the burial? The Act refers to the person "who has control over, or ordinarily buries bodies." When this person is the superintendent of the burial board cemetery, a certain supervision is provided. But when the grave digger or parish sexton is the official—how can there be any feeling of security? Supposing this person is shown a certificate said to be signed by a registered practitioner, does he know whether it is, or is not, a proper certificate? The person legally permitted to sign the Declaration is "any person present at the birth, or the person in charge of the child." Suppose it is signed by some old woman, or unqualified assistant—I ask what protection such a Declaration gives to the public that many children born living are not interred as stillborn, and that they have not been subjected to some malpractice during or soon after birth? Thus, any person can prevent a child, which is being born, from breathing,—put it in a soap box, take it to the parish sexton, make a declaration that the child has not lived, give the sexton a few coppers, and the *murder* is completed. At present very few prosecutions take place. In 1890 only 19 prosecutions under the Births and Deaths Acts were instituted by the Registrar General, and only one for permitting a child to be buried as stillborn without a certificate that such was the case. One prosecution!

I shall next try to answer the question: How many stillborn children are interred each year in England? When in 1890 a midwives' registration bill was introduced into the Commons, to enable women to practise midwifery without their having either a medical or surgical qualification, and therefore placing them on a different footing to other midwifery practitioners, it occurred to me that this strange proposal should be opposed until at least provision had been made for the efficient registration of stillborn children. In order to arrive at some finding as to the number interred, I wrote to some 100 Burial Boards, asking each what number of stillborn children had been interred. I found that at 71 Burial Board cemeteries, 6,321 stillborn children had been interred in Burial Board cemeteries in England and Wales in 1890. Dr. Cameron called attention to this statement in the House of Commons, and moved for a return showing the number interred in Burial Board cemeteries in England. This return was issued in July, 1891, and we must thank Dr. Cameron and the Hon. C. T. Ritchie, President of the Local Govt. Board, for it. From it we learn that in 1133 Burial Board Cemeteries, 17,335 children, *supposed* to be stillborn, were interred during 12 months, and that 4,569 of these were buried without a medical certificate. This Return is very incomplete, as it does not include Ireland or Scotland, neither does it give us any account of those interred in the parish or other burial grounds. And in connection with this I have been told that the parish church-yards are the commonest receptacles for stillborn children. According to the Official Yearbook of the Church of England, there are 13,988 benefices in England; and if only half of those benefices, not to mention those in Scotland and Ireland, have church-yards attached, we see what an enormous quantity of stillborn children must be interred in them. It is impossible to give any idea of the number thrown

into ashpits, or sewers, or buried in gardens, or burned. (See Return.) A painful feature brought out is, that the number of interments in certain large towns is very great. Thus in Lancashire, Blackburn had 298 such interments; Bolton 262; Burnley 197; Preston 150; Rochdale 130; Warrington 113; Oldham 285; Walsall 154; Hanley 148; Newcastle 267; Liverpool 383; London 2,121; Salford 294; and Manchester 299. These figures do not include all interred, as there are burial grounds in Manchester other than burial board cemeteries. Of all burials in the above, 1 in every 13·8 buried was a stillborn child. The above figures give us but a glimpse as to the number interred. Farr, when giving evidence before the committee on the protection of infant life, in 1871, estimated that there were from 30,000 to 40,000 stillbirths in England each year. With our present population, the number cannot be less than 60,000. Had the ages of the stillbirths been given in the Return, I venture to say it would have shown that almost all interred had reached the full term of 9 months. If children under the 7th month of pregnancy and abortions were included, then at least 178,164 must be added to the total—that is, supposing, as I have tried to show in my work on "the Causes and Treatment of Abortion," the number of abortions to the total births is 1 in 5. An instructive addition to this Return would have been statements showing what proportion of illegitimate children had been stillborn. It is well known, the illegitimate child, from its very conception onward, has to run the gauntlet of many attempts upon its life, which the legitimate child has not to encounter. Statistics prove that the number of stillbirths among illegitimate births is much greater than among the legitimate. In the *British and Foreign Medical Review*, No. 7, it is stated that the proportion of stillbirths among legitimate children—basing the calculation upon 8,000,000 of births, is 1 in 18 or 1 in 20; while among the illegitimate and immature it is 1 in 8 to 1 in 10. Bertillon states that the chance of an illegitimate child being stillborn, when compared with the legitimate, is as 193 to 100. In Denmark, "its Medical Organization and Hygiene," it is stated that of 100 legitimate births, 2·6 per cent. are stillborn; and of the illegitimate 4·1 are stillborn. It may also be stated that in 1st labors 1 in 11 are stillborn, and in other labors 1 in 32, and more males than females in the proportion of 56 to 44. I have mentioned these facts because any certificate of stillbirths should state the age and sex of the child, and whether its mother was single or married. Referring next to the number of stillbirths, I may say that in

Country.	Year.	Stillborn.	Total births.	Proportion to population.
Prussia.	1889.	42,084.	1,094,668.	1 in 26·01.
France.	1875.	43,834.	880,579.	1 in 20·08.
Netherlands.	1890.	7,374.	150,529.	1 in 20·4.
Switzerland.	1890.	3,072.	78,548.	1 in 22·2
Sweden.	1890.	3,557.	132,060.	1 in 37.4
Denmark.	1889.	1,933.	66,239.	1 in 34·2.

It will be readily seen the total number of stillbirths must vary in each country, according to the *legal* definition of "stillbirth," as, if one country enacts that all stillbirths over 6 months be registered, while another fixes the age at 7 months, or at 8 months, a great difference will be shown in the figures. It is to be remembered that in France, all children, liveborn, and *others*, who die before being registered, are entered as "stillborn." The custom in Denmark, until 1860, was that all those dying within 24 hours after birth were registered as stillborn. A reference to the laws regulating the compulsory registration of stillbirths in European countries shews that this country is very far behind. In the Netherlands, registration is made compulsory by Article 32 of the Civil Code. In Switzerland, Section 14 of the Federal Law, Dec. 24th, 1874, regulates the practice. Only those, concep-

tions of 6 months are registered, and they are registered both as births and deaths. In Germany, registration is carried on by the Registrars of births. Stillbirths are registered as deaths. (Act Jan. 6th, 1874.) Their law does not define the term "stillbirth;" but in practice, only a fœtus of 7 months is capable of living, and those born before that age are not registered. Paragraph 23 of the Act enacts that, "when a child is born dead, or dies during birth, the fact must be notified by the next day at latest." Anyone failing to comply with this regulation may be fined £7 10s. 0d., or be imprisoned. Two special forms for registering a stillborn child are supplied. In one, the fact that the child died during birth is noted; while the other is used in those cases where the child is born dead, *i. e.*, died in the womb. Abortions and mole-conceptions are not registered. When the informant registers a stillbirth, the registrar interrogates the informant as to whether the child died during delivery or died in the womb. In Greece, registration is not compulsory, and no penalties are laid down. They are registered as deaths, and their legal definition of a stillborn child is "a dead newly born child." It would appear that the body of every newly born child must be taken to the Registration officer, unless its birth has been registered before as a livebirth. The Act of October 29th, 1856, regulates the procedure. In an Appendix to the Act, there is a form relative to the showing of a stillborn child to the registrar. In Denmark, registration is compulsory by the Act of Jan. 2, 1871. It is performed by the registrar of births and deaths. A penalty of 10 kr. is imposed if the death is not registered; and if a midwife fails to register, she is fined 100 kr. (1 kr equals about 25c.). By a stillborn child is understood a child which has issued forth from its mother after the expiration of the 28th week of gestation. A special form of certificate or stillbirth is provided for the use of a midwife.

Having tried to give some idea of the number of stillbirths, I shall next proceed to answer the question—Is the criminally causing of children to be stillborn frequent? Coroner Braxton Hicks, in his pamphlet, "Hints to Medical Men Granting Certificates," says: "Many children who are termed stillborn are not really so, but have been born alive and died soon after, sometimes from natural causes, but also from suffocation and other illegal means. In fact, it is to be feared that many children termed stillborn are disposed of in such ways." Tidy, in his "Legal Medicine," says: "So notorious is it that a large number of these cases could be averted, that some legislation is urgently needed." Stevenson, in his "Medical Jurisprudence," says: "There is reason to believe that the non-registration of births of children born dead leads to many being disposed of as stillborn which really came living into the world, but have died from neglect, exposure, or violence." In the Return already referred to, the following pointed statement occurs:—

"The Secretary of State has reason to believe that in some places the practice prevails of entering in the cemetery-book as stillborn children who have survived their birth by only a few hours, and over whose body no religious service has been performed." In the *Lancet* of Oct. 11th, 1890, a writer states, that a midwife known to him signs a Declaration of stillbirth of those children who die within 5 or 6 hours after birth. Previous to the passing of the Births and Deaths Act, 1874, and when no penalties were imposed for burying live born children as stillborn, the custom of burying liveborn children as stillborn was common. I have met with a case where a woman ruptured the membranes, the os being dilated to a small extent only, in the hope that by so doing the labor would be so delayed that the child would be stillborn. Again, it is well known how easy it is to prevent

a child from taking its first breath. Stevenson says: "A wet cloth may be placed over the child's mouth, either during birth or afterwards, and before or after the performance of respiration." I have been told of a case where a midwife had a large number of "stillbirths" in her practice, and where she was found to have placed a hollow sponge (cup shaped) over the child's mouth and nose, so as to prevent it from breathing while being born. It is well known how easy it is to allow the fully born living but non breathing child to lie on the bed without making the slightest endeavor to make it respire, and that such want of action cannot be uncommon among a certain class. Also that many children are stillborn because the mother allows herself to remain in labor for too long a time before calling in aid. It has been suggested that one reason why efforts are made by some to have dead liveborn children interred as stillbirths is that by so doing the burial fees are greatly lessened.

If a stillborn child can be interred for 1 shilling and sixpence, and a live born child for 10 shillings and sixpence, we may expect this to make a difference. Perhaps if we had the system of burial by municipal authorities as in Germany, there being no private undertakers; and where the funeral of a child is carried out for about 3 pence, this would meet the above argument.

A practitioner who has watched the practice of midwives writes me as follows: "There exists a deplorable (might one not say criminal) amount of negligence in the treatment of apparently stillborn children. I have repeatedly saved children that have been thrown aside by the *diplomated midwife*. The whole system is shocking."

A strong incentive to the criminal causation of stillbirth is *illegitimacy*. In 1890, of 896,937 births in England and Wales, 38,412 births were illegitimate, or about 1 in every 22 births. This shows there is a large field for criminal stillbirth business. I ask, what father or pregnant woman of an illegitimate conception would not pay a large sum to any one who guaranteed that the child was to be stillborn? The experience of our police and coroner's courts answers: We know that large quantities of drugs are consumed so that the child may be stillborn, and that in every city the professional abortionist makes a large income. Is it likely then that when these methods fail, not to mention the many "checks" used to prevent conception, that others will not be used when the child is being born? The fact that in this country a woman condemned to death can not have her execution stayed, unless she prove she has quickened, encourages the present disregard for infant life in the womb. That is, the infant in her womb, although a living child, is legally not worthy, in such a case, of any consideration. The plea of pregnancy in bar of execution holds good only if quickening has taken place, the vulgar idea being that the child receives life only when the woman quickens. Otherwise, not only she but the child in the womb are both killed. It would be well if some Member of Parliament would raise the question—Has the Crown the right to take the life of the child in the womb of the woman condemned to undergo the sentence of death? In France this law does not exist, for there the proof of pregnancy, not of quickening, is sufficient to stay execution.

It may be suggested that the Act relating to the concealment of birth lessens the value of the demand for registration. By the 24th and 25th Vict., Chap. 100, it is enacted that, "if any woman be delivered of a child, every person who shall, by any secret disposal of the dead body of the said child, whether such child died before, at or after birth, endeavor to

conceal the birth thereof shall be guilty of a misdemeanor, and being convicted thereof shall be liable, at the discretion of the court, to be imprisoned for any term not exceeding two years, with or without hard labor."

The object of the Act is to prevent secret disposal with a view to child murder. It refers to a child which dies either before, during, or after birth. It is not a crime to conceal the body of a live child, unless it die before the fact of its birth was made known. The body must also be secretly "disposed of," and this is a weak point, as it has been stated by a judge, that because a woman disposed of her child in a field from which she might have been seen from the public road, she did not "secretly dispose" of it. Again, a great deal depends upon the definition given to the term "child." Justice Chitty has said it is no offence if the child so concealed was only seven months old, a somewhat strange ruling, seeing the child is viable before the 7th month. Another judge has laid it down that it is not a "child" unless it could live when born; while a third has said that if it had the outward form of a child, this is sufficient.

In a proposed "new criminal code" drafted by Sir J. Stephen, late judge, it was suggested that "No fœtus is to be deemed a child within the meaning of this Section which has not when born reached the period at which it might have been born alive." I also call attention to the above Act, because some practitioners give very wrong advice regarding the disposal of premature births, stillborn or otherwise. Kinkead, in his "Medical Practitioners' Guide," says: "If any practitioner secretly dispose, or aid, or abet at such disposal, he is guilty." It is also criminal to conceal the birth of a putrid fœtus, because the act refers to a child which dies *before birth* as well as those dying during or after birth.

The Scottish and the German laws go further than the English. By the 49th George III, chap IV, "Concealment of pregnancy,"—not of birth—is criminal. It enacts, that if any woman shall conceal her being with child during the whole period of her pregnancy, and shall not call for and make use of help and assistance in the birth, and if the child be found dead, or missing, the mother may be imprisoned for two years. This law lays it down, that it is the duty of every pregnant woman to make preparation for her confinement and infant. I have asked little John if he thinks the words "during the whole period of pregnancy" would exclude those women who concealed their having aborted or miscarried. He refers me to McDonald's "Criminal Law of Scotland," 2nd Ed. 1877. It appears the Act refers to all cases, but that it would be a very strong point in the woman's favor if she had been delievered of an abortion or fœtus; if so, she would be outside the statute. The Act asks that the child be *found dead.* Therefore the child must have been born alive; or, in other words, pregnancy must have lasted so long as to make a living birth possible. In Scotland there is no Act corresponding to our "concealment of birth;" and neither the Scottish nor the English Acts lessen the force of our request for registration.

Having referred to these Acts, I shall try to define some terms of which we must have clear ideas before any legislation on the subject of registration of stillborn children is entered upon.

What is a "stillborn" child? This may be met by asking another: What is a "liveborn" child? The medical and legal definitions unfortunately differ greatly,—physiology and law being in direct conflict. Medically, the child from the instant of conception has life. In legal language, the live born child is one whose

body being "completely born shows some definite sign of life." In this definition there are two expressions which must be considered, viz., "completely born" and a "sign of life." To be "completely born" it is necessary that the *entire body* of the child be born, but it is not necessary that the placenta be delivered or the cord divided. Legally, therefore, as long as the child is in the womb, it is not a living being, and so it is assumed that every child is born dead until evidence to the contrary is produced. Next, what constitutes "a sign of life"? The fact that a child after its complete birth—not during—has been observed to move a limb, or a muscle to twitch, that the cord has been seen to pulsate, that its heart has been felt or heard to beat, that its cry has been heard, or that it has been seen or heard to show any physiological sign of life or vital action, is *legal evidence* that the child has been liveborn. It need scarcely be added that had the child been born dead, it could not show any of those signs of life. From the legal view of livebirth, it is not necessary to prove the child has breathed, as a child has been known to live for some hours without breathing. Neither is the fact that the lungs sink in water, a proof that the child has legally lived. It has, unfortunately, sometimes been held that breathing is a complete sign of livebirth,—but a child may breathe before being completely born, as when the head only is outside the vulva. Breathing when coupled with complete birth is only one of the signs of livebirth, and so a child may legally live although it has not breathed. Further, the law does not ask that the child born alive shall be "a viable" child—that is, one capable of living for some time after birth. It only asks that the child after complete birth has been observed to show "a sign of life." And if this sign last for one part of a minute, the law is as satisfied as if it had lasted for a year. Nor does it ask whether the child is mature or immature, healthy or diseased, for both immature and diseased can live. It will be seen that in the great majority of confinements, only those present at the birth can give any useful evidence as to the live birth of a child. If the evidence of live birth is to rest upon information obtained only through "postmortem" examinations,—if I may be allowed to use the term—then it must be owned it is very difficult to state positively that the newly born child has been stillborn. I use the term "newly born child" as applicable to those 24 hours old. The condition of the lungs, state of the cord, appearance of the centre of ossification in the inferior femoral epiphysis, state of kidneys, bladder, and bowels, do not often supply us with that amount of evidence which a judge and jury would think it right to convict upon.

The importance of these facts are enforced because the charge of murder cannot be brought against any person who prevents a child while being born from breathing. The law holds that the child in the womb is dead in so far as proving livebirth is concerned, and therefore that the child can not be killed. Consequently it follows that a child can be murdered—*i. e.*, prevented from breathing and living during birth, while all the culprit has to say is—"the child was stillborn." Such a state of the law is a direct incentive to crime, and places a high premium upon child murder. In fact, in one case, a woman who cut a child's head off while it was being born was acquitted. No doubt, if a person maliciously injure a child during its birth, so that after it is completely born it dies from the injury, this is murder. But such do not refer to those incompletely or stillborn. In cases of criminal abortion also the charge is not one of murder.

The next question for consideration in relation to legal livebirth is: What is the earliest age at which a child, when com-

pletely born, can show "a sign of life"? For upon the answer to this question must depend our answer to the other:—Down to what age of intra-uterine life should stillborn children be registered? In some countries, as Switzerland, only such stillborn children as have completed the 6th month of intra-uterine life are registered. In Denmark, those attaining the 28th week must be registered. In their "Midwives Register" they are entered under one of two headings: 1st, those stillborn, *i. e.*, those dead in the womb; 2nd, those born alive but asphyxiated and not resuscitated —a most practical and important distinction. In that country, in the five years—1883 to 1887—33.6 per cent. of stillborn children were dead before birth, *i. e.*, exhibited signs of maceration. In the Netherlands, no legal definition is given.

But if complete delivery, coupled with the performance of some vital act by the child, be a sign of livebirth, then stillborn children under the 6th month must be registered. Barnes states that children which have completed the 4th month when born may live for some hours. Athill informs me he has seen a child under 4 months breathe after birth. No doubt children of this age die soon after birth. But for the purposes of registration, the question of the duration of life after birth need not be entered upon. The question of intra-uterine age might be ignored, if, for the purposes of registration, it were enacted, that all stillborn conceptions expelled from the womb, and having the outward form of a child, were to be registered. If it be held that only these stillborn children of 9, 8 or 7 months, viable children, be registered, we accept the barbarous admission that because a child has not attained the 7th month its life is not to be considered. My definition of a stillborn child would be—a child which, before, during, or after its birth, has not shown or does not on examination of the body show any sign of life. For the purpose of registration I would define a "child" as a conception born after 4 months of pregnancy, the pregnancy being dated from the last day of the last period. Consequently, every stillborn child of 4 months and upwards would be registered. The present Registrars of Births and Deaths should register stillbirths, and those persons already mentioned as having the responsibility of notifying deaths should also be called upon to notify stillbirths.

No stillborn child should be interred until a certificate of registry from the registrar of deaths is presented. Penalties for neglecting to register should be provided. Some may suggest that both the birth and death should be registered—such being the custom in Switzerland. In Sweden the birth is registered. In Germany, France, Belgium, Denmark, and Greece the death is registered. I think we should register the death only and not the birth. It should be registered within 24 hours after delivery, 2 witnesses to the *fact of birth and death* being required by the registrar. In Berlin and Brussels, the office of the registrar is open on Sunday as well as on other days. Heavy penalties should be provided for the punishment of those who use any means which cause the child while being born to be stillborn. Against those who fail to use every means to induce the newly born child to breathe, penalties should be provided. While those who burn the bodies of newly born children, or dispose of them in any way other than burial in a burial ground, should be fined. For reasons already stated, the medical certificate of stillbirth should contain particulars of the sex, date of confinement, and address at which it took place; whether the confinement was natural or artificial; mode of presentation of the child; measures used at the confinement; name of medical practitioner pre-

sent at the birth; or name of other person present; number of family; number of previous stillbirths; length of gestation; if the child showed any sign of life: (*a*) before, (*b*) during, (*c*) or after birth; legitimate or illegitimate; name and address of father and mother; cause of death; signature of medical practitioner.

In Sweden the sex and legitimacy or illegitimacy of the child are entered under the column, containing the christian name,—as stillbirths have no such name. It would be well if we followed the example of France and Germany, and tried to have it provided that the body of every stillborn child be inspected before burial by the medical officer of health or other practitioner. In Brussels, the birth of a stillborn child is notified to the civil office. This office makes out a list of all the deaths, daily, and sends this to the médecin de l'état civil. This official must call before 10 a.m. at the house at which the stillbirth lies, and must examine it carefully. If he come to the conclusion that it has died a natural death, he fills in a report, and has it forwarded to the Hotel de Ville. If he is not satisfied, he sends this report of verification and of death and identity to the police authority. No burial can take place in this case until authority is given by the Hotel de Ville or by the police. Printed instructions are issued by the Hotel de Ville to the medical official. Articles 6, 7, 8 and 9 of these lay it down as follows:—"If the body present any indication of death from violence or other suspicious circumstance, he must give notice in writing at once to the office of the civil state, as well as to the divisional police. (7) He shall transmit to the police at the same time the certificate of verification of death, notifying that permission to bury must not be given without the authority of the police, and to inform the relatives of such notice. (8) The verification of the death of the stillborn or of newly born infants requires mores careful examination by the medical official. He must state on his certificate to the civil authorities whether the infant was dead before or died during or after birth, and in the last case how long it lived after birth. (9) If he thinks the child is not dead, he himself is to proceed at once to use all measures, and at once to inform the doctor who attended the child; and in all cases he must not fill up his certificate of verification until he is certain of the decease, even supposing another visit is necessary." The system in force in Paris is almost similar to the above. In Switzerland, stillborn children, although registered, are not inspected.

It may be said, the cost of carrying out the registration of stillbirths would be too great. The cost of the medical certificate of the cause of death is, according to Farr, one and sixpence to the country. If, then, 60,000 stillbirths were registered each year at this cost, surely the country would not object to pay the small sum of £4,500 a year.

It is the duty of the medical profession to bring this question to the front. The time is ripe for a public protest against the gross indifference of women of all classes—rich and poor—to the child in the womb. The present state of affairs is a public scandal. A class of political economists may go about saying the human animal is a glutt in the market, and so, not having the value of a pig, calf or sheep, it may be conveniently placed upon that little list, from which, they hope, it will never be missed. On the other hand, our words and actions must be made to give a strong color to public thought, to instil the knowledge, that from the moment of conception there is *life*; that this *life* has the right to claim our protection; and that our duty must be to bring about the registration of stillbirths. In some respects, the protection of child life in the womb and during birth is on the increase. Thus in the charge of crim-

inal abortion,such can hold good if attempts to procure abortion have been made upon a conception but a few days old. Again, a child of 4 months old, if legally born alive, can inherit property and have money left to it. Here registration of livebirth or of stillbirth is of the greatest importance. Tenancy by "courtesy" also depends upon the birth of a living child.

But, on the other hand, the charge of infanticide cannot be brought if a child is killed *while being born.* And here I may say, it would be more humane and more worthy of an—even professedly—civilized community, if the recommendation of the Harveian Society on infanticide were adopted, and that for the purposes of conviction complete separation of the child from its mother were not required, but proof only that the child was living during birth and that it had died from violence. By the Prussian code, any woman who intentionally kills her illegitimate child either during or after birth is charged with infanticide. Although, in this country, infanticide is murder, still this charge is very frequently reduced to that of concealment of birth. In the suggested new Criminal Code already alluded to, it was proposed that if any person cause the death of any living child which has not proceeded in a living state from its mother,they shall be liable to penal servitude for life.

If we bear in mind the difference in the medical and legal definitions of what a livebirth is, that from the legal view the child performs some vital act *outside* its mother's womb, which *very same act* it performed when *in* her womb, we can see that the difference is one of *locality* only and not of vitality.

And if we can induce our lawmakers to extend further official recognition to the child in the womb, by passing an Act for the registration of all stillborn children,then we, as medical practitioners, possessing the power of harmonizing law with medical science, should be able to say we had not altogether neglected our duty towards this important subject.

In concluding this paper, I wish to express my thanks and, I am sure, the thanks of this Association, for the information received from Her Majesty's representatives abroad, relating to the different laws upon this subject.

Society Proceedings.

RESOLUTION OF THE MEDICAL PRACTITIONERS OF OTTAWA.

At a meeting, held this first day of August, 1892, of the Ottawa Members of the Bathurst and Rideau Medical Association, which includes all the registered medical practitioners resident in the City of Ottawa, the following resolution was carried unanimously :—

Resolved, That this meeting having been officially informed of the action of the Dominion Government whereby by Order in Council—"Every qualified medical practitioner whose name is registered in the Medical Register of the province in which he resides is appointed an authorized medical practitioner for the purpose of issuing medical certificates as required by *The Civil Service Act.*" That they desire to express their full appreciation of the courtesy thus extended to the members of the medical profession throughout Canada; and they believe also that this course is in the interests of the members of the Civil Service, equitable towards the members of the medical profession and equally protective to the interests of the Government, as compared with the former regulation of having only one authorized physician in each locality.

Resolved, That this meeting is of the opinion that it would be well for the Government to adopt and have printed a form of blank medical certificate to be filled out by physicians giving such to Civil Servants who are ill and under their care.

Resolved, That whilst the members of this Association desire to express the opinion that there is no body of men who would more readily condemn a physician for wilfully issuing an unwarranted and unworthy medical certificate than the members of the medical profession, and whilst they declare that such a physician would be deserving of the severest censure, and his name should be erased by the Government

from the list of authorized medical practitioners —yet inasmuch as there are cases where the trained medical mind is enabled to discover slight symptoms of disease, indicating serious possibilities in the near future, where divulgence might thwart the chance of cure, together with the fact that the lines of professional secrecy are inelastic and demand invariably the most honorable observance, it would be but justice that before any physician's name is removed by Order in Council from the list of authorized medical practitioners under the Act, for reported irregularity, he should have the right extended to him of explanation and of defending his action.

Resolved, That a copy of this resolution be sent to the Dominion Government, through the Honourable the Premier, Sir John Caldwell Abbott, and that a copy be also sent to all the medical journals in Canada.

A. F. ROGERS, M.D., H. B. SMALL, M.D.,
President. *Secretary.*

Progress of Science.

SUBSTITUTION AND ITS ATTENDANT EVILS.

BY JOHN AULDE, M.D., OF PHILADEPHIA, PA.

[Published by *The Journal of the American Medical Association*, Chicago, Ill., December 5th, 1891.]

The evils attendant upon substitution and sophistication of remedial agents have long been surmised; they have not, however, until recently, received attention at the hands of the medical profession. Increased diagnostic skill, along with greatly improved facilities for the manufacture of medicaments, favor and approach towards mathematical exactness in computing therapeutic results. When these are wanting we challenge the character of the remedy. The question which presents itself is: Has our patient received the true medicaments or a base counterfeit? However attractive in theory, it will be found impracticable for the medical profession to drift away from the pharmacists, and it should be our aim to reward the faithful and bring the guilty to punishment. The friendly bond between the two professions should be honesty, as neither can afford to work independently: there is an interdependence which makes them mutually helpful.

It is said of Lawson Tait, that he has returned to first principles, and carries a mill with him, so that when ergot is needed he prepares it fresh with his own hand. The reliable character of Squibb's ether has been maintained through his business sagacity in having it prepared chemically pure and distributed all over the world in sealed cans, thus precluding the possibility of sophistication or substitution.

The life of a patient suffering from rheumatism may depend upon his being supplied with sodium salicylate prepared by a combination of Merck's chemically pure bicarbonate of soda and true salicylic acid obtained from oil of wintergreen, and yet few pharmacists, even in large cities, pretend to keep either in stock. They are the exception in Philadelphia, and doubtless the same is true of other cities.

Some years ago Dr. Squibb, of Brooklyn, set his seal on Marchand's peroxide of hydrogen, by endorsing its character and defending its merits as the most powerful and yet harmless bactericide which could be employed in the treatment of various formidable and fatal diseases. Dr. Robert T. Morris, Dr. Paul Gibier, and other well-known authorities have corroborated his statements from clinical observation, and, as a consequence, a revolution has taken place in our methods of treatment in both medical and surgical practice. The efficacy of this simple remedy, its innocuousness and extended field of application have shed a flood of light upon modern therapeutics, but at the same time there has followed in its train a host of worthless imitations.

The substitution of the commercial for the medicinal peroxide is calculated to work serious injury and destroy our confidence in a most potent remedy. In the treatment of diphtheria, for example, the commercial product is positively harmful. When death results, shall we blame the attending physician or the unscrupulous druggist who substitutes a base imitation for the genuine product? And still, pharmacists who claim to be respectable do not hesitate to trifle thus with human life. Is it any wonder, then, that our mortality percentages are on the wrong side?

Cascara sagrada has been counterfeited and sophisticated until it is almost impossible to secure a reliable preparation of this most useful medicament, although Parke, Davis & Co., the pioneers of its introduction, have adopted every means in their power for the protection of the medical profession. Antipyrin, a patented preparation, has met with phenomenal sales, and possesses distinct therapeutic properties, and, as a result, imitations and substitutes are offered to take its place in medical practice. Whether these imitations are better or worse than the original product, I do not care to discuss: neither is it for the druggist to decide. The decision, here, as to any special remedy or preparation, rests entirely with the physician, as he alone is responsible for the condition of his patient; no one else, not even the druggist, should be permitted to interfere with his directions. Substitution is an evil which should be guarded against: it is an evil which must be

eradicated, or the entire medical structure will collapse. It is a duty we owe to ourselves and to our patients to look after this unnatural condition of affairs in which we are so vitally interested, and the time is near at hand when a systematic effort must be made with a view to accomplish the desired end.

This subject is commended to the attention of the American Medical Association, with the suggestion that a committee be appointed who shall recommend suitable measures for the protection of the medical profession from the evils of substitution and sophistication on the part of unscrupulous pharmacists. Shall we have a "list"?

4719 Frankford Avenue.

THE SALIVA AND PATHOGENIC MICRO-ORGANISMS.

SANARELLI (*Centralbl. f. Bakt. u. Paras.*, January 9th, 1892) says that, considering the frequent presence of pathogenic micro-organisms in the mouth, it is remarkable that primary lesions appear so rarely there, and that wounds heal so kindly. The first condition has been attributed to the chemical properties of the saliva, to the resistance and regenerative power of the tissues of the mouth, and to the conflict between pathogenic bacteria and saphrophytes. The author investigated the properties of the saliva in respect to the growth of the micro-organisms most often found in the mouth. The saliva is shown to possess bacteria-killing properties not unlimited in degree, but dependent on certain conditions, and chiefly on the number of micro-organisms introduced into it. Thus the staphylococcus aureus, the streptococcus pyogenes, the micrococcus tetragenus, and the typhoid and cholera bacillus perished if in small quantities. The diphtheria bacillus and the pneumococcus behaved differently, but the former at length ceased to thrive and the latter lost its virulence. It is not yet clear to what substance the saliva owes its bacteria-killing properties. The author sums up that the saliva is an unfavorable cultivation medium for certain pathogenic micro-organisms, destroying them (when not too abundant) more or less rapidly, and that it so alters the type in others (for example, pneumococcus) as to render them powerless. *The British Medical Journal.*

SUPPURATION DUE TO PNEUMOCOCCI.

R. CONDAMIN (*Lyon Méd.*, February 7th, 1892) records a case of multiple suppuration, consecutive to a suppurative otitis, which presented characters different from those usually observed. The ear mischief developed suddenly during the course of influenza, and rapidly culminated in perforation of the tympanum, having been preceded by severe sore throat. Two days later the patient's temperature was high, and he had several rigors. An abscess developed on the dorsum of his left hand, which was opened two days afterwards. From this time a series of abscesses in different parts of the body, all subcutaneous and running a rapid course, developed. From fifteen to eighteen at least of these were observed, and in each case cultivations from them revealed the pneumococcus of Fraenkel in a state of purity. The common character of all these abscesses was their quiet development, without acute pain—in fact, they behaved after the manner of "cold" abscesses. The pus was very thick, yellow, and odorless; there was little tendency towards diffusion, each collection tending rather to become encysted. The rapidity of the disappearance of each after being opened by the thermo-cautery was most striking. *The British Medical Journal.*

NON-SEPTICITY OF THE VAGINA.

E. BUMM (*Centralbl. f. Gynak.*, No. 9, 1892) discusses the question of the disinfection of the inner part of the genital canal in childbed. Without denying the dangers of infection and the consequent necessity for precautions, he finds that the natural secretions of the vagina contain no pathogenic germs. Indeed, they rather protect the part from the development of colonies of microbes. When the vaginal mucus is purulent, micrococci are to be found identical in appearance with those seen in septicæmia, but only in isolated groups; nor do they seem to possesss septic powers. There is no proof that these germs, developed in vaginal mucus, ever set up the morbid processes of puerperal fever in the course of normal childbirth.—*British Medical Journal.*

OVARIAN CYSTS IN INFANTS.

KISSEL (*Nouv. Arch. d'Obstét. et de Gynéc.*, October, 1891, Supplement, p. 458) found 39 cystic ovaries in 428 bodies of female children (362 from birth to 1 year old, the remainder from 1 to 13 years old). In only 1 case of cystic ovary was the subject over 1 year, and that case was 13 months old. The younger the infant the higher up lay the cystic ovaries, the older infants bearing the tumors in the pelvis. The cysts most usually occupied the outer aspect of the ovary. The cysts were tense, sometimes larger than the ovary, and often had septa. The ovarian parenchyma was partly destroyed by the pressure of the cyst; sometimes there where traces of parenchyma on each side of the cyst. Why these cysts were so common in infants and rare in children Kissel could not explain. He carefully searched with

the microscope, but could not once find any trace of cyst or cicatrix representing the site of a cyst. These cysts must, it would seem undergo a retrograde change, and, thanks to the youth of the patient, the parenchyma is probably reproduced.—*British Medical Journal.*

ICHTHYOL IN DISEASES OF WOMEN.

ESCHEN (*Gynek. og Obstet. Meddelelser.*, 1891, vol. viii, p. 192) used this drug in twenty-five cases. Good effects were observed in patient with metritis, parametritis, and inflammation of the ovary, but it is admitted that no extraordinary effects were observed.—*British Medical Journal.*

SULPHONAL POISONING.

KOBER (*Centralbl. f. klin. Med.*, March 12th 1892) relates the following case: A man, aged 52, became very melancholic in consequence of increasing deafness, and more particularly of tinnitus. The sleeplessness was treated by bromide, salts, and sulphonal. The latter was given in doses of 0.5 to 1.5 g. (the larger dose rarely), and continued during four to five weeks. After a temporary improvement, repeated vomiting, abdominal pain referred to the navel, and obstinate constipation supervened. A change in the urine was also noted. The daily quantity was under 1 litre. It was Burgundy red to reddish black in color, and contained at first no albumen and never any sugar. It did not give exactly the tests for hæmoglobin. Heller's reaction was absent. The specific gravity was 1021. The coloring matter was partly thrown down by alcohol. The crystals thus obtained were soluble in water, not in ether and chloroform. The colored salt was taken up by amyl alcohol with a red coloration. Lead oxide precipitated and took up the coloring matter; when treated with acetic acid and common salt hæmin crystals were obtained. No sulphonal was present. The sulphonal was omitted but the color of the urine deepened, albumen, and formed elements—leucocytes, casts, but no red cells being found. Then retention of urine supervened, and later death. It would appear that the sulphonal was stored away somewhere in the body, possibly in the liver. The absence of albumen at first would apparently prove that the excretion of hæmoglobin could produce a true renal inflammation. —*British Medical Journal.*

AMENORRHŒA OF SCHOOL-GIRLS.

T. A. REAMY (*Arch. of Gyn.*, January, 1892) lays down definite rules for treatment of the amenorrhœa of schoolgirls. He particularly insists that the patient should be induced to breathe deeply, with the mouth closed, when standing in the open air. This should be done for at least fifteen or twenty minutes, and repeated at least twice a day. Reamy declares that no other known method of treatment more rapidly improves the character of the blood. He requires the patient not only to leave school, but to give up all study. Several hours must be spent in the open air. In winter the patient must be warmly clad, but must wear no sheepskins or other chest-protecting pads. Milk and beefsteak must be taken in plenty. The patient must sponge her extremities and body every morning with water of the temperature of the room, practising friction freely with an ordinary towel. Small doses of iron with a bitter tonic are required. Neglected cases of amenorrhœa, Reamy observes, go from bad to worse, and finally die of pulmonary tuberculosis.—*British Medical Journal.*

PORRO'S OPERATION FOR PELVIC CONTRACTION DUE TO OSTEO-MALACIA.

After mentioning the indications for Porro's operation, Everke, of Bochum (*Deutsch. Med. Woch.*, January 28th, 1892), says that osteo-malacia is the most frequent and important of such indications. He relates the following successful case: After the sixth pregnancy five years previously, the patient had pains in her limbs and difficulty in getting about. These symptoms became worse during the seventh pregnancy, the latter half of which she had to spend in bed. The labor was tedious, but otherwise normal. She kept her bed during the whole of the eighth pregnancy, at the end of which the pelvis presented the characteristic deformities. Porro's operation was then performed. The pains gradually diminished, and in five months she could walk without assistance. In one year and a quarter she could go long distances without inconvenience. The author says that this case shows that the operation should be performed (at the time of labor), and that it is to be preferred to Cæsarean section with oöphorectomy, since (1) there is no object in leaving the uterus; (2) three wounded surfaces are left in the abdomen in the latter case; and (3) there is no fear of hæmorrhage if the uterus be removed. The question of treating the stump is then discusesd, the author preferring the extra-peritoneal method.—*British Medical Journal.*

ILEO-COLOSTOMY.

GROSS, of Nancy (*Sem. Med.*, February 13th, 1892), discusses the indications for ileo-colostomy in cases of ulceration and tumor of the cæcum. Maisonneuve, it is stated, was the first surgeon to aim at intestinal anastomosis in a case of internal strangulation, in which

he stitched the small intestine to the cæcum in order to avoid the necessity of forming an artificial anus. This operation, which was performed in 1854, was followed soon afterwards by a second, in which an attempt was made to relieve the patient by an artificial anus. Both these cases terminated fatally, death having been due in one case to peritonitis, in the other to suppurative perityphlitis. Although ileo-colostomy has not been frequently performed, much attention has been given to this operation, especially by German surgeons, and its methods have been improved by Salzer and Hochenegg. In the procedure advocated and successfully practised by the latter surgeon, the two ends of the diseased portion of gut, which has been completely separated from the rest of the intestinal tract, are fixed to the edges of the external wound in order to permit the discharge of mucous and purulent secretion. Ileo-colostomy is held to be indicated under the following conditions: (1) In cases of tumor —particularly carcinoma—of the cæcum not amenable to direct operation. In cases in which the diseased portion of intestine is constricted, ileo-colostomy will relieve the patient of the symptoms of obstruction. If such symptoms have not yet been manifested, the operation will have a prophylactic effect. Moreover, by removing the irritation caused by frequent contact of fæcal matter, the tumor will be less disturbed, the bad results of fæcal retention will be avoided, and secondary pericæcal inflammation will be diminished if not altogether abolished. (2) Chronic or relapsing inflammatory affections of the cæcum, with ulceration and consecutive constriction and adhesion to surrounding structures; ulceration of tuberculous or other organs with pericæcal suppuration and stercoral fistulæ. Free passage of fæces along the intestinal canal will necessarily result in suppression of the discharge of fæcal fluid by the fistulæ, and so render it possible for these to close and cicatrise. Moreover, as the seat of the disease is no longer infected by fæcal matter, the inflammatory phenomena ought to diminish in intensity, if they do not wholly disappear. Ileo-colostomy, however, as practised by Hochenegg, is a long, delicate, and complicated operation, and it ought not, therefore, to be undertaken except under very favorable conditions, and when the general health of the patient is relatively satisfactory.—*The British Medical Journal.*

CÆSAREAN SECTION.

BOGDANIK, of Biala (*Centralbl. f. Gynak.*, No. 6), was called in, on September 11th, 1891, to a woman, aged 40, in labor at term. She had already borne twelve children. She was much emaciated, and a fœtid discharge issued rom the vagina. Hard, carcinomatous masses were detected in the vagina, extending as low down as the meatus. The cervix was extensively involved, and the point of the finger could hardly be passed into the os externum. Fœtal heart sounds were audible though weak. The patient had suffered from profuse flooding four months previously, but how long the cancer had existed could not be ascertained. In order to save the child and relieve the mother, Cæsarean section was performed. The operation was undertaken in a very small room in a cottage in a remote German-Polish village. The patient was first put under the influence of a mixture of equal parts of chloroform and ether, and the charge of the anæsthetic was then entrusted to a countrymidwife. The abdominal walls were washed with soap and carbolized water, and compresses soaked in the same solution were laid over the vulva. An asphyxiated child was delivered; it soon recovered. The cord was tied in two places and the placenta removed. The uterine cavity and the operation wound were washed with carbolic solution, then the uterine wound was sutured after Sänger's method. A continuous sublimate cat-gut suture was employed. Iodoform powder was strewn over the uterine cavity and the peritoneum as well as the external wound, which was dressed with iodoform gauze. The mother lived a fortnight, dying of exhaustion; the child, a well-nourished girl, was saved. Bogdanik maintains that Cæsarean section, like herniotomy, is an operation that any practitioner may be called upon to perform, sometimes under unfavorable surrounding conditions.

ECKERLEIN, of Konigsberg (*ibid.*, No. 8, 1892), gives details of a Cæsarean section in a patient aged 39. Her last period occurred at the end of October, 1889; the fœtal movements were first felt in the first half of March. During the first three months there was much vomiting. She had never been pregnant before. The waters broke on August 24. Three days later the pains set in; they lasted four days, yet the labor made no progress. The child was very large and evidently dead, the pelvis flat, and universally contracted. The uterus was tympanitic on percussion. On account of the narrowness of the pelvis, the size of the fœtus, and the great wish of the mother that she might bear a child on a subsequent occasion, Cæsarean section was determined upon, in preference to craniotomy or Porro's operation. Sänger's procedure was strictly carried out. The uterus contained much fœtid gas. A towel, soaked in a 4 per cent. boracic solution, was passed behind the uterus. An elastic ligature could not be brought round the cervix as the head of the fœtis filled the pelvic brim. The uterus

was drawn well to the right, and its anterior surface slightly twisted to the right. A long incision was made, and a putrid fœtis extracted. Contractions followed, and the placenta was expelled. The uterine cavity was stuffed with a long strip of iodoform gauze, soaked in a 5 per cent. solution of carbolic acid. Uterine contractions came on on the third day, but ceased when the gauze was removed. An abscess formed in the abdominal wound. The patient ultimately recovered.—*The British Medical Journal.*

HOW LONG SHOULD A CONVALESCENT FROM DIPHTHERIA BE ISOLATED?

In one case the patient was supposed to be well, and made a visit to a relative in Boston nine days from the date of his "getting up." One week after his arrival a child in the family was attacked with diphtheria, and died. An outbreak of diphtheria in a hotel at Nantucket followed the arrival of a person just recovered from diphtheria, and pronounced well by the attending physician. One of these cases, when supposed to be well, carried it to a hotel in town. Three cases of diphtheria in one family closely followed the advent of a nurse who had just come from attendance on a fatal case.

I think that evidence goes to show that poison is retained in the mucous membrane longer than is generally considered to be the case. In lieu of definite knowledge, I have adopted the arbitrary rule of advising quarantine precautions for one week after the patient appears to be perfectly free frem disease. This seems to be a fairly safe rule and one that is desirable.—*Boston M. and S. Journ.*

TREATMENT OF CHOREA IN THE PARIS HOSPITALS.

Dr. Baudoin made an extensive inquiry into the treatment of Chorea as carried on in the various hospitals of Paris, and published his results in *Semaine Médicale*, 1891, No. 13.

Germain Sée has obtained the best results in ordinary cases with antipyrine and arsenic. If there existed any rheumatic taint, he combined the antipyrine with the salicylate of soda. In cardiac cases Professor Sée recommends chloral and hydrotherapy, associated with iodide of potassium, and especially iodide of calcium. Sulphur baths are also recommended. Dr. Gilbert Ballet abstains from all medication in the majority of cases, on the ground that the tendency of chorea is toward recovery. He absolutely discards antipyrine. In severe cases, arsenic or Fowler's solution may be given, from six to ten drops daily. The tonics and iron are very beneficial in anæmic cases. In intense cases spraying the vertebral column with ether may be resorted to. As to the bromides, they are only indicated in cases complicated with psychical troubles. Good hygiene, nourishing food, absence of fatigue, exercise in the open air—these are the best agents to prescribe.

Dr. Déjérine considers special medication useless in children. He advises tonics, along with massage, salt baths, Swedish movement, and, above all, good hygiene.

Dr. Joffroy lays considerable stress on rest and sleep in the mild cases, and gives chloral hydrate, sixteen to twenty-five grains, after each meal to accomplish this. During waking hours all excitement, physical and mental fatigue should be avoided. In severe cases antipyrine is ineffective, and recourse must be had to the moist sheet, used twice daily.

Dr. Albert Robin has had the best success with antipyrine, giving as high as thirty-two grains daily, divided in four equal parts with four grains of the bicarbonate of soda added. After eight to ten days he substitutes the arsenate of soda for the antipyrine.

Dr. Raymond believes that there are only two efficacious remedies—antipyrine and chloral. Acetanilide has been used successfully in a few cases.

Dr. Luys uses, perhaps, the simplest treatment. His agents are "transfert" with rotary mirrors.

Dr. Sevestre gives preference to antipyrine. He begins with sixteen to thirty-two grains daily, and increases to forty-eight to sixty-four daily. At the same time he administers arsenic, either as Fowler's solution, six to twelve drops daily, or the arsenate of soda. It is necessary to avoid all excitement, and, if convenient, to isolate the patient.

Dr. Ollivier advises, in the first place, massage, and is well satisfied with the results obtained. He prescribes iron, arsenic, and hydrotherapy according to the case in question.

Dr. d'Heilly insists upon hygiene tonics and prolonged sleep. In mild cases he prescribes arsenic, iron, bitter tonics and baths. In severe cases he thinks antipyrine and chloral succeed best.

Dr. Legroux has had excellent results with antipyrine, and gives from thirty to sixty grains daily. In those cases associated with hysteria he administers the bromide of potassium, thirty to sixty grains daily, and the cold shower-bath.

Dr. Jules Simon's plan of treatment is as follows: For the first few days the patient should be kept in bed, should be blistered along the spine, and be given aconite or conium; after two weeks the patient may arise, and then the antipyrine treatment is begun, sixteen to eighty grains daily for several weeks. After this, regular exercise, with iron, baths, etc., should be resorted to. W. C. K.

THE IDEAL CONSULTANT.

When, says the *Lancet*, nearly a generation ago, Sir Henry Acland in a memorable publication introduced the Oxford Museum to the academic world, and foreshadowed the benefits it would bring to liberal culture as a whole, and more particularly to that of the physician, he gave a picture of the "ideal consultant," which, if more comprehensive than detailed, may be said to come as near perfection as such compendious characterizations are capable of reaching. In a quotation from Suidas he adduced the answer of the consultant Trophilus, when asked to define the all-accomplished physician: "It is he," said Trophilus, "who is able to distinguish between what can and what can *not* be done." This definition may be said to cover every requisite in the medical adviser in whatever circumstances the exigences of his calling may place him; but it does not, of course, enter into native aptitudes or acquired dexterities, or, in short, into the *ensemble* of qualifications which combine in the physician who is ever ready and never at fault. One definition, or rather indication, of what the successful consultant really is or was incidentally given some years ago by an outsider, in a strictly professional controversy—a definition which embodies the lay belief in the personal power of the physician apart from what special discipline can make him. "A great physician," he said, "is a great artist." This also is true, and will be found on closer analysis to explain the extraordinary success of practitioners whose book-learning or laboratory training is notoriously far inferior to their power in diagnosis and their success in treatment. The Athenian intellect at its best and in its most characteristic mood—essentially artistic as it was—seemed to fulfill the requisites which from time to time attain medical embodiment in a Sydenham, or, to come within our own day, in a Bamberger, whom, *consensu omnium*, each morning's encounter with cases of every kind in the Vienna wards found seldom or never at a disadvantage. That intellect, in its combination of nimbleness with strength, of centripetal insight with sense of proportion and judicial balance, has been described for all time by Thucydides in his wonderful picture of Themistocles. He dwells on the native understanding of "that Athenian of Athenians"; on his power, without previous information or after-thought, with, indeed, the briefest consideration of the problem in hand, to form a picture in his mind of what it really implied and of what its solution would yield—diagnosis, in short, and prognosis, almost improvised as to readiness; and again, when the problem admitted of only an approximate or provisional solution he could—"this way and that dividing the swift mind"—alight on the better and avoid the worse interpretation, even in the absence of previous prompting or of the data indispensable for less artistic minds. The whole passage (*Thuc.*, i, 138) is well worth pondering in this connection, and will serve to explain how the idea of an "artist" dominates the popular conception of the consummate physician—as is, indeed, involved in the German word "Arzt," which Becker rightly derives from the Low Latin "artista." Noteworthy, too, is the fact that the intellect here typified is always genial, always repays the confidence it invites by possessing the patient with the belief that his malady is indeed of personal interest to his adviser, who considers, and pronounces, and prescribes as if he were in other's place. That is what Celsus means when he talks of the "hilaris vultus" of the ideal consultant—what Horace implies by the *deformis ægrimoniæ dulcibus alloquiis*. The character thus equipped by nature becomes more and more developed by experience, till, as statesmen and men of letters, and indeed the moral and intellectual grandees of every age, combine in attesting, humanity appears in no more admirable or lovable form than in that of the "ideal consultant."

HEMORRHAGE FOLLOWING TONSILLOTOMY; LIGATURE OF THE COMMON CAROTID; TRANSFUSION; RECOVERY.

Mr. Arbuthnot Lane related the case of a man, aged 21, who had his tonsil removed at the Throat Hospital on December 16th. At the time of the operation and during the few hours following he lost about half a pint of blood; on December 19th he lost another half pint; bleeding recurred on the 20th, and continued steadily in spite of local applications. On December 22nd, as he was evidently dying, his friends consented to his removal into Guy's Hospital, a distance of only a few yards, and he was carried directly into the operating theatre from his house, on a stretcher. Normal salt solution had to be introduced freely into the circulation before any other operation could be done. He reacted at once to the injection: when Mr. Lane tied the common carotid. It was not necessary to inject more than 3½ or 4 pints of salt solution, his pulse being then 96, large and full. He left the hospital within a few days quite well. The point of interest about the case, besides the perfectly successful result of the saline intravenous injection, was the delayed onset of the bleeding, which recurred more than four whole days after the excision of the tonsil.

On examining the excised area after the operation, as the patient's condition did not admit of it before, no evidence of any injured vessel could be seen. The tonsil had been

very freely removed, but probably not more so than was very commonly done. There was nothing in the man's history or in the behavior of the wound at the time of the operation which suggested that he bled more readily than other people.

In two previous cases he had had no difficulty in controlling the hemorrhage with his finger and thumb. The reason why he had tied the common carotid was that, upon his excision exposing the external and common carotids, he found a very large pharyngeal artery present, and that other branches of the external carotid arose close to that vessel. He had often ligatured the common carotid, and had never known subsequent cerebral trouble arise. The immunity he attributed to the fact that he always injected the saline solution the desirability of which procedure he strongly advocated.—From the report of the London Clinical Society, *British Medical Journal,* April 30th, 1892.

THERAPEUTIC NOTES.

PROF. KEEN said that in Septicæmia alcohol is the treatment. It must be given fearlessly, and even pushed up to the verge of intoxication.

TO SHORTEN THE DESQUAMATIVE PERIOD IN SCARLET FEVER.—Jamieson states that this may be accomplished by a combination of resorcin and salicylic acid in a super fatted soap. The use of this preparation is begun with establishment of desquamation. After using the soap, a bland, fatty substance should be rubbed upon the skin.

PROF. COHEN says that after the removal of polypi from the nasal cavity by forceps or snare, the injection of distilled witchhazel, one part, to water four parts, three or four times a day, is much better than the application of the galvano cautery.

For sunburn, apply freely a solution containing one dram ammonium chloride, twelve grains cocaine-hydro-chloride, two drams glycerine, three ounces alcohol, one ounce orange flower water, made to six ounces with rose water.

PERMANGANATE OF POTASH IN CHRONIC URETHRITIS.—Chronic urethritis is treated by Dr. A. G. Gerster, of New York, by injections of 1 : 2000 solution of potassium permanganate, carried to a point between the sphincter of the bladder and the cut-off muscle. A marked improvement usually quickly follows, and on the degree of improvement depends the frequency with which the applications should be made.

THE white of an egg, with a little salt and six ounces of water, well beaten and shaken, is a good mixture, which can take the place of infant food temporarily, but is an invaluable makeshift in severe intestinal catarrh, or a permanent nutriment in the same when added to other food.—*A. Jacobi, M.D.*

A COMPOUND COMMINUTED FRACTURE OF THE FRONTAL BONE.

On March 29th, I was called forty-five miles by telegram, to see a large, healthy boy, six years old, who had on the evening of the 26th been kicked by a mule. I found him perfectly conscious, pupils slightly contracted, temperature 100°, and respiration good, with a deep depression in the frontal bone directly over the median line, and extending across above the superciliary ridges. Over this depression a large contused flap had been neatly sti ched above, and bloody water oozed out freely. I consulted the physician who had dressed the wound shortly after the accident, who informed me that he "calculated to let it remain as it was, unless serious brain symptoms should set in." The boy's parents insisted that I should take charge of the case, and took the evening train for this place. The trip did not appear to weary him very much, and, after taking some food, he rested well during the night under the influence of bromides. On the morning of the 30th, his temperature had gone up to 101.5°, and bloody pus was freely oozing from the wound.

I then called A. A. Bondurant, M.D., of this city, in consultation; and, after considering the deep depression, condition of the wound, etc., we concluded to raise the flap and ascertain the extent of the fracture. By the assistance of Dr. Henry McElmurry, who kindly helped us, the patient was put under the influence of ether, and the fracture exposed, which was full of pus, and measured externally two inches in a transverse and seven-eighths of an inch in a vertical direction. Both plates of the bone were broken in, with the lower margin of the fractured bone resting on the brain at an angle of 80°, and forming an obtuse angle with the upper portion of the bone from which it had been broken. Several small pieces of bone were taken away with the forceps from the lower margin on the right side, which afforded room for the elevator; we tried to raise the main piece of fractured bone, but failed. The elevator was then removed to the upper margin on the right side, and by slight traction the piece of bone easily came away. I might say here that it measured one and three-fourths of an inch in length and seven-eighths of an inch in width externally, and on the internal aspect one by one and three-fourths of an inch.

After removing this large piece of bone, we observed a large black clot and several smaller pieces of bone, ranging from half the size of the one mentioned to that of a pin's-head, all

of which were covered with bloody pus. After having removed the clot and bones, some of which had been forced by the violence of the blow between the brain and the cranium—eleven in all—we washed out the wound, closed the flap with silk sutures, leaving room for drainage, and dressed it antiseptically.

In due time he came nicely from under the ether narcosis, partook of some light diet, and by evening his temperature had gone down to 100°. During the night he rested well, bowels and kidneys acted, and on the morning of the 31st was resting nicely, with only a temperature of 100°. During the day he drank some soup and milk, but by evening he had a temperature of 100°. During the night he rested fairly well, took some nourishment, and his kidneys and bowels acted; but, in spite of all the antipyretics he could bear, on the morning of April 1st his temperature was 103°. By 10 a.m. it went up to 104°, at which time he became delirious, and remained so the remainder of the day, taking only what was administered hypodermically. By evening his temperature had raised to 105$\frac{2}{5}$°, and he was still delirious, in which condition he remained until 11 a.m., April 2nd, at which time he died, seven days and a half after the accident, and four days after the operation.

Five hours after death we opened the wound; found the membranes highly inflamed, and upon opening the cortical portion of the brain in the median line, a vast amount of pus gushed out from the cavity where the brain tissue had been broken down. While we are not justifiable in interfering where only a slight depression exists in the skulls of children without brain symptoms, I do believe that an early operation in such cases as the above is not only advisable but imperative.—*Dr. M. H. Pittman, in the So. Practitioner.*

RETROFLEXION AND RETROVERSION IN PREGNANCY.

Chrobak (*Centralbl. f Gynäk.*, No. 7, 1892) maintains that these conditions, so far from being usually associated and therefore amenable to the same treatment, are clinically and pathologically distinct. He endeavors to show that the relations of the uterus, and the mechanism of its muscular apparatus and ligaments, favor spontaneous reduction of a retroflexion in pregnancy. He even believes that he has never known a case of uncomplicated retroflexion where manual reduction was absolutely needed. He has reduced a great many retroflexed gravid uteri, either to relieve pain or difficulty in defæcation, or simply because a displacement being discovered he naturally rectified it. Far more frequently he has done nothing, and spontaneous reduction has followed. The case of retroversion is quite otherwise. If a retroversion be not replaced by the hand, abortion, under very unfavorable circumstances, or incarceration, will inevitably ensue. The fundus grows larger and the cervix becomes more and more elevated, and recedes from the symphysis as the pregnancy advances. Spontaneous reduction is an impossibility under the circumstances, and it is the duty of the obstetrician to interfere.—*British Medical Journal.*

HEMIPLEGIA AFTER DIPHTHERIA.

Auerbach (*Deutsch. med. Woch.*, February 25th, 1892) reports the following case: A girl, aged 7, had extensive diphtheritic membrane on the tonsils and soft palate. On the eighth day of the disease the speech had a nasal twang, on the twelfth the urine contained albumen and casts, and on the fourteenth there was œdema about the eyelids. On the twentieth day the patient had convulsions for ten minutes, followed by coma, which lasted during the following night. There was almost complete anuria, but not vomiting or dyspnœa. The pulse was tense. The next day there was complete left hemiplegia, including the face, together with difficulty of speech, which latter passed off in a fortnight. The patellar and superficial abdominal reflexes were absent on both sides for a week. By the twenty-eighth day the œdema, which had been considerable, disappeared. In the seventh week the patient could lift the left leg about half as high as the right, and in the ninth week the arm began to improve. The recovery, though considerable, remained incomplete. The intelligence was unaffected. The author says that the hemiplegia was due to cerebral hæmorrhage, the onset excluding embolism, and that there were symptoms present in this case independent of the cerebral lesion, namely, paralysis of the soft palate, disturbance of co-ordination, and loss of reflexes. Auerbach then refers to the vascular changes found in the infective diseases, and would attribute the hæmorrhage to this fact, combined with the increased vascular tension brought about by the renal affection.—*British Medical Journal.*

TREATMENT OF HICCOUGH.

Hiccough is sometimes a very troublesome symptom, and in children may persist without discoverable cause for long periods, and seriously interfere with sleep and nutrition. In such a case, a child aged 12, Leloir (*Rev. des Mal. de l'Enf.*, March, 1892) applied digital pressure for three minutes to the left phrenic, between the two attachments of the sternomastoid; the hiccough stopped and did not recur. He has since used the method in a large number of cases, and always with success; in some cases pressure for a few seconds has been sufficient, in others a few minutes.—*British Medical Journal.*

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MONTREAL, SEPTEMBER, 1892.

CHOLERA.

A great deal of unnecessary alarm has recently been raised among nervous people by the sensational reports of the probability of Asiatic cholera invading Canada, and the weary physician is asked many times a day for an opinion *gratis* on the question. Although it is quite possible that the disease may reach Canada, it is very improbable that it will gain any foothold in this country. That it should decimate Russia is not at all to be wondered at, for the disease is always prevalent near its borders, and little effort is made to prevent its importation into the realms of the Czar. Once a single cholera patient enters that country everything is in favor of the disease spreading, for as far as the general adoption of sanitary appliances is concerned, that country is still in the dark ages. In conversation with intelligent Russians we have learned that the excreta are generally thrown out of the back door, especially in winter, and not very far from there snow is gathered to be melted into drinking water. In other places cesspits are used for the excreta, but the drinking water is obtained from wells in close proximity, into which the privy vaults drain. Some years ago, when there was a cholera scare here on account of the disease raging in Marseilles, a very intelligent French gentleman in this city remarked that he had no fear of cholera coming to this country, even if half the population of Marseilles died from it. He then described what he had seen many times in that city of smells. A sailor with cholera in his intestines would walk into a wine shop near the wharf and call for wine and water. While drinking it he would have an urgent call to move the bowels, but in asking for the closet he would be shown to the courtyard in the rear of the tavern, around the three sides of which was scattered a thin layer of straw. There might be seen half a dozen people emptying their bowels, some of them loaded with billions of germs, while in the centre of the yard the *garçon* is busily filling the caraffes with the clear water from the well which receives the germs from the circumference of the yard. No wonder then that they have plenty of cholera in Marseilles. But even in such a magnificent city as Paris, with every modern appliance, there is no adequate supply of pure water. During as many as fifteen days in a month the inhabitants of certain quarters of the city are supplied with drinking water from that great Paris sewer called the Seine, the intake pipes being in some cases only a few feet away from the outfalls. It is true that cholera visited Montreal some thirty or forty years ago, and caused many deaths, but let us see what favorable conditions for its spread existed then: The quarantine regulations were so defective that it was easy for one case, probably a sailor, to reach the port. His ship was probably moored somewhere above the line of Bonsecours market, at which place was situated the pumping engine and the intake pipe. A single stool from a cholera patient contains millions of germs, so that one stool dropped into the

river near the intake pipe would guarantee a distribution of germs to every inhabitant using water. Later on the cholera patients were removed to the cholera sheds at Point St. Charles, where their discharges were carried into the river and half an hour later were pumped up to the reservoir, which at that time was situated at the top of St. Denis Street. At that time the disease was thought to be so contagious that even passing an infected person on the street would be sufficient to cause the disease. Now we know that it is absolutely necessary to swallow the germs, and that even then they will not grow unless there is a dirty condition of the stomach and intestines. It would therefore only be possible for us to have an epidemic of the disease in Canada on condition that one patient were admitted into the country, and, second, that his discharges be allowed to flow into the water supply of the inhabitants. So that the prevention of the disease is summed up in two precautions: careful quarantine of suspected lines of inward travel, and burning of the discharges of any case that gains admittance in spite of the quarantine, so that the water supply cannot be contaminated. With these two precautions, should a case pass the quarantine, and should the discharges fail to be destroyed, then by boiling everything in the shape of liquids intended for internal use we may still afford to laugh at the disease.

We shall reserve for a future article the consideration of the important question of Montreal's water supply which, in view of its being taken at present from the river Ottawa, exposes a quarter of a million inhabitants to some danger, should cholera or typhoid break out in the city of Ottawa. We believe the time has now come to look to the crystal lakes thirty miles to the north of Montreal for a greater water supply, which will suffice for the wants of the city for the next five hundred years.

PERSONAL.

Dr. Herbert Tatley (M.D., Bishops, 1891) and Dr. Ewing Brandt (M.D., Bishops, 1892) are now in Edinburgh, attending the practice of the Royal Infirmary. Both intend to present themselves for the triple qualification in October.

Dr. Hacket (M.D., Bishops, 1892) has been appointed an Assistant Physician by and to the Board of Health of Montreal, in view of the possibility of cholera.

Dr. Austin of Sherbrooke has been elected president of the St. Francis Medical Association.

Dr. Weir Mitchell, of Philadelphia, passed several weeks in June salmon fishing on the Restigouche River.

Dr. Gotman (M.D., Bishops, 1892) has been appointed House Surgeon to the Western Hospital, Montreal. Dr. Warren (M.D., Bishops, 1892) has commenced practice in the Eastern suburbs of Montreal. Dr. Hacket (M.D., Bishops, 1892) has commenced practice in the Western suburbs of Montreal. Dr. Heber Bishop of Boston (M.D., Bishops, 1882) was in Montreal about the 22nd of August on his way home from fishing on Lake Megantic. Dr. Bishop is Surgeon for the United States Mutual Accident Association of New York for the State of Massachusetts.

Drs. Roddick, Stewart and Alloway, of the McGill Faculty of Medicine, have all returned from their brief visit to Europe.

Dr. Hingston, of Montreal, delivered the address on Surgery at the meeting of the British Medical Association at Nottingham. The address was an admirable one, was well received and high encomiums were passed not only on Dr. Hingston but on the Canadian profession generally by Lawson Tait and others. We congratulate Dr. Hingston on the compliment which was conferred on him by his selection as the reader of the address.

Dr. A. T. Brosseau, of Montreal, was elected secretary of the College of Physicians and Surgeons, Province of Quebec, for the District of Montreal, in place of Dr. F. W. Campbell, who was elected one of the Vice-Presidents.

Dr. Burnett (M.D., Bishops, 1892) has commenced practice at Point St. Charles, Montreal.

Dr. A. J. Richer (M.D., Bishops, 1892) has settled at Point St. Charles, Montreal.

Dr. George Ross, Vice Dean of the McGill Faculty of Medicine, who has been confined to the house by illness since June last, we regret to hear makes but little progress towards recovery.

Dr. George W. Major, of Montreal, has returned from Europe.

Dr. Leslie Foley (M.D., Bishops, 1880) passed a few weeks at Long Island, Maine, during August. He and Dr. Jack (M.D., Bishops, 1889) are the only two specialists on skin disease practicing in Montreal.

Dr. Pavlides (M.D., University of Paris) applied to the College of Physicians and Surgeons in May last for a license. The College decided to suspend action for reasons which it deemed sufficient till the September meeting. In the meantime Dr. Pavlides took out a *mandamus*, and Judge de Lorimier sustained it. A special meeting of the College decided to carry it to the Court of Appeals.

The medical officers of the two French war ships visiting Montreal during August were entertained to a dinner in the Metropolitan Club by a number of our French Canadian Medical men. An enjoyable time was passed.

Dr. Henderson, of Kingston, who died this month, was a bright and valuable member of the profession. He died in early manhood, and those who knew him best mourn him most.

Dr. Tyson has resigned his office of Dean of Medical Faculty of the University of Pennsylvania.

Dr. Rollo Campbell (M.D., Bishops, 1887) has been appointed Assistant Medical Examiner in Montreal for the New York Life Insurance Company.

Dr. J. M. Mackay of Quebec (M.D., Bishops, 1874) has been elected a Governor of the College of Physicians and Surgeons, Province of Quebec.

Dr. J. M. Beausoleil, of Montreal, has been elected Registrar of the College of Physicians and Surgeons, P. Q. Those of our subscribers residing in the Province of Quebec should make note of this fact. He replaces Dr. LaRue of Quebec.

The Hon. Judge Church, who died in Montreal on the 31st of August, at the comparatively early age of fifty-six years, was also a medical man, and while practising as a member of the bar, took a lively interest in medical matters, expecially medical legislation. For many years he served on the Governing Board of the College of Physicians and Surgeons, only retiring on his elevation to the Bench. He began his medical studies at the Albany Medical College, continuing them at McGill University, from which he took his degree of M.D. in 1857. During the course of his studies he was on the resident staff of the Montreal General Hospital, filling the position in these days kown as apothecary, which was always filled by a senior steward. A "bright" man in the fullest meaning of the word, and of a genial temperament, it is no wonder that as a medical man, legislator or judge he was a convivial favorite, and his death is deeply lamented. For years he was a member of the Quebec Legislature, and filled at one time the office of Provincial Treasurer.

Dr. Aubry, who for many years practised most successfully at Cote St. Paul (near Montreal), has moved to Montreal. He is fond of military life, and for years served as Major of the 85th Batt., to the Lieut-Colonelcy of which he has just succeeded. We congratulate him on his promotion.

We notice by the *Canada Gazette* that the Government have decided not to appoint any more Assistant Surgeons to Militia Battalions. The weak strength of the great majority of battalions we presume, in their opinion, does not warrant such appointments. In writing of Military medical matters, we may state that the corps which composed the camp at St. Johns, Que., in July last were sadly deficient in medical officers. Two battalions had none, necessitating the Principal Medical Officer performing a variety of duty not contemplated as falling within the scope of his office. By-the-bye, is the office of Surgeon-General still to the fore? The name of Dr. Bergin appears in the last Militia List as filling that position, but we never hear of his performing any duty. There are many medical matters constantly coming before the Militia Department—especially from the permanent corps—which should be dealt with by a medical officer.

Dr. Kemp (M.D., McGill, 1890) proposes to establish himself in Sherbrooke.

PAMPHLETS RECEIVED.

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA. Third Series. Volume the Thirteenth.

INSOMNIA IN AN INFANT, WITH REFLECTIONS ON PATHOLOGICAL SLEEPLESSNESS. By C. H. Hughes, M.D., St. Louis, Mo. Reprint from the *Alienist and Neurologist*, July, 1892, St. Louis.

MEDICAL MANHOOD AND METHODS OF PROFESSIONAL SUCCESS. By C. H. Hughes, M.D., St. Louis. Valedictory address before the graduating class of the Marion-Sims College of Medicine, at St. Louis, April 25, 1892. Late Professor of Neurology, Psychiatry and Electrotherapy, now President of Barnes Medical College. Reprint from the *Alienist and Neurologist*, July, 1892, St. Louis.

NOTE ON THE HYSTERICAL CONCOMITANTS OF ORGANIC NERVOUS DISEASE. By C. H. Hughes, M. D., St. Louis. Reprint from the *Alienist and Neurologist*, July, 1892, St. Louis.

BOOK NOTICES.

DISEASES OF WOMEN AND ABDOMINAL SURGERY. By LAWSON TAIT, F.R.C.S., Edin. & Eng., LL.D., M.D. (Honoris Causâ) of the University of New York, Union University of Albany, and the College of Physicians and Surgeons of St. Louis; Professor of Gynaecology in Queen's College, Birmingham; Surgeon to the Birmingham and Midland Hospital for Women; Honorary Consulting Surgeon to the Brooklyn Hospital for Women, to the Nottingham Samaritan Hospital for Women, to the Wolverhampton Dispensary for Women, and to the West Bromwich District Hospital, etc.; Honorary Fellow (late President) British Gynæcological Society; Honorary Fellow American Gynæcological Society, etc., etc. Vol. I. Leicester: Richardson & Company; Philadelphia: Lea Brothers. 1889.

This is such a remarkable work by a truly remarkable man that it is difficult to criticise it unless in the sense of according it the highest praise. As the author says in his preface, its greatest claim is its entire originality. The whole book is an account of the author's own personal experience, which has been an unusually large one with the diseases of which he speaks. Hundreds of cases are recorded in a frank and easy style which makes the book unusually interesting reading. Indeed the writer of this notice has found it difficult to lay it down once it has been taken up, so well is the interest maintained. Whether the case ended in recovery or death does not seem to have prevented the author from reporting it fully, and as a rule he also gives in full the names and addresses of the medical attendants who were associated with him or who sent the cases to him. The writer of this notice has always had a perfect faith in the author's statements; but if he had not had it he could not have perused this work without coming to the conclusion that it is the production of an enthusiastic but thoroughly honest surgeon. With some of his methods of treatment of course we do not agree. Our own experience has shown us, for instance, that the majority of bleeding myomas can be practically cured by electricity, while when this fails abdominal hysterotomy offers a certain and comparatively safe result. In the work before us, as is well known, the author advocates removal of the appendages as the treatment by preference, although even this sometimes fails to arrest the hemorrhage. Even the author's most bitter opponents, however, must admit that pelvic and abdominal surgery is under an immense debt of gratitude to the talented author for the wonderful progress he has made in these branches of our art.

The arrangement of this work is especially worthy of praise, and is the one followed by the writer in his lectures. Starting from the "*Mons veneris*" which occupies the first chapter, he proceeds to diseases of the vulva, the chapter on which includes the labia majora, labia minora, hymen and carunculæ myrtiformes, the clitoris, the meatus urinarius vulvo-vaginal glands and perineum. Chapter III. includes the vagina, urethra and bladder. Chapter IV. comprises 100 pages devoted to the uterus, subdivided into diseases of the os, cervix and fundus. Chapter V. is on the broad ligaments and mesentery, Chapter VI. on the fallopian tubes, Chapter VII. on the ovaries, Chapter VIII. on ectopic pregnacy and pelvic hematocele. In this last chapter does the author shine to the greatest advantage, for he may be said to have created this branch of our work. It is he who has pointed out that all extratuterine fœtation is tubal, and that this is due to disease of the lining membrane of the tubes. He has made us see that the tubes as well as the tuerus and ovaries are outside of the peritoneum, and that when rupture first occurs it generally does so in the line of least resistance, namely, between the folds of the broad ligament, and that it is only when the case has failed to be diagnosed and the diseased structures removed that a second rupture takes place through the peritoneum into its cavity.

Where every page bears the impress of the individuality of a master mind it is difficult to point out the most salient points. The book must be read and studied in order to be appreciated. While of especial value to the specialist, it is greatly to be desired that it should be in the hands of the advanced general practitioner, who might thus be on the lookout for those cases of life and death which if detected early might be saved, but which if left to their fate must nearly always terminate in death. We await with impatience the appearance of the second volume, which will probably be entirely devoted to abdominal surgery. As Lawson Tait can justly claim to be the greatest abdominal surgeon who has ever lived, his experience far exceeding that of any other surgeon, we are anxious to learn the details of those methods by which he has reduced the mortality of abdominal operations to an average of only three or four per cent., and we can promise that when it does appear it will meet with a reception no less cordial than that which has greeted volume the first.