PROPOSED COMPULSORY INSPECTION AND REGISTRATION OF STILLBORN CHILDREN.

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WHEN in 1890, a Midwives Bill was introduced, I recognised that it would be a danger if any persons, other than medical practitioners, were empowered to grant certificates of the cause of stillbirth. I therefore sent out a circular letter, and found that at 71 Burial Board cemeteries, 6,321 stillbirths had been interred in 12 months. Sir C. Cameron called attention to my statement in the Commons, and moved for a return showing the number of stillbirths interred. This Parliamentary Return (No. 352, July, 1891) shows that during 12 months 17,335 stillbirths were interred in Board cemeteries. The return is very incomplete, as it does not include Scotland or Ireland, nor the various parish and other burial grounds.

Stillbirths occur much more frequently among illegitimate than legitimate births—in the proportion of 1 in 18, or 1 in 20 among the legitimate; and 1 in 8 or 1 in 10 among illegitimate. Bertillon says that the chance of an illegitimate child being stillborn, when compared with the legitimate, is as 193 to 100. In Denmark, of 100 legitimate births, 2.6 per cent. are stillborn; and of the illegitimate, 4.1; while in first labours, 1 in 11; and in other labours 1 in 32 are stillborn. In England, in 1889, 40,627 illegitimate births were registered; in Scotland, 9,537; and in Ireland, 2,827.

It is to be feared that the criminal causing of stillbirth is frequent. Coroner B. Hicks says: "Many children who are termed stillborn are not really so, but have been born alive, and die 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 other ways." Tidy says: "So notorious is it that a large number of these cases could be averted, that some legislation is urgently needed." Stevenson says: "There is reason to believe that non-registration of births of children born dead leads to many being disposed of as stillborn, which in reality came living into the world, but have died from neglect, exposure, or violence." In the above return the following occurs: "The Secretary of State has reason to believe that in some cases 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."

The present state of our law conduces to criminal stillbirth. In this country a woman may be hanged, if pregnant, but if she has not "quickened." In France "the plea of pregnancy" is a sufficient bar to execution. In this country the child in the womb, although medically "alive" is legally "dead." Again, section 60 of the 24 and 25 Vict. cap. 100, 1861, which relates to the concealment of birth, does not give any protection, as it refers to a "child," the "dead" body, and to "secret disposal," legal terms which have given rise to three different rulings. This section was enacted in order to prevent the secret disposal of a liveborn child with the ultimate view of child murder. Nor does the Scottish Act of 48 Geo. III, cap. 14, March, 1809, relating to concealment of pregnancy, give any real protection. Neither do sections 58 and 59 of the 24 and 25 Vic., cap. 100, which relate to the procuring of miscarriage, apply to criminal stillbirth. The Registration of Births and Deaths Act, 1874, in so far as it refers to still births, takes notice of the interment of such; while it enacts that any person present at the birth, or the father or mother, or the person in charge of the child, may sign the declaration which states that the infant was stillborn. It does not even ask the cause, so that the person signing might have murdered it and then sign the declaration.

In other countries the law insists that all stillborn children should be not only inspected, but registered. In Denmark it is so by the laws of January 2nd and September, 1877; in Holland, by Article 32 of the Civil Code; in Switzerland by section 14 of the Federal Law of December 24th, 1874; in Sweden by the Circular of April 27th, 1860; in Norway by an order of the Board of Trade of November 18th, 1877; in Italy by Article 56 of the Ordinance of the Civil

State, 1865; in Spain by the Royal Order of January 30th, 1871; in France by the Decree of July 4th, 1806; in Germany by section 23 of the Act of February, 1875; and in Austria by a Decree of the Imperial Ministry of the Interior of April 1st, 1890. Inspection and registration are also compulsory in Belgium, Hungary, Province of Ontario, Western Australia, and in some of the States or chief towns of the United States of America. In these countries inspection is carried out either by official medical verifiers of the fact and cause of stillbirth, or by the medical practitioner present at its birth. Registration is generally carried out by the ordinary registrars of births and deaths, and heavy penalties are provided for failing to notify still births.

What is a stillborn child? Here medicine and law differ. In legal language, a "liveborn" child is one whose whole body, being completely born, shows some definite "sign of life." "Completely born" means that the entire body must be outside its mother, but it is not required that the after birth be delivered. Therefore, legally, so long as the infant is in the womb, it is not a living being; it is not *rerum natura*.

What is a "sign of life?" This means any vital movement of the infant after complete birth—a movement of a limb, a twitch of a muscle, the heart or cord seen or felt to beat. It will thus be seen—and this is a most important medico-legal point—that only those present at the birth can say whether the child was actually stillborn. It is a question of fact only.

The law does not ask whether the child was "viable," mature or immature, healthy or diseased. It would, therefore, be much better if the law were amended, so that, for the purpose of conviction, proof of complete birth were not required, but proof only that the infant was alive during birth, and that it died from injury inflicted during birth. In the charge of infanticide the injury causing death must be inflicted after "complete birth," or that it died after complete birth from the injury inflicted during birth.

What is the earliest age at which stillbirths should be inspected and registered? When an infant is completely born at such a time of life as will allow it to show a "sign of life," then, if stillborn, it should be registered. R. Barnes states that a 4-month conception has lived for some hours after birth. Athill tells me he has seen a child under 4 months breathe after complete birth. In some countries all stillbirths having the outward form of a child must be inspected and registered. Again, it might be held that the earliest age at which the sex can be determined would be a good starting point, that is, from the third to fourth month, and upward. In Italy no definition of the stillbirth is given, and all dying within twenty-four hours after birth are registered as stillbirths. In Spain stillbirths of 6 months and 1 day and upward are registered. In France the definition varies in different communes, and all infants dying within three days after birth are registered as "stillbirths." By the judgment of the Court of Besançon of October 31st, 1844, a stillbirth in which the sex can be recognised must be registered. In Paris the earliest age is the fourth month of intra-uterine life. In Germany stillbirths of seven months and upward must be registered, and in the Grand Duchy of Hesse all stillbirths having human form. In Austria "viable" stillbirths; in Denmark conceptions of twenty-eight weeks; in Switzerland those of six months; in Sweden "viable" children; and in New South Wales infants of six months' intrauterine life and upwards, when stillborn, must be inspected and registered. I propose that they be registered in a special book as stillbirths, and by the present registrars of deaths. In other countries abroad the system of registration varies.

What would a system of inspection and registration cost? According to Farr, the cost of registering a death is, on an average, about 1s. 6d. No extra cost on account of offices, clerks, etc., would be required for registration of stillbirths. At present each registrar is paid at the rate of 2s. 6d. for each of the first 20 entries of births or deaths, and 1s. for each additional birth or death registered during the quarter. If he make a return to the local sanitary authority he is also paid 2d. opposite each death so notified. Therefore, supposing 60,000 stillbirths were registered in the United Kingdom each year, and that the registrar be paid 1s. 6d. each, this

would cost at most £4,500. Next, I propose that the fee paid to a practitioner for each certificate of the fact and cause of stillbirth, and for inspection of the body, should be the same as that paid for notifying an infectious disease—that is, 2s. 6d., when the stillbirth has occurred in private practice, and 1s. when it occurs in a public institution. I calculate this would cost about £7,500 yearly, so that for £12,000 a year we could have a perfect system of inspection and registration of stillbirths. In 1892 £21,357 was paid in England for notifying infectious diseases, and £5,311 in Scotland. In Paris alone in 1893 £10,800 was paid to 100 medical verifiers for verifying all births and deaths.

If we can induce our law makers to extend further statutory protection to the children in the womb by passing an Act to provide for the inspection and registration of all stillborn children, then we, as medical practitioners, possessing the power of harmonising law with medical knowledge, will be able to say that we have not neglected our duty. If we bear in mind that the actual difference in the medical and in the legal definitions of what constitutes "live birth" is, that from the legal standpoint the child performs some vital act outside its mother, which very same act it performed when in the womb, we can see that the difference is one of locality only. Let our law friends be guided by medicine, and so throw their protection over the infant during as well as after birth.

SUMMARY OF RECOMMENDATIONS.

1. That all stillborn children shall be registered by the present registrars of deaths in a special book, and as stillbirths only; and that the fact of stillbirth shall be notified to the registrar of deaths within twenty-four hours, by the persons now required by the Births and Deaths Registration Act, 1874, to notify a death to the registrar.

2. That, for the purposes of registration, a stillborn child is a child which has completed the fourth month of intra-uterine life or upwards, and which has not shown any "sign of life" after complete birth; the age of such child being calculated from the last day of the last menstrual period of its mother; or, in the absence of this, by the sex of the child.

3. That it be illegal for any registrar of deaths to accept any certificate of the cause and the fact of stillbirth unless such certificate is signed by a registered medical practitioner, or by a coroner, or procurator fiscal; and that when such certificate is signed by a practitioner who has a registrable qualification, but which is not actually registered, it shall be invalid.

4. That each registrar of deaths in the United Kingdom shall be furnished with a yearly copy of the *Medical Register*, and at the expense of the public funds.

5. That the certificate issued and signed by a registered medical practitioner be a certificate of the fact of stillbirth, the cause of stillbirth, and of the identity of the stillbirth.

6. That it be illegal for any registered medical practitioner to issue and sign such certificate until he has personally inspected the body of the stillborn child referred to in the certificate.

7. That in all cases the certificate be forwarded forthwith by the registered practitioner signing it direct to the registrar of deaths of the district in which the stillbirth was born, and that it be illegal for any other person to forward such certificate.

8. That each registered practitioner shall be paid a fee of 2s. 6d. for each certificate of the cause of stillbirth when such stillbirth has occurred in his private practice; and that a fee of 1s. shall be paid when such stillbirth occurs in a public hospital, institution, or asylum, to which he acts as medical officer; such fees to be paid out of the public funds.

9. That the form of the certificate of the fact of stillbirth, the cause of stillbirth, and of the identity of the stillbirth be supplied to registered medical practitioners free of cost by the Registrar-General's Office; that such certificate, when so supplied, be furnished with a halfpenny postage stamp; that such certificate be scheduled in the Act; that it be illegal to use any form of certificate other than that scheduled in the Act; and that the names and addresses of the local registrars be printed on such certificate.

10. That it be illegal for any registrar to issue a certificate of registry (or burial order) until he has received a duly

signed certificate of the fact and the cause of stillbirth, or an order from a coroner or procurator fiscal. Provided that, when an informant attends before the registrar to register a stillbirth in connection with which there is no medical certificate of the cause of stillbirth, the registrar shall inform the public medical verifier of the district in which the body lies, and at the same time furnish him with the necessary form to fill in, and such verifier shall return such form, either to the registrar or to the coroner, as the case may be.

11. That it shall be illegal for any person to bury any stillborn child in any burial ground or in any other place, or to dispose of such body by cremation or in any other manner whatsoever, until the registrar has issued his burial order, or until the coroner or procurator fiscal has issued such order.

12. That such burial order shall be scheduled in the Act, and that it shall be illegal to use any other form of burial order.

13. That such burial order shall not be delivered to the person who informs the registrar of the stillbirth, but shall be forwarded by the registrar of deaths to the burial authority having control of the place in which the body is to be buried or otherwise disposed of; that the registrar or clerk of such burial authority shall specify the place and date of interment on this burial order, and shall return it forthwith, duly signed, to the registrar of deaths from whom the registrar of the burial authority received such order.

14. That each registered medical practitioner must conform with any "suggestions" issued for his guidance by the Registrars-General.

15. That the following be the certificate of the fact and the cause of stillbirth, and of the identity of such stillborn child:

I certify that I, registered medical practitioner, residing at, have personally conducted the confinement of (name of woman), whose occupation is stated to be (state occupation), and whose condition is (state whether married, or single, or widow), on the day of, 189...; that I have inspected the body of a (state sex) child, which has attained the month (state month) of intra-uterine life; that this child was stillborn; that I (state name of practitioner present at the birth, or in default the name of adult who identifies the child) identify the child as being that of which its mother was delivered; that the cause of its being stillborn is (state probable cause of stillbirth); that it died (state whether child died in the womb or during birth), and that the cause of its being stillborn is not due to accident, poison, violence, or criminal neglect.

This certificate must be filled in by the medical practitioner present at the birth, or, in default, by the public medical verifier. In case the practitioner cannot identify the child, then that part of the certificate relating to its identity must be filled in by some adult present at the birth.

16. That it be illegal for one or more registered medical practitioners to issue more than one certificate of stillbirth for each stillbirth so certified.

17. That when a woman has not been attended in her confinement by a registered medical practitioner, the public medical verifier shall visit the place at which the body of the stillborn child lies, and shall make such examination of the body (including, if necessary, a "post-mortem examination") as will enable him to form a true opinion of the cause of stillbirth, and the fact of stillbirth, and if he is satisfied that the stillbirth is due to natural causes, he shall forward a certificate forthwith to the registrar of deaths to this effect. If, however, he is of opinion that the cause of stillbirth is due to accident, poison, violence, or neglect, he shall at once forward his written report to the coroner, or procurator fiscal, as the case may be.

18. One or more such public medical verifiers (who must be registered medical practitioners) shall be appointed in each sanitary district by the coroner or procurator fiscal having jurisdiction over such district; and each public medical verifier shall appoint his medical deputy, who shall act for him in his absence. The public medical verifiers shall be paid out of the public funds for the duties performed by them under this Act; the fee for verifying the cause of stillbirth, including the certificate or report to the coroner, being

10s. 6d.; and the fee for a *post-mortem* examination, including report to the coroner, being £1 1s., such fee being exclusive of the fees paid, under the Coroners Acts, for giving evidence at the inquest if held.

19. That it shall be illegal for any registrar of deaths to give a book of forms, or a form, of the certificate of stillbirth until he shall have received from the practitioner desiring such book of forms a written request signed by the applicant in the presence of the registrar, and until he shows to such registrar his certificate of registration as granted by the General Medical Council.

20. That it be illegal for any coroner, procurator fiscal, or registrar of deaths to use any form of certificate other than that provided by the Registrar-General's Office.

21. That each registrar of deaths in the United Kingdom shall notify the sanitary authority all particulars required by such authority concerning all the stillbirths registered by him.

22. That it shall be illegal for any person to keep the body of a stillborn child in any dwelling place or in any other place for more than four days, unless by order of the coroner or procurator fiscal.

23. That when a coroner orders an inquest to be held concerning a supposed stillborn child, the jury summoned shall consist of five persons only.

24. That the present law be altered so that the plea of pregnancy, and not the plea of quickening, shall be a valid reason why a pregnant woman shall not, until after she shall be confined, suffer capital punishment.

25. That the criminal law relating to infanticide be amended, so that for the purpose of conviction "complete birth" be not required, but proof only that the child was living during birth, and that it has died from criminal violence inflicted during or after birth.

In connection with this public question, it must always be remembered that in almost all stillborn cases, only those present at the birth can be certain as to whether the stillbirth is due to criminal causes. It is a question of fact only.

It is my earnest wish that the above recommendations be discussed by all the Branches of our Association, and by medical and coroners' societies, and that such send copies of resolutions in favour of registration and inspection of stillbirths to their local members of Parliament. It is only by bringing this important question prominently to the front in these days of pressure of public business that we can expect to secure legislation. I need only refer to the work done by Sir Charles Cameron, M.D., and Sir Walter Foster, M.D., in connection with the Select Committee of the House of Commons on Death Registration to show that we may count upon their continued efforts. In order that any one who wishes to work up this subject may do so, I shall refer such to the following works mentioned beneath. I cannot let this occasion pass without publicly expressing my thanks to those of Her Majesty's Consuls and Ambassadors who have supplied me with facts relating to the laws of foreign countries bearing upon the inspection and registration of stillborn children.

[*The Burial Laws*, by Little (Shaw and Sons); *The Law Relating to the Registration of Births, Deaths, and Marriages*, by W. C. Glen and A. Glen; *Jervis On Coroners*, fifth edition (Sweet and Sons); *Seton's Practical Analysis of the Acts Relating to the Registration of Births, Marriages, and Deaths in Scotland* (Edmonston and Douglas); *Nomenclature of Diseases*, second edition (Royal College of Physicians, London); *Regulations issued by the Registrars-General of England, Scotland, and Ireland to Registrars and Superintendent Registrars of Deaths*; *Official List of the Registrars-General, showing the Occupation of Registrars*; *Stillbirth Interments*, Parliamentary Return No. 352, July, 1891; *Protection of Infant Life*, Parliamentary Report No. 372, July, 1871; *Death Certification*, Parliamentary Report No. 373, September, 1893; *Stillbirths in England and other Countries*, Parliamentary Return No. 279, June, 1893; *Registration of Births and Deaths Act (England)*, 1874; *Registration of Births and Deaths Act (Ireland)*, 1880; an Act to provide for the Better Registration of Births, Deaths, and Marriages (Scotland), 1854.]

GERMAN MEDICAL PRESS ASSOCIATION.—The German Medical Press Association, which came into existence at the meeting of the German Scientists and Physicians, held in Vienna in September, 1894, now includes the editors of all the leading medical journals published in the German language. The object of the Association is to increase the influence of the medical press, and safeguard its interests, and on all occasions to promote its proper representation, especially at congresses and similar meetings. The Association will meet this year in Berlin, under the presidency of Professor Eulenbarg.

THE PROPHYLAXIS OF INFLUENZA.

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THE annual recrudescence of influenza in epidemic form with more or less virulence renders its prophylaxis a matter of extreme urgency. My experience in this connection has confirmed the opinion that in quinine we have an almost unexceptionable preventive of the scourge. I was first led to the use of this remedy by recalling to memory a passage I had noted some years ago in a very amusing and interesting book by De Windt, entitled *From Peking to Paris*. The author made the observation that the frequent change of encampment of the nomad Tartar tribes of the Central Asian steppes was not so much determined by the necessity for fresh pasture as by the circumstance that, if the encampment were not changed at intervals, influenza attacked them, and developed with increasing intensity until change of location was effected. This, of course, points to a *materies morbi* of telluric origin intensified by what French pathologists term *encomblement*, at first endemic and then epidemic in character. This agrees with the natural history of the epidemics of influenza of recent years. It was called by the Russians the "Chinese Influenza," from its Tartar cradle, and, when passed on its pestilential career to the west, became the "Russian Influenza" to the Germans and other nations of Northern Central Europe.

The following experience will, I think, show that my opinion of the protective properties of quinine in influenza is well founded. On the appearance of the epidemic in October, 1891, I was consulted by the principals of a large educational establishment, mostly patronised by foreign pupils, as to whether I would advise them to close the institution, or could recommend some efficacious preventive. The school consisted of nineteen resident pupils, besides teachers, servants, and day pupils. I advised that every resident inmate of the house should take immediately after breakfast a gr.v pill of sulphate of quinine. This injunction was strictly obeyed during the prevalence of the epidemic, with the result of complete exemption. One of the domestic servants who went to an adjacent town to attend her mother, who died of the epidemic, returned to her duties evidently suffering from it, but did not communicate it to any of the other inmates of the house.

A singular corroboration of this protective potency was afforded more recently in this same institution. All the inmates were put upon the matutinal quinine regimen as formerly, with the exception of one of the principals, who was induced to refrain, from other considerations in connection with her health. The result was that she alone took influenza in a rather severe form, but did not communicate it, not even to her colleague who shared her room throughout, but who was protected by quinine. My own personal experience is further corroborative. In the same epidemic of 1891-2, I similarly placed my whole household, consisting of fourteen persons, on quinine. In consequence of my mind being very much preoccupied with professional and other anxieties, I neglected after a few days to take my breakfast dose of quinine, the result of which was that I contracted the disease from some of my patients, and in a very severe form, with pneumonic consolidations of the right base. My temperature for nearly a week was recorded nightly at 103.8°. I was so gravely ill that my solicitor was sent for, and spent more than an hour at my bedside. He was unable to rise next morning, and the disease spread to his family and servants; they all had severe pulmonary complications, and his wife succumbed. No other member of my family or household was attacked, because, as I am strongly convinced, they were protected by quinine.

I have since seen, in very many instances, further and equally convincing proofs of this prophylaxis. I am further impressed with the fact that the symptoms of influenza more rapidly yield to quinine with salicin if there be muscular or joint pains, or with ammonia in pulmonary complications, with a large administration of old dry champagne, for which indeed there seems to be almost as strong a craving as for air in the agonies of dyspnoea, than to so-called antipyretics, or