

which we may detect the earliest deviations of function from the healthy standard. In the particular disease which we have been considering, it has been shown to give more certain proof of definite changes or of the absence of certain variations in the course of the malady than any other means at our disposal. A temperature of 104° and above is a sign of grave import in pneumonia. (New Sydenham Society's *Year-Book*, 1862, p. 176.) In genuine pneumonia, the temperature is stated to rise rapidly, amounting on the first day to 101.7° Fahrenheit, and maintaining a temperature of 4.5° to 5.6° above the normal standard, with little or no morning remission; on the fifth or seventh day it falls rapidly; and in thirty-six hours returns to the natural condition. Peculiar variations of temperature in the course of the disease are described as characteristic of definite varieties of pneumonia. To conclude this digression, Wunderlich affirms generally that the temperature is the surest measure of the improvement or aggravation of a disease, of its running a favourable or unfavourable course, and of the efficacy of treatment. I may add that in surgery this little instrument has also been employed with advantage, both in determining the presence or absence of traumatic fever and in fixing the exact local changes in deep-seated tissues.

The theory which I have advocated, that pneumonia is not a disease *per se*, but the climax of a series of antecedent morbid changes would be liable to contradiction, so long as we have not obtained positive proof of the deranged condition of the blood and of the nutrition generally. I have sought to indicate the general grounds deducible from what is observed in individual cases. Other evidence, though not absolutely conclusive, appears to be given in the admitted hyperinosis of the blood before the outbreak of pneumonia and the diminution of the general symptoms of disease as those of the local affection become more prominent. However, so long as the direct evidence is not obtainable, we must be allowed to have recourse to circumstantial evidence, and be satisfied to use such means of observation as are now at our disposal.

I trust that I may not be misunderstood as maintaining the impossibility of any form of pneumonia without an arrested or perverted metamorphosis of the tissues. The pneumonia occurring in the course of trichiniasis, is one of those rare forms that are attributable to the presence of a direct irritant in the lung-tissue. The pneumonia, so fatal in some trades, in which mechanical irritants find an entrance into the lungs, belong to the same category. But they are not the pneumonias of every-day life; and it is to the ordinary cases of inflammation of the lung-tissue which we meet with in hospital and private practice, that my remarks apply.

[To be continued.]

**ACCIDENTS IN THE METROPOLIS.** The number of persons run over and killed in the streets of the metropolis during last year was 140. In the same year 1707 persons were injured. To the end of February in the present year 23 persons were killed and 231 injured from the same causes. In the City Police district last year 14 persons were killed in the streets and 207 injured. In the same district up to Feb. 26 of the present year 8 were killed and 30 injured.

## Original Communications.

### ON THE CAUSES WHICH TEND TO AND OCCASIONALLY ENDANGER FŒTAL LIFE DURING LABOUR:

WITH REMARKS ON SOME OF THEIR MEDICO-LEGAL BEARINGS.

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[Read before the Perthshire Medical Association.]

[Continued from page 145.]

It is well known that the states mentioned in my previous paper lead to, and frequently cause, still-birth. However, according to the recent Report of the Capital Punishment Commission, several alterations in the present law in reference to crime are advised to be made; and one particularly relating to my subject is felt by not a few in the profession to be rather startling, and is consequently of great interest, and vitally important in a medico-legal point of view. I refer to the recommendation of the aforesaid Commission in regard to infanticide; viz, "that it should be made an offence punishable, etc., maliciously to inflict injury on a child during its birth, or within seven days afterwards, in case the child should have subsequently died; and no proof that the child was completely born alive should be required." On such becoming a part of the future criminal code of our country, difficulties from conflicting medical opinion will, to my thinking, be found to occur from time to time in several ways. But it is necessary to show how such can arise. It will be admitted as far from being uncommon, that, in a case of difficult labour, with no medical attendant present at the time, the child may die during labour or before its complete birth, and may also present appearances not unlike "inflicted injury"; while nothing could be discovered to implicate the mother. Let me state the following possible cases.

A woman, in broad daylight and alone in her own house, is all of a sudden taken in labour at the full term. The head of the child protrudes; it is heard by her to cry, and more so when the head is extruded. It remains in this—often dangerous—position until the next uterine pain, which perhaps does not come on for five or ten minutes after. Meanwhile, she tries with one of her hands to push forcibly the child's head, so as to relieve herself until gradually its body comes into the world. In doing this, her nails have pierced parts of the head, neck, and face of it. At length it is completely born, and found to be lifeless.

Place alongside of this case a woman taken up for concealed birth. Her child is found soon afterwards hidden in the room in which she bore it, with severe scratches here and there on parts of its neck and head, etc.; while the mother afterwards confesses that she heard it cry shortly before it was completely born, and did the same thing as the previous one to aid self-delivery, and with an unfavourable termination.

In another case, the child's head being similarly extruded, and shewing many signs of fetal life, the mother, from some inhuman motive, stuffs its mouth with a part of either her flannel petticoat or a corner of the bedsheet, and afterwards declares that it was stillborn.

How is the first of these to be exonerated from blame, and the second or the third to be convicted

of maliciously inflicting injury? There may be no serious wound or ecchymosis on the head, neck, or face of the first child referred to, any more than the other two, when medically examined outwardly, sufficient to convict of injury; but it may be found, if sought for, of greater or less extent, within. Where else is evidence of the cause of death in many new-born children to be relied on? Not, as hitherto, in the hydrostatic test; as it would appear that this is not to be required. We, therefore, are shut up to whatever state the brain and its membranes, or the heart, may be in, to decide the cause of death in the instances of new-born children suspected of having been foully dealt with. It is true, and proper to bear in mind, that the head of the child in certain kinds of labour, when extruded, may remain, from various causes (maternal and fetal) too long in such position; and, on its complete birth, may be stillborn, without the woman, or any one else, having meddled with it at all. But, on the other hand, if such is to be the law in future, that "no proof that the child was completely born alive should be required", how many may be led to bring about by secret means a child's death during its birth without fear of penalty, when early medical examination would be often able to detect the malicious injury inflicted, but for such a law.

A woman alone is seized with the pains of labour at full time, and soon bears her child alive; but, after it is born, she finds the umbilical cord twice at least round its neck, and is anxious to relieve herself and the child. In trying to remove the cord, she only causes a greater constriction of the neck, whereby the foetal respiration is the more impeded; and by the time she has managed to free the child of it, life has fled. In a case of this kind, there might be caused marks on the neck of the child, sufficient to excite suspicion against an innocent person. Another, also alone during the bearing of her child, is standing and about to get into a low bed, when a severe uterine pain comes on, by which the child is forcibly and quickly expelled, and driven against the corner of a chair or stool, causing a wound or fracture of the child's head, ending in the death of it; and the woman, although suspected, would be innocent. Another alone in labour feels as if she were to have an evacuation, and sits down on a house slop-pail with water in it; a succession of violent pains takes place; and before she gets off it, the child is not only born, but it has lost its life by being drowned. Another woman, unmarried, is taken in labour, alone; the child is found, not long afterwards, dead, with its umbilical cord insufficiently tied, which has caused the death of the child by loss of blood. On the other hand, what is to hinder a lying-in woman wickedly doing away with her new-born child from afterwards screening herself under the same states and circumstances as above described? There would be much room for conflicting medical evidence in such a case.

A case of labour, at full term, in a married woman, about 40, who had several children before, came under my care not very long ago, where an elderly female was in attendance. The child, the mother said, was living prior to labour-pains coming on, and it came by the feet. The attendant, thinking she had no more to do than to pull the child's feet and deliver the woman, continued pulling away; until the mother became alarmed, as the child was not coming so soon as she expected, and I was therefore hastily sent for; on my arrival I found her still undelivered, but the child was now dead. The head was by me readily brought into the world. What is to be done with those unprofessional and unlearned persons who proffer their aid in such and other cases, as

well as with those itinerant quack evil advisers who vend medicines secretly to cause abortion, especially in advanced pregnancy in unmarried females, occasionally with a fatal termination? Some greater restriction is certainly required to be put in force by the legislative powers of government against such persons.

Inattention to the severed and tied end of the umbilical cord seemed to have been the cause of phlegmonoid inflammation and death in two infants of different mothers, which I was lately requested to see before they died. The neglect was apparently unintentional on the part of either the mothers or attendants!

### REMINISCENCES OF A FOUR MONTHS' STAY WITH PROFESSOR A. VON GRAEFE IN BERLIN.

By A. SAMELSON, M.D., Manchester.

[Continued from p. 309.]

THOSE three days of the week, on which Von Graefe lectures in the morning—i. e., Monday, Wednesday, and Friday—are also set apart for operating. This generally commences soon after 3 o'clock p.m., and is continued for about an hour, within which, on an average, fifteen operations are performed. Some eight or ten of the hearers regularly attending the lectures are in turn admitted to watch the operations, as well as the preceding attendance on the ambulatory patients. The remaining afternoons of the week, apparently devoted to the more collected and thorough investigation of cases, are passed in comparative seclusion; only a casual visitor being present, or some foreign colleague anxious to make the most of his limited stay at Berlin. But, on the operating-days, the number of practitioners mostly equals or exceeds that of the pupils; and, amongst the former, one or another person of high repute, or at least local celebrity, may often be met with. We had the good fortune of meeting Dr. Desmarres of Paris, Professor Rossander of Stockholm, Dr. Melchior of Copenhagen, Dr. Heymann of Dresden, etc.

The ordinary medical attendant of a patient is in many instances present to watch the operation on the latter. As Von Graefe, when in Berlin, performs but very few operations any where else but at the Clinique, the interesting spectacle is presented of a concourse of patients of each sex, belonging to the most various countries and ranks of society. Not to mention a host of counts and countesses, high functionaries and military officers, financiers, etc., we saw two children of royal birth, grand-cousins of King William of Prussia, brother and sister, operated upon in succession—the one for squint; the other for closed pupil in the only and but very poor eye left to her. Amongst the foreign patients, the most abundant are Russians, and next in number French—both, it appears, appreciated on account of their substance and liberality; but, amongst the former, the poorer classes also are most numerously represented, especially the Jews of Poland and the Baltic provinces, obviously much visited with eye-disease—quaint people with curious names, such as Rosetwig, or Gingerbread, or Mother-o'-Pearl, and often distinguished by their epizootic propensities. Perhaps this latter proclivity accounts in part for the comparatively frequent occurrence among them of an otherwise rarely seen disease—trichosis, or Plica Polonica—of which we met with three or four examples. In some instances, when persons of high rank, especially ladies or very nervous individuals among the