Life, birth, and live-birth : a medico-legal study / by Stanley B. Atkinson.

LIFE, BIRTH, AND LIVE-BIRTH:

A MEDICO-LEGAL STUDY

BY

STANLEY B. ATKINSON, M.A., M.B., B.Sc.

OF THE INNER TEMPLE, BARRISTER-AT-LAW

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LIVE-BIRTH, in Theory and Practice,

(Abstract from "THE LAW QUARTERLY REVIEW," April 1904.)

There is no authorised definition of a *Live-born child.* The terms of the definition of *Murder* are suggestive.

A child is *live-born* in the legal sense, when after entire birth, it exhibits a clear sign of vitality, that is, in practice, at least the evanescently persistent activity of the heart. *Vitæ habilitas (viabilité)* need not be proved in English law.

Positive proof of the alleged live-birth of a given now lifeless child is necessary in law. Where respiration was never fully established, in the large majority of cases, it is essential for one present at the delivery, to give direct evidence, as well of the complete birth as of the subsequent exhibition of a sign of life.

IN LAW (Civil and Criminal alike)

Theory demands a *postnatal separate and independent existence in law i.e. a separate personality.*

(? the fœtus having passed mid-term.) Homicide of the unborn is impossible.

Mr. Justice Wright's test: "whether the child was carrying on its being without the help of the mother's circulation," after birth. (1901)

Practice requires a postnatal sign of this separate existence:

1.—Direct, (*e.g.* Civil cases): at least palpable pulsations in the funis.

2.—Indirect, (*e.g.* infanticide at birth in solitude.)

(*a.*)—*Medical:* A pool of fœtal blood pumped from a wound (*e.g.* divided funis.)
Vital action of muscles of respiration or deglutition.
The common lung tests.

(*b.*)—*Moral:* Relative to the conduct of mother.

IN MEDICINE.

Theory demands the cessation of the symbiosis between mother and fœtus. (? when does this actually occur. ? is the separation of the placenta a true test.) This dissociation may precede birth.

Practice varies: unless respiration has been established it is not usual to *register the birth.*

What is the true attitude towards the *still-born?* the word itself appears to mean "silent-born." In Law they are regarded as born dead. In Medicine they may be merely postnatally apnœic survivers of birth.

Compare the status of a child:

1.—Where a mother, at term, is met by sudden death.

2.—Where a child is "born with a caul," or into a liquid medium.

3.—Where it has been burked before it has breathed.

The Medico-Legal Society.

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5. V. 1904

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Will you please accept for the Library a copy of the paper which being in a primarily legal publication, may yet be of interest to your readers?

Stanley B Atkinson

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LIFE, BIRTH, AND LIVE-BIRTH.

THERE is no authorized definition of Live-birth in the theory of the law, and the proof of this condition, in conformity with any definition submitted, is often not easy. Judges have repeatedly enunciated views on the subject for the guidance of juries, grand and petty. Royal and also private commissions have issued several Reports upon cognate subjects, both from their forensic and from their medical aspects[1]. An inquiry into the physiological economy of 'the hidden world of the womb' is advisable while arriving, as well at a definition of a Live-born child, as the proofs of the fact of Live-birth, more especially where the function of respiration has not yet been fully exercised. Otherwise it may well be with this discussion, as Baron Hatsell said of the first recorded conflicting medical testimony, adduced in 1699: 'unless you have more skill in anatomy than I you would not be much edified by it.'

The provisional presumption of our Common Law, and by Statute since Lord Ellenborough's Act (43 Geo. III. c. 58), is that a child is born dead; this is doubtless an application of the general principle *presumitur pro negante*. The fact of Live-birth must be established by valid evidence, usually *res ipsa loquitur*.

Was the child born alive? The answer is of medico-legal importance on two distinct classes of occasions, criminal and civil. In the former, either where lifeless newly-born 'children of nobody' are found, hidden from or exposed to public view, or in false certifications, including non-certifications of birth, cases which will become more noteworthy when the 'still-born' are recognized and registered. In the latter, where questions arise relative to succession, including the interpretation of the terms of testamentary disposition, and to some other 'cases affecting the venter.' The sequel of the former may be a prosecution, the latter may base a civil action. In both alike, conditional presumption of dead-birth must be positively rebutted: in the criminal charge, the prisoner desires to sustain a presumption which is so wholly favourable to the accused; in the action, the chief end and aim of the claimant and his friends is to rebut a presumption so unfavourable to his case.

[1] Commissions have held inquiries upon Capital Punishment (1865), Infanticide (1867, of the Harveian Society), a Criminal Code Bill (1879), Registration of Death (1893). In 1893 a Return of Still-births was published, and the Coroners' Society considered the same subject. In this paper these Reports are referred to as C. P., H., C. C., D., S., and C. S. respectively.

It is proposed to consider the definitions of the terms Child, Birth, and Live-birth, the facts necessary to prove the proposition that a child was born alive, and the occasions when such proof may be demanded. The term 'Still-birth' will be discussed and some 'cases affecting the venter' will be enumerated.

I. *In the Criminal Law* a child *is a human foetus which is born, alive or dead, at such a stage of uterine development as experience shows is necessary for capacity to survive birth, viz. at least five calendar months.*

For proprietary rights, the venter, at every stage of gestation, is by construction considered as a potential child.

The following statements hold in criminal and in civil cases.

II. *A child is* born *at the moment that its body has completely quitted the mother.*

III. *A child is* live-born *in the legal sense, when, after entire birth, it exhibits a clear sign of independent vitality; in practice, at least the evanescently persistent activity of the heart.* Vitae habilitas (viabilité) *need not be proved in English law.*

IV. *Positive proof of the alleged live-birth of a given now lifeless child is necessary in law. Where respiration was never fully established, in the large majority of cases, it is essential for one present at the parturition to give direct evidence, as well of the complete birth as the subsequent exhibition of a sign of life.*

I. A Child.

Normally the fruit of the human womb is ripe after forty weeks' gestation. The aid of pharmacy has been invoked, both to hasten and to delay an event of which Blackstone (1765) says: 'being a matter of some uncertainty the law is not exact as to a few days.' Many instances are recorded, on sufficient medical authority, where so long a term was not necessary to produce a living and a rearable child: George III, though prematurely born, '*was* a king!' The value of medical evidence in such cases is seen in *Bailey's Divorce Bill* (*The Globe*, March 11, 1817) and the *Poulett Peerage* decision [1903] A. C. 395, H. L. (E.). Occasionally, too, a retarded delivery, *partus serotinus*, is affirmed: in the case of *Robert Radwell's* widow (1290) we read that a son was born *per undecim dies post ultimum tempus legitimum mulieribus constitutum*, he was ruled not legitimate (1 Rol. Abr. 356). In 1620 the Court, having examined physicians, allowed the jury to accept it as a fact, that a legitimate posthumous child might be born after forty weeks and nine days; this is the first published case which records expert medical evidence (*Alsop* v. *Bowtrell*, Cro. Jac. 541). Forty-three weeks were allowed in 1791 (*Foster* v. *Cook*, 3 Bro. C. C. 347; *Brock* v. *Kellock*, 4 L. T. R. 572). Hippocrates would not allow more than ten solar months, Coke only

nine calendar months or forty weeks, but no set limit is now imposed to a presumption derived from the course of Nature.

The earliest or embryo-stage of development progresses for about six weeks, and is liable to abortion (a word seldom heard in medical practice) or to degradation into a mole (false-conception). The size of a split pea is then attained. Later, becoming recognizably organized and of human shape, and by Galen supposed to be then endowed with life, the product is spoken of as a foetus, and there is liability to miscarriage or, later, to premature delivery of the mother (phrases seldom used in Criminal Law). At about mid-term the foetus gives tangible tokens of prenatal individuality: it is felt to be lively, to quicken, or 'leap.' Samuel Pepys enters on Jan. 1, 1662-3, Lady Castlemaine 'quickened at my Lord Gerard's at dinner.' Blackstone wrote: 'life begins in contemplation of law as soon as an infant is able to stir in the mother's womb' (Com., 9th ed., i. 129; cf. ch. i. ver. 45, St. Luke 'the physician'). This stirrage implies muscular contractions, resulting mainly in tiny cuffs and kicks, foetal gymnastics in a somewhat confined play-room, which can be witnessed at mid-term, both *in situ* and after expulsion. A suspected woman cannot be compelled to confess to having experienced this phenomenon of foetal life. Born shortly after mid-term, such an immature, marsupial-like foetus may breathe and emit 'faint, frail and feeble cries,' and even languidly live for several hours: it is submitted, for purposes of definition, that after birth it is then a *child*. Previously, although the foetal heart, *primum movens*, has long been maintaining the self-contained foetal circulation, no efficient attempts to breathe after birth can be made, and therefore 'the nameless piece of babyhood' cannot continue the struggle for independent existence. In medical practice, from the twenty-eighth week of pregnancy onward, the timely induction of premature labour affords, when indicated, increasing hope of saving both the child's life and the mother from the Caesarean or other operation. There is, however, no prenatal physiological test determining at what exact stage or age a given foetus *in utero* becomes rearable, or even able to survive birth. Modern methods of 'puericulture' have rendered less fatal the vital chances of the prematurely born among the well-to-do; many seven months' incubations have thriven, and wool-swaddling has long been used to protect these chilly, sleepy mannikins. It is an anomalous fact that English law allows premature birth to bastardize a child, whose parents are arranging to intermarry and prevent a triple blemish! It is only subsequently to mid-term that on the petition of the *verus heres*, devisee or other would-be ejector, the issue of a writ *de ventre inspiciendo* will lead to the discovery of

a woman's disputed condition *utrum impregnata sit necne* and *quando paritura* (granted last by Bruce V.C., 1847, *In re Blakemore*, 14 L. J. Ch. 336). Then too, if as Mr. Peachum advised, 'she pleads her belly at the worst,' in stay of execution and in hope of reprieve, a special jury of matrons, assisted or replaced by a committee of medical referees (examined in open court), will discover whether the sentenced murderess 'be with child, of a quick child or not' (*R.* v. *Mary Boyle*, Lancaster Spr. Ass. 1904). The fact of pregnancy may arise in several other 'cases affecting the venter.'

Forensically, the stage at which a foetus becomes a *child* has needed definition for the purposes of Lord Ellenborough's Act and the Offences against the Person Act (24 & 25 Vict. c. 100). The latter (s. 60) deals with endeavouring, by secret disposition of the dead child's body, to conceal its birth. Several judicial definitions may be cited (2 Hale, 289). In 1824 Park J. stopped a case because the alleged child was a mere mass of corruption (*R.* v. *Thurtell*, Hertford Wnt. Ass., charge to grand jury). In 1854 Erle J.: 'unless the child had arrived at that stage of maturity at the time of birth that it might have been a living child. It is not necessary that it should have been born alive, but it must have reached a period when but for some accidental circumstance such as disease on the part of itself or its mother, it might have been born alive. If she had miscarried at a time when the foetus was but a few months old and therefore could have had no chance of life, you could not convict her upon this charge. No specific limit can be assigned to the period when the chance of life begins, but under seven months the great probability is that the child would not be born alive' (*R.* v. *Anne Berriman*, 6 Cox C. C. 388, where upon information gained by irregular catechism of a mother, suspected of concealing the birth of her child, the calcined bones of a seven months' child were found). The ruling does not clearly enunciate whether a chance of momentary existence or of prolonged life (*viabilité*) is indicated. In 1864: 'a foetus not bigger than a man's finger, but having the shape of a child, is a child within the statute . . . which has nothing to limit the word child to a child likely to live or likely to die, but as soon as the foetus has the outward appearance of a child, it is sufficient'; this view, however, Martin B. was willing to reserve, but it was not considered further as the accused was acquitted, (she was a friend of the mother who had been delivered at mid-term: *R.* v. *Mrs. Colmer*, 9 Cox C. C. 506). In 1866, Smith J. said of a malformed product of under seven months' development, upon which a medical coroner had declined to hold an inquest, he left it to 'the jury to say whether the offspring has so far matured as to become a child, or was only a foetus, or the unformed

subject of a premature miscarriage' (*R.* v. *Sarah Hewitt & John Smith*, 4 F. & F. 1101). Such nameless objects seldom reach the publicity of court. An obvious latitude for abuse is allowed by the absence of a definition of a *child* in the legal sense; it might be at least as empirically fixed as is the passage from a child to a young person, or from an infant to an adult.

When the suggested registration of still-born children is enforced, a definition will be needed. At present no legal notice is taken of the 'still-born,' unless there is a wish to inter them in a public burial-ground (37 & 38 Vict. c. 88, s. 18). The authorities of such a place must then receive a written declaration, both of the mother's name and of the fact of 'still-birth,' signed by a coroner, by a medical man who has seen the body, or by the person bringing it for burial. In practice, the midwife hands the child and the document to an undertaker, who decides as to the truth of the latter! For a small fee, the child shares the coffin of a larger corpse (a fact to be remembered in exhumations), or is clandestinely disposed of by night. The burial authorities have no power to expose the contents of coffins. Reports D., S., and C. S. (*sup.*) deal with these 'children.' The first advised that, if of seven months' gestation, they should be treated in the manner proposed therein for all deaths; it also noted that the six weeks allowed for the registration of birth is open under the present law to grave abuse: at the risk of a fine of £10 there is a possibility of committing murder. Seldom has a child weighing under four pounds at birth been reared. Dr. Tidy suggested that those over two pounds should be medically inspected and officially registered. This accords with the suggested definition of a *child*, allowing for nearly six months' development. Mr. Lowndes summed up the case in 1872: 'let everything requiring burial, whether foetus or abortion, be registered[1].' Some such rule might also be adopted, as the test of criminality in the secret disposition of the bodies of the alleged 'still-born.' In France, for registration purposes a prior date is adopted—that is, at four months' gravidity—when also sex is distinguishable. The fallacious appearance at birth previous to this date, has often half-consoled the expectant parents—for 'all abortions are boys'! The chief grievance of Henry VIII against his first Queen was that

> 'Her male issue
> Or died where they were made, or shortly after
> This world had air'd them.'

Finally, social and physiological puzzles for the court, occasionally

[1] Sir William Petty in his London Bills of Mortality (1676) 'accounting from the quick conceptions included abortives and still-born in the burials' (Phil. Trans. lii. 48). Bishop Hall says (1648): 'Pleasure dies in the birth, and is not worthy therefore to come into this Bill of Mortality.'

arise in dealing with *monsters*, abnormal products of human conception, graduating from a being having more or less the form, internal and external, of one or more of mankind, to a mere shapeless mass. The homicide of a monster is forbidden (a case is said to have been tried at York, 1812). Fortunately with marked abnormality *viabilité* is rare. Blackstone (after Coke) says 'a monster which hath not the shape of mankind hath no inheritable blood and cannot be heir to any land, it is not capable of inheriting.' To a minor monstrosity it is often difficult to allocate a status, e. g. the political rights of a pseudhermaphrodite. At the other end of this series, in molar and blighted pregnancies, clinical skill and experience in minute pathology is essential, before a product of recent conception can be affirmed, and parental fecundity or chastity can be thereby investigated (*Kitson* v. *Playfair*, March, 1896).

The after-birth is not legally considered as an integral part of a *child*. The much wider civil construction of a *child* is considered later.

II. Birth.

A person's birth is the most important event in his civic existence —when he is 'fairly in the open air' he comes under the king's peace. The instant of nativity is when the last part of the body of the foetus is wholly extruded from the body of the mother. Many cases might be cited. In 1832 Littledale J.: 'the being born must mean that the whole body is brought into the world; and it is not sufficient that the child respires in the progress of the birth' (*R.* v. *Maria Poulton*, 5 C. & P. 329). Parke B. on three occasions, in 1834: 'a child must be actually wholly in the world in a living state to be the subject of a charge of murder; but if it has been wholly born, and is alive, it is not essential that it should have breathed at the time it was killed; as many children are born alive, and yet do not breathe for some time after their birth' (*R.* v. *Eliza Brain*, 6 C. & P. 349); to the Hereford grand jury in 1841: 'the whole body of the child should have come from the body of the parent'; in 1837, 'it should have been wholly produced' (*R.* v. *Ann Crutchley*, 7 C. & P. 814). In the same year Coltman J.: 'the entire child actually born into the world' (*R.* v. *Eliz. Sellis*, 7 C. & P. 850). In 1842 Erskine J.: 'the child had been wholly produced from the body of the prisoner alive' (*R.* v. *Milborough Trilloe*, 2 Moo. 260). In 1845 Erle C. J.: 'in law the birth of the child must be complete' (*R.* v. *Betsey Christopher*, Dorchester Spr. Ass.). In 1872 Willes J.: 'a complete birth of the child apart from the mother' (*R.* v. *Sarah Stokes*, Lancaster Sum. Ass.). Notwithstanding that the cord and the major part of the after-birth are paraphernalia of the foetus,

having developed from the ovum, they are not legally considered as an essential part of the child, and hence, to consummate *birth*, these structures need be neither severed from the child nor expelled from the mother. A misconception of physiology at one time made this doubtful. In *R.* v. *Crutchley* (*sup.*) Parke B. gave as 'my impression . . . the cord need not be severed.' In 1839 Vaughan J. objected to the hesitancy of this *obiter dictum* (*R.* v. *Jane Reeves*, 9 C. & P. 25). In *R.* v. *Trilloe* (*sup.*) Erskine J. continued: 'although the child at the time it was so strangled still remained attached to the mother by the navel-string.' He reserved this ruling, which was later established by the fifteen judges.

While on the one hand this view of *birth* closes the door to the casuist by ignoring partial birth of the child's body, as where, for many seconds, a large-bellied foetus may have only its head and shoulders born, and in such a plight may cry valiantly as soon as the mouth has been delivered; on the other hand the door of defence swings open to counsel who demands positive proof of a sign of life after complete expulsion. Witnesses there are often none, as where mothers either are, like the Jewesses in Egypt, 'lively, and delivered ere the midwife come unto them,' or designedly, for secrecy, seek an unaided solitary travail; in each event *presumptio facti* of the exact natal incidents will be alone afforded. From this solitude proceeds the difficulty in proving neonaticide (infanticide at birth): the inevitable physical test of locality must be met. A dead child is proved to have breathed, but where was it when it breathed? Was it fully born? In tedious and in assisted labours (notably with turning, face-cases, and twins) the foetus may breathe and even cry before partial birth; such a *vagitus vaginalis* is rare, *vagitus uterinus* is very rare—Livy's case where '*Io! Triumphe!*' was the intra-uterine salutation is certainly unique! The possibility of this occasional festinant respiration is well known to judges and counsel, who are indeed apt to mistake it for a probability, while neglecting the proof of the actual separate existence of the foetus afforded by this sign of physiological independence. These children, if not born dead, are frequently partially suffocated before they attain *birth*: they are then truly 'still-born.' In 1835 Gurney B. stopped a case on hearing the medical evidence: 'if the child had died in the birth the lungs might have been inflated' (*R.* v. *Ann Simpson*, Winchester Spr. Ass.). In 1853 Alderson B.: 'a child may breathe before it is separated from the body of the mother—that is, before it is born—and this child may have died before it was born' (*R.* v. *Martha Stevens*, Northampton Sum. Ass.; cf. *R.* v. *Charlotte Grouncell*, 1837, Parke B., Worcester Spr. Ass., and *R.* v. *Sellis*, *R.* v. *Poulton*, *amb. sup.*). The medico-legal importance

of prenatal breathing must not be maximized: as a rule, the children either live after birth or are not brought forth rapidly in the absence of witnesses.

A timely note as to the sex of the child and the exact moment of nativity should be made by the accoucheur. The time of the most reliable clock available should be taken. The actual midnight birthday may be disputed later, as with David Copperfield in fiction and the Duke of Wellington (1769) in fact (cf. *re Goodrich*, L. R. [1904] P. 138). The attendance of a Secretary of State at a royal accouchement recalls the possibility of a feigned delivery or of the introduction of a supposititious child. The depositions taken relative to the birth of the son of King James II illustrate this point (1688, St. Tr.). In the case of twins priority in age pertains to him who is first wholly expelled, as with Tamar's boys: in later references Perez always precedes Zerah (cf. *The male triplets'* case, 1731, Exeter Spr. Ass.).

It is claimed that a birth by Caesarean extraction ranks with one *per vias naturales* (cf. *in re Burrows* [1895] 2 Ch. 497).

III. Live-birth.

In the absence of authority, scientific or statutory, the precise definition of *live-birth* has long vexed students of obstetrical jurisprudence, limited as they are by fixed physiological facts and by judicial dicta progressive with the recognition of those facts, a progress restricted by the terms of the definition of 'murder.' In Criminal Law, with one recent notable exception, the genesis of a life —that is, of the legal personality of a human being—is simultaneous with complete birth; the physiologist declares this incident to be merely the moment of exodus of a surviving foetus, the passage from a prenatal to a postnatal phase. In correlating these and other differing views, judges have at times discredited medical 'suspicions,' 'hypotheses,' and 'opinions.' A remarkable example was *R.* v. *Ellen Sheppard*, where Pigott B. affirmed that a delivered mother might have swooned and so fallen upon and killed her mutilated child (1863, *Hampshire Chronicle*, Dec. 5). The importance of a fixed view of *live-birth* is patent, for quite apart from the theory of jurisprudence, in practice an application most commonly arises in a prosecution where, on a coroner's inquisition, a woman is indicted for and charged with child-slaying. Not until the child is disproved dead-born can live-birth, connoting the common rights of citizenship, be affirmed in court. Unenviable in such a case is the position of the medical witness who can prove live-birth, preferably does he give the truthful though schoolboy answer: 'Not knowing, cannot say.' A secretly delivered foetus of under five months' gestation may be absolutely regarded as lifeless after

birth, and hence not a subject for murder (cf. definition of a *child*). To establish existence as a legal personality 'occular demonstration' of a physiological token of vitality, however curtailed, must be exhibited, after a child is born into the world. The live-born foetus becomes *ipso facto* and for all purposes 'a reasonable creature in being and under the king's peace.' Should the child soon die, someone (often it is not a medical man) must be present and observe both the birth and a subsequent clear vital act; otherwise, there can be no reliable evidence of live-birth, for an expert can here certify few opinions. During the past decade the abundant columns of *The Times* have recorded fifty charges of either neonaticide or concealment of birth. Owing to the usual inability of indirect evidence to prove the reiterated formula: *a postnatal separate and independent existence in law*, acquittal of the former crime and conviction for the latter misdemeanour has most commonly resulted (*R.* v. *Eliz. Wills*, 138 Cent. Cr. Ct. 904). The test phrase is more easily recited than explained, it is at least ambiguous and capable of various interpretations, as also are other terms used in this discussion: still-birth (literally means silent-birth) and asphyxia (literally, pulselessness). (1) From the moment of conception an embryo has a species of psychical individuality; canonical casuists may be left to the discussion of this problem. Forensically, such an aboriginal existence is recognized in certain civil constructions. (2) In 1811 we catch an echo of Blackstone: 'the medical men in their examinations differed as to the time when a foetus may be stated to be quick, that is, when the woman felt the child move within her, and to have a distinct existence' (*R.* v. *Hannah Goldsmith*, 3 Camp. 73). This case recalls the obsolete distinction (copied from the Civil Law) between a conception in a *feme privement enceinte*, and (for criminal purposes) a foetus actually *in esse* and *animax*, that is, quick, within a *feme grosement enceinte* (see the U. S. A. case *Hall* v. *Hancock*, 1834, 15 Pick. 255). The word 'quick' has been transferred to the fact of the mother's pregnancy, thus may be explained the phrase 'quick with quick child.' Apart from vestiges of Canon Law, the procuring of abortion is rather a grievous battery upon the mother than a felonious attempt upon the life of the venter. John Selden (1647), however, commenting on Fleta (lib. i. c. 23), says: acting 'in such sort as to procure abortion, or non-conception after the foetus shall have been already formed and endowed with life, is, by law, homicide. Also the woman doeth homicide who . . . shall have destroyed her animate child in her womb.' A similar view is found in 43 Geo. III. c. 58, but was abolished by 1 Vict. c. 85, s. 6 (cf. Coke, Hale, and Hawk. *Of Murder*). (3) When, at the end of pregnancy, 'the bundle of life' is unbound,

the mother and foetus becoming organically separate, there is a disruption of the functional unity between the womb and the after-birth. The foetal parasitism, or more correctly the symbiosis between parent and child, sometimes ceases prior to complete birth: there is then a brief intra-natal period, when the relations of the foetus pass from contact to status. (4) Lastly, and this is the common judicial, in contrast with the third or physiological view, 'the separate existence' of a child as a legal person refers to the topical relations of the maternal and foetal bodies, it can only commence simultaneously with the complete expulsion of the living foetus. The technical objection that the delivery is obstetrically 'incomplete,' until the after-birth is expelled, has no validity. This judicial view of live-birth is assumed in the following adverse criticisms. After an unusually severe epidemic of infanticide, Report C. P. (rec. 15) ran: 'no proof that the child was completely born alive should be required'; Report H. advised: 'evidence of complete separation of the child from the mother, that is, of complete live-birth, should not be required for conviction; it should be held sufficient that the medical or other evidence prove that the child was living during birth and that it died from violence or neglect.' Following these commissions, abortive Infanticide Bills were introduced in 1867 and 1874. When later, the registration of still-births was under keen discussion, Return S. stated that in England, apart from abortion, 'the killing of a child in the act of birth and before it is fully born is not an offence by the present law.'

Many judicial statements may be cited as to the nature of the test of the consummation of live-birth. Repeatedly is the proof of 'independence' of either 'existence' or 'circulation' insisted upon, seldom is that condition defined, even parenthetically. In *R.* v. *Poulton* (*sup.*): 'whether the child was born alive or not depends upon the evidence of the medical man.' In 1863 Williams J.: 'the child must be completely born into the world and have an existence independently of' the mother (*R.* v. *Caroline Burns*, 57 Cent. Cr. Ct. 585). In 1851 Patteson J.: 'whether the child was born alive and had a distinct and separate existence from the mother and then the prisoner killed it by strangulation' (*R.* v. *Emma Taylor*, Worcester Spr. Ass.). Mr. (now Justice) Wright in his draft Jamaica Criminal Code (1877) advised (s. 128 and note on p. 107): for live-birth 'it is not necessary either that a circulation of blood independent of the mother's circulation should have commenced in the child, or that the child should have breathed.' There are, however, many statements (notably one by himself) which illustrate the balancing of the judicial view of the test of postnatal 'independence' between, as criteria, (*a*) the performance of the lung-functions, which of course

are logically subsequent to the alternative test, (*b*) the essential and continued beating of the child's heart, that is, where the foetus is of more than five months' development. In 1863, Byles J.: 'medical evidence is required to show whether a child breathed after it was entirely born, and whether the act of violence which caused its death was applied to it while so breathing' (*R.* v. *Ann Jenks*, Hereford Sum. Ass.). In 1874, Lord Esher (then Brett J.) afforded a comprehensive definition: 'a child is born alive when it exists as a live child, breathing, and living by reason of breathing through its own lungs alone, without deriving any of its living or power of living by or through any connexion with its mother' (*R.* v. *Emma Handley*, 13 Cox C. C. 79). In 1833, Parke J.: 'the child might breathe before it was born, but its having breathed is not sufficiently life to make the killing of the child murder; there must have been an independent circulation in the child, or the child could not be considered as alive for this purpose'; this trace of an apparently obsolete physiology is found in *R.* v. *Richard Enoch & Mary Pulley* (5 C. & P. 539). In 1841, Gurney B.: 'I entirely concur in the opinion of Baron Parke, as expressed in the case of *Rex* v. *Enoch*' (*R.* v. *Ann, Mary, & Geo. Wright*, 9 C. & P. 754). In *R.* v. *Trilloe* (*sup.*): 'while it had, according to the evidence of the surgeon, an independent circulation of its own.' In 1861 Stuart V. C., in *Brock* v. *Kellock* (*sup.*), was held correct in ruling 'a continuation of circulation after entire birth,' sworn to by the accoucheur who felt the birthcord pulsating, was proof of the performance of one clear vital function and consequently of live-birth. In 1863 Blackburn J.: 'an independent existence—that it should be completely born and have an independent circulation' (*R.* v. *Sarah Smith*, Durham Sum. Ass. charge to grand jury). In conformity with twentieth-century advance Mr. Justice Wright is correctly reported: 'the true test of separate existence in the theory of the law, whatever it may be in medical science, is the answer to the question, Whether the child was carrying on its being without the help of the mother's circulation? If Yes! then it had a separate existence, even though it might not be fully born. If No! it had no such separate legal existence' (*R.* v. *Mary Pritchard*, 1901, Shrewsbury Spr. Ass., *The Times*). Mr. Justice Wills has subsequently restated the older 'very unsatisfactory' views of 'separate existence in the legal sense' which 'enable women to escape punishment on account of a pure technicality which is contrary to medical knowledge on this point' (*R.* v. *Eliz. Bradley*, 1903, Chester Sum. Ass.). Assuming the general adoption of Mr. Justice Wright's ruling, legal theory will be more consonant both with physiological fact and the above-quoted Reports; but for the amelioration of the legal proof of live-

birth little will be gained by the correction *per se*, for there is no known physical means of determining, at what instant the foetal and parental circulations are so dissociated, as to allow the child to commence such a separate legal existence. This dissociation may precede birth; it is usually postnatal: following the establishment of respiration, the ligature of the cord or the separation of the after-birth from the womb. Live-birth must as heretofore be directly witnessed. The most that the hundred and more medical men, who have been called to the Bar, have been able to do in this matter is to probe the postnatal criteria, respiration or circulation, with exceptional cases. Actual and theoretical occurrences may be formulated: where a child is born with 'a caul' covering the mouth and nostrils, or, as in Hoffmann's case, where report delivered a woman of 'a leg of mutton' (the membranes being intact), movements of respiration will be ineffectual until the veil is removed: Is the child live-born? A parturient woman seeks delivery in a bath, deliberately bringing forth her babe into a watery grave, for at most, prior to the cessation of the heart's action, the child will make a few gasps, which may indeed succeed in filling the bronchi and stomach with water: it is physiologically 'still-born.' If it is considered dead-born, she has not committed homicide, but if the postnatal continuance of the circulation is alone the test of live-birth, she is a murderess; as also, on the same grounds, would one, who burked the nascent mouth and nostrils of a newborn child, be held to have killed it (*R.* v. *Susan Hyde*, 1821, Old Bailey S. 274). What is the status of an unborn foetus within a woman at term who is met by sudden death? It may survive for over an hour. All these children die without 'expiring.'

Notwithstanding the legal view of separate existence, there is little doubt that in general medical practice still-birth is regarded as dead-birth; breathing is taken as the rough test of live-birth. There are few published confessions, but it may be safely stated of medical men, that it is more life and fuller that they want. The following admittedly expert opinions were elicited in affidavits produced in *Brock* v. *Kellock* (30 L. J., Ch. 500). Twenty years before the action, the widow of a medical man, after a severe labour, was delivered of her (posthumous by eight months) firstborn, which forthwith died. It was neither baptized nor registered as a birth. Live-birth was successfully claimed. Dr. Robert Lee, F.R.S.: 'It is the universal practice to certify that a child is born dead unless it breathes after birth.' Dr. Francis Ramsbotham: 'Every medical man would certify to the still-birth of any child that did not attempt to respire, and had not respired, after birth.' Dr. Tyler Smith, F.R.S.: 'If a child's heart should beat forcibly for many minutes, if it

gasped, and performed the movements of respiration again and again, yet if it died within a few minutes after birth, medical men would consider it still-born, and certify accordingly.' But Dr. Swaine Taylor, F.R.S., whose obstetrical experience was presumably not extensive and whose view the Court adopted, wrote in a letter: 'We should not affirm that a child is dead in law, until it is completely dead in a physiological sense, and all vital actions have ceased.' In 1901 for issuing a false declaration relative to a premature weakling who survived but a few hours, the medical adviser was censured for 'gross carelessness' (*R.* v. *Jones & James*, Sheffield C. S., Jan. 11). Friends of the mother may strive to seduce the accoucheur from the truth of live-birth, to veil unchastity, and to protect their own pockets, by declaiming of feeble gaspings: 'It's only wind, Doctor!' (*R.* v. *Mrs. Lunn*, *The Times*, 17 Ap. 1901).

IV. The Proof of Live-birth.

What evidence will rebut the presumption of dead-birth by proving legal live-birth? Report C. C. advised that a presumption of live-birth should again prevail, so that a woman found with a dead child, concealed or not, would be held guilty of its death, 'unless she proves that such death was not caused either by such neglect or by any wrongful act to which she was a party' (ss. 185, 186). Until the adoption of this view, life after birth must have been exhibited by the child, both in civil and in criminal cases, where the alternative for decision is, Was this foetus born dead? or, Is this child deceased? To support a charge of neonaticide, the prosecution, without any involuntary aid from the accused, must establish the fact of live-birth. The longer the child has lived the easier becomes this task: *nec silet Mors*.

A. Circumstantial evidence, medical or moral, being commonly alone available, will be first considered. After several days of life, the vital tokens notable by a skilled eye are manifold. The arched chest and the conditions of the inflated lungs; the impervious vessels of the withered cord stump; the decadence, functional and organic, of the special foetal cardio-vascular apparatus; the contents of the digestive tract and more indirectly the condition of the layette, may all indicate brief survival when actual movements and cries were unwitnessed by a third person. Should the foetus die while being secretly introduced to the world, or should the child succumb very soon after such introduction, great difficulty arises in efficiently proving its live-birth. By *post mortem* examination alone it is almost impossible to furnish skilled evidence of a fleeting postnatal life—a fatal admission early extracted from the medical witness by defending counsel. The child may have

lived and moved and had its separate being, but in the absence of an eye- or ear-witness, though the chain of circumstantial testimony of live-birth may be lengthy, the forging of the links will be weak. The foetus may have been born macerated or it may speedily decompose. 'A hidden untimely birth' may obviously have been unable to sustain a separate existence. The body, when dissected, may display no abnormality nor casual mortal sign, or marks of violence may be exhibited, extensive in distribution and in degree. 'No one flogs a dead horse,' and such signs are scarcely compatible with *post mortem* infliction. The moulding of the head, the site and contamination of injuries, the length of the birthcord and even finger-prints may be suggestive. The birthcord may be snapped or cut and possibly tied. The association between a large loss of foetal blood (with some nucleated red cells) and a postnatally active heart is very noteworthy. Live-birth is usually then supported by signs of inspiration. Foetal blood may have trickled from a wound and collected into a pool, as where, with a cut but untied cord, respiration has been obstructed. The projected foetal blood may have jetted drops over the body or elsewhere. Air may have been aspired into the circulation (cf. *R.* v. *Emma Pitt*, Dorchester Sum. Ass. 1869). The vaginal contents, water or local ashes may have been inhaled or swallowed during suffocation (*R.* v. *Mary Hodgson*, 1872, Lancaster Sum. Ass.). Possibly no preparations were made to welcome and to succour the unwashed new-comer, whose designed suppression by exposure to cold and starvation is thus presumable (cf. Ezekiel xvi. 4). In 1830 Park J. held that a mother, having both prepared baby-linen and sent for a surgeon's aid, thereby disproved the alleged intention to conceal the birth (*R.* v. *Sarah Higley*, 4 C. & P. 366). *The Worcester Herald* thus reports Lord Esher in *R.* v. *Handley* (1874, *sup.*): 'where a woman without any definite intention of concealing the fact that a child has been born, still for shame or selfishness determines that she alone shall be present at the birth of the child, and afterwards the child dies by reason of her wicked want of skill or negligence, she is guilty of manslaughter.' With this ruling may be compared the *Harlot's* case (1360, Cromp. Inst. 24) and *R.* v. *Ellen Middleship*, where a child was born into and smothered in privy-ashes (1850, 5 Cox C. C. 275). In 1860 Cockburn C. J. had dissented from this view of homicide by omission or reckless neglect (*R.* v. *Maria Knights*, 2 F. & F. 46); its harshness has from time to time been commented on by the Bench, who would however not rule in accordance with the sixth article of the New Decalogue:

> 'Thou shalt not kill—but need'st not strive
> Officiously to keep alive.'

Indirect medical methods of proving the fact of live-birth are usually deficient, where the mother has travailed in secret and the child has survived but a short time. Moral evidence must be associated with medical testimony in cases of suspected neonaticide. Remembering the great attention many married women claim in the hour of Nature's sorrow, it is not surprising that unattended labours, among the unwedded of the lower orders, are often assumed to come to grief. The physical and mental condition and the position of the expectant mother must be considered. Seldom does a Hetty Sorrel appreciate such *ein seliger Zustand*. A young spinster, usually, she has probably during the preceding half-year cunningly concealed her pregnancy—in Scottish law an offence *per se*, noted in 'the proof' of Effie Deans. Having cautiously applied for relief, then having tried and failed to 'remove the obstruction,' if not by more forcible means, at least by swallowing boxes of pills labelled *On no account to be taken by ladies desirous of becoming mothers*, she fearfully awaits a secret, solitary, unaided, and possibly precipitate delivery. The great pain and peril of childbirth, the premonitions and advent of which are a new and terrible experience, lead often to witless rather than wilful conduct on her part. Should she have coolly planned the fate of her child, she may perhaps escape detection. Such design, we are assured, is rare, though some half-dozen neonates appear annually at the Barking Sewage Outfall. Cases of premeditated infanticide, in order to avoid the burden of support, are usually not at birth. Such a murder led to the last execution of the capital sentence for this crime in England: a wife had poisoned with arsenic her monthling babe, ten others had been successively buried at about the same age (*R.* v. *Rebecca Smith*, 1849, Cresswell J., Devizes Sum. Ass.). The last capital sentence reported is *R.* v. *Eliz. Davies* (1903, Bruce J., Chester Wnt. Ass.). The motive occasionally is quasi-meritorious: to screen the husband, a deserter (*R.* v. *Stewart*, 1786, Burn. Cr. L. of S. 572). Returning to the common cases, rather from ignorance, inability or neglect, the woman commits a rash or occasionally malicious act in efforts, as frantic as inexpert, at self-delivery during or self-protection after the live-birth; or she may omit an essential 'first aid' to her newborn child. To maintain the secret of her pitiable plight, even without conscious personal malice towards her offspring, she may stifle as well her maternal instinct as the continuance of shrill pipings, which would announce to the world, at once her private shame and the lively arrival of her hapless babe. Then desiring to cloak the deed or to retain her reputation for chastity, pondering perhaps as an epitaph: 'Good is the grave, but better far not to have been born,' she proceeds

secretly to dispose of the body when, often erroneously, she thinks her offspring dead. Little knows and, indeed, careless is she of this misdemeanour, and still less she knows of the learned disputes among medical jurists as to whether her child was 'legally born alive,' before it was thus neglected, silenced, or put away. Such questions she may first hear discussed by the coroner, should she care to attend the inquisition upon her discovered child. His jury, according to their 'skill and knowledge,' forbidden a verdict *Not proven*, and in the absence of the mother's voluntary confession and of other evidence of neonatal vitality offered by one actually present at the birth, will return *Still-birth* as the cause of death, unless some obvious *post mortem* signs point to the establishment of efficient respiration, when *death owing to the lack of medical aid*, passive *manslaughter*, or active *murder* will be returned. The guilt of murder is as a rule qualified, by a declaration of a transient mania or frenzy, brought out by the shame and birthpangs (*R.* v. *Sarah Lancastell*, 1863, Crompton J., Cardiff Wnt. Ass.; *H. M. Adv.* v. *Miss Abercrombie*, 33 Scot. L. R. 581). The deliberate, premeditated act of the puerperal mother is unwillingly credited by those who ignore the deterrent object of punishment. Even with ample evidence of unqualified felonious homicide, as in the twenty-two capital sentences for infanticide recorded from 1884 to 1892, the subsequent forensic history of the case makes 'the black cap a stage trick' (Keating J.). This impressive ceremonial is omitted at discretion, for within the memory of living man, no execution for neonaticide has taken place in England. Report C. P. and later Sir J. F. Stephen (who gave evidence before that commission), pleaded for a limited discretion to be vested in judges when dealing with those homicide cases, in which penal servitude invariably replaces the awful sentence for such murders. Such a course is the only practical solution of the dilemma: either to make light of homicide or to deal too severely with sufficiently punished 'first and last time' miserable offenders.

Lord Ellenborough's Act was passed in order to impose some sanction upon those who secretly disposed of the newly born bastard. Then, as now, a jury of men, in origin witnesses to the mental and moral character of the accused, being more charitable than medico-legal creeds warrant, would seldom convict for neonaticide—a fact not wholly to be regretted, for enforcing this article of a Draconian code would doubtless increase the trade of the Mrs. Dyer tribe. A positive rebuttal of the presumption of dead-birth being demanded in vain, for we have seen that indirect proof of live-birth precedent to speedy death is of a nature practically impossible to medical science, the case is either completed by

the coroner, or a person (usually the mother) is charged at the Assizes under the Act (or rather under the Consolidation Act, 24 & 25 Vict. c. 100, s. 60) with the misdemeanour of secretly disposing of the corpse, in the endeavour to conceal the child's birth from the world. The Act also allows an alternative verdict on an indictment for infanticide: the jury acquitting of the capital charge may convict for attempted concealment of birth. In Report C. P. Bramwell B. stigmatized this procedure as 'a sort of contrivance by which women are now acquitted.' The gist of the misdemeanour is the secret disposition of the corpse, which 'every person' aids and abets at his peril; the husband (*R.* v. *Walter Morgan*, 1899, Guildford Sum. Ass.; *R.* v. *Mr. & Mrs. Dawes*, 1894, Lewes Sum. Ass.), an advising and agent friend, or indeed the medical adviser (*R.* v. *Sarah Gillman & Chas. Newman*, 1878, Gloucester Sum. Ass.). The plea that the hiding was but temporary is unavailing (*sed qu. R.* v. *Sarah Opie*, 1860, Martin B., 8 Cox C. C. 332). Although since Lord Lansdowne's Act (9 Geo. IV. c. 31, s. 14) live-birth prior to the concealment need not be proved, a dead body must be produced before medical evidence is possible: the hidden corpse establishes the *corpus delicti*. A woman, whose pregnancy and delivery are medically proved, cannot be called upon to account for the child (*R.* v. *Bate*, 1809, Warwick Sum. Ass.; *R.* v. *Charles Angus*, 1808, Lancaster Sum. Ass.), unless evidence 'affiliates' the child exhibited to her (*R.* v. *Mary Williams*, 1871, 11 Cox C. C. 684), and shows that it is dead (*R.* v. *Mary Perkins*, 1830, Carlisle Spr. Ass.; *R.* v. *Hannah Hopkins*, 1838, 8 C. & P. 591; *R.* v. *Harriet Rudge*, 1857, Hereford Sum. Ass.; *R.* v. *Emma Bate et al.*, 11 Cox C. C. 686, where the facts were very similar to *R.* v. *Berriman*, *sup.*). The goodly child Moses would not have been sufficient evidence to convict Amram, Jochebed, or Miriam, who, when evil entreated so to do, characteristically declined 'to cast out their babe to the end that he might not live': for the discovery of a corpse alone sustains the charge (*R.* v. *Jane May*, 10 Cox C. C. 448; *R.* v. *Andrew Horne*, 1759, Nottingham Wnt. Ass.). A magistrate cannot authorize the physical examination of an unwilling suspect (*Annie Agnew* v. *Jobson et al.*, 13 Cox C. C. 625; Elizabeth Canning in 1754 refused a bed prepared for her in St. Bartholomew's Hospital). In 1863 Crompton J. strongly disapproved of the practice of indicting persons for murder in cases which, at most, amounted to the statutory misdemeanour of concealment of birth, especially where there had been no investigation before the magistrates, and the only preliminary account of the evidence was the medical deposition taken on the general inquiry, in the usual absence of the accused, before the coroner, as to the cause of the

child's death (*R.* v. *Emma Ingram*, Worcester Wnt. Ass.). Until the punishment for neonaticide is assimilated to that for procuring abortion, or until child-slaying becomes an offence *sui generis*, the more lenient retreat will be commonly effected, and the prosecution, often at the instigation of the Bench, will either abstain from offering evidence (*R.* v. *Eliz. Wills*, *sup.*) or abandon the primary charge. 'Human nature is the same in all the professions.'

Comparatively rare are civil actions which call for a claimant's proof of live-birth to rebut the negative presumption. Occasionally a medical certificate of live-birth may be required for a Birth Insurance Society, for compensation payable to a posthumous child, or in connexion with an insurance policy at Lloyd's against the birth either of twins, or of issue, when the mother is presumably beyond the procreative age referred to in the rubric of the Marriage Service. Excluding such curiosities, the claim is usually asserted some years subsequently to the brief natal event in dispute: its witnesses are then scattered. The direct evidence of an ephemeral postnatal life in being is often vague, and only perhaps obtainable from the long memory of a now ancient midwife or other party (including the mother) present at the birth, or from the case-books of a deceased accoucheur (who, unwisely, has not ordered their immediate destruction by his executors). Collateral facts may be relied upon in indirect support or denial of the propounded live-birth: the maturity of the child and the means adopted in striving to resuscitate a weakling may be recalled, especially if they 'talked obstetrics when the little stranger came.' Canonical paedobaptism may or may not have been administered and recorded. Discovery of certificates of birth, death, or still-birth may be called for in vain (*Llewellyn* v. *Gardiner*, 1854, *Stafford Advertiser*, March 25, retried 1856 Stafford Sum. Ass. No direct medical evidence was given). The fact of live-birth may be assumed from its implied recognition by reputation among relatives (*Jones* v. *Ricketts*, 7 L. T. R. 43). Since descent is now, by statute, traced from the purchaser, *possessio fratris* is obsolete, but there still remain as civil occasions when positive proof of live-birth is all-important, (1) sporadic cases depending upon the construction of terms in documents, (2) the widower's tenancy by the curtesy of unsettled property, as to which his wife was actually seised but died intestate. This *jus mariti* rarely arises. It is unaltered by the 'Wives' Charter of 1882' (*Hope* v. *Hope*, [1892] 2 Ch. 336; cf. *Eager* v. *Furnivall*, 17 Ch. D. 115). A notable provision is that a child, capable of inheriting, must be born alive at any period during the coverture, so that the birth of Benjamin would have sufficed, *caeteris paribus*, to establish the con-

tingency. An estate did not vest in the widower (cited in *Paine's* case, 1587) where a living child was produced by typical Caesarean section (the only form then known). Coke also states that the land descended to such a child while yet in the womb (8th Report). 'Separate existence' of the foetus commences in fact simultaneously with the somatic death of the mother: the point might arise in a survivorship claim. Children have thriven who were thus tardily but skilfully extracted after the sudden death of the mother: an ancestor of Julius Caesar, Scipio Africanus, and Manilius (but not Edward VI) are historical; Bacchus, Aesculapius, and Macduff adorn the myths. Under Ethelbert there was a *jus viduae*: 'if she bear a quick child, let her have half the husband's property, if he die first' (doom 78). Posthumous children, although neither begotten nor born during the span of a wedlock, may be legitimate.

B. Apart from circumstantial evidence, what is the exact nature of the overt act which must be exhibited to afford proof of live-birth, in the theory of the law and in the practice of medicine? Crying, breathing, pulsations, muscular contractions, 'motion, stirring and the like,' have each in turn been demanded and may here be reduced to their biological significance. Bichat regarded life as 'the resistance to death.' Death results from the permanent cessation of the heart's action—literal 'asystolic asphyxia,' with consequent stagnation of the unpurified blood: 'for the blood is the life.' The logical postnatal life-test, in civil and in criminal cases alike, is reduced to an examination of the organs concerned with the circulation of the blood. 'A man's life is an appendix to his heart.' Muscular activity, usually rhythmical and in mammals needing a constant, free, pure blood-supply, is the visible sign of the moving creature that hath life. Most neonatal movements are relative either to the circulatory, or, so long as that is efficient, to the respiratory function. The belief that the breath of life inspires the living soul, is as ancient as Adam and as modern as to-day's medical practice. The broad facts of the circulation of the blood, and notably the fact that the child's cardio-vascular system perpetuates a very similar foetal condition, have been known for less than three centuries and properly appreciated but for one. The embryo, within a month of conception, has as separate and self-contained circulatory mechanism as has the chick within its shell; the embryonic heart, from the earliest throbs of the *punctum saliens*, has maintained the foetal blood-stream, which at no stage is concurrent nor directly communicating by conduit pipes with the maternal blood-stream.

There is no haemostatical continuity between the uterine and

foetal systems, a fact proved by comparative anatomy, injection experiments and the microscope. To this extent, apart from the Civil Law, My Uncle Toby was wrong in asserting: 'there must certainly have been some sort of consanguinity betwixt the Duchess of Suffolk and her son.' These anatomical facts many legal dicta do not assume. The vulgar error is seen in 'Phisition' Raynalde's *Byrth Mankind* (1545): 'so that no doubt the blood is carried through the Navel-vein, from the veins of the mother's Matrix, into the liver of the child . . . through these arteries lively spirit and fresh Aire is derived out of the mother into the child.' James Drake, M.D. defended a similar view before the Royal Society in 1705; he described 'a sort of *epicycle* to the main circulation in the mother.' In 1688 Queen Mary d'Este is reported in the State Trials to have exclaimed after the birth of her prince—'O Lord! I don't hear the child cry! . . . Pray don't part the child!' the deposition continues, 'thinking it dangerous to herself.'

The after-birth, while organically attached to the womb, functionates as lungs, stomach, and kidneys to the foetus, whose own corresponding organs remain practically inactive before birth. The site of the uterine attachment of the after-birth, where these activities are forestalled, is the seat of mutual osmotic and filtration exchanges, but not of reciprocal blood currents, between mother and foetus: each has a quite distinct circulation of its own, sustained by its respective heart. When by uterine contractions, the after-birth is detached from its uterine site—an event occasionally precedent to complete birth—the foetus attains a separate physiological existence. It is then left wholly dependent upon its own vital organs and its intrinsic economic resources. Being once independent of the mother, it can receive no further prenatal assistance from her, other than passive physical protection and active molar propulsion.

Although slight but regular instinctive movements of the thoracic walls, are stated to occur in the enwombed foetus, breathing as a function is quite novel. It is called for by the actual or functional detachment of the after-birth from the womb. It indicates vital independence. No longer can reliance be placed on the parental blood-stream for indirect foetal sustenance. *Le besoin de respirer* evokes the first breath of life. Reflex or automatic attempts to exercise the respiratory muscular apparatus are initiated under this 'stimulus of necessity.' So is normally prevented the stoppage of supplies to, and the accumulation of effete products in, the child's system. Efforts to breathe may be absent or exaggerated, they may be ineffectual because untimely, the head may be as yet undelivered or the face, though born, may be covered.

The foetal blood which formerly coursed through the after-birth,

entering and leaving by way of the birthcord, is somewhat gradually diverted and streams through the tissues of the child's inflated lungs. At birth, prior to the establishment of respiration, the rapid tumultuous precordial beatings are very evident to inspection, even in the premature, for the anterior chest wall is then flat and the solid lungs are retroposed. The corresponding pulsating circulation along the cord may continue for many seconds after the expulsion of the child and even of the after-birth; in practice the cord is not severed until this pulse has notably ceased. Within a few minutes of the actual or virtual separation of the after-birth from the womb, the child must be born, or, more correctly, must be able to commence and continue to breathe; otherwise, the blood being vitiated and unrefreshed, the heart will stop and there will be a transit '*aus dem Fötusschlummer in den Todesschlaf, aus dem Amnionshäutchen dieser Welt in das Bahrtuch, das Amnionshäutchen der andern*' (Richter). It is just prior to birth or alternative 'asphyxia' that this living foetus, for some moments, may be organically separate and yet not even partially brought forth. The accoucheur declares it now to enjoy independent life, and fears the injury and infection which any prenatal delay solicits; the jurist declares it not to be 'a human being,' because it is not live-born and therefore it cannot be unlawfully slain. 'It stands between the dead and the living.' Formerly, some medical writers spoke of the pre-respiratory (atelectatic) phase of a child's life in the world as being merely a prolongation of *intra-uterine existence*, as opposed to a later and real *external or extra-uterine life*, commencing with the first inspiration (*Fish* v. *Palmer*[1]; *Brock* v. *Kellock*, *sup.*; *Stout* v. *Killen* tried at Dover, Delaware, May 1875; cf. *The Lancet*, Oct. 26, 1878, and Galen: '*ut vivens omnino spiret et spirans omnino vivat*').

Successful inspiration will result in the fetching of tiny sighs and the uttering of cries: 'the noise of life begins again.' Crying after birth was the Common Law test of live-birth. Later, probably copying Justinian's decree, this test was reduced to a mere item of evidence. In 1537 the justices sitting in Common Bank ruled: 'the crying is but a proof of life'; with quaint pathology Coke adds,

[1] This Exchequer case was tried in 1806 (July 14), the issue being directed from the Equity side of the court. There is no official report. Verbally identical accounts occur in contemporary newspapers, *The Times* is silent. A decade after the birth of a well-formed child, evidence was given that (1) the accoucheur, since deceased, declared the foetus to be living an hour before its birth; (2) he acted, after its birth, as though it was not dead; (3) the two women also present (one since deceased) had commented on 'twice a twitching and tremulous motion of the lips.' Lord Macdonald C. B. put it to the jury: 'Was there any spark of life whatever in the child at its birth or not?' The verdict affirmed a vital *scintillula* sufficient to establish a contingent tenancy by the curtesy.

'for peradventure it may be born dumbe.' In Scottish and in German law the vocal test still holds. With us indeed, *vox et praeterea nihil* is admitted as hearsay evidence, valid as an essential part of the *res gestae* in the birth of an infant 'with no language but a cry.' The Stoics allowed a child to join the ranks of humanity when it had breathed, and to-day French law, while demanding proof of respiration for live-birth, will not register a child as alive, until it has lived for three days. In England the balance of opinion in the recorded cases is unsettled, owing to the more than ambiguous demand of a postnatal 'separate existence in the legal sense.' Taking, however, the persisting function of the child's heart as the logical and legal test of postnatal vitality, the unreliable results of mere *post mortem* proofs of unwitnessed live-birth, where the life soon makes a lethal exit, are explained. Children, apparently dead at the moment of birth, have survived for hours with an almost imperceptible beating of the heart, as the sole evidence of temporarily latent life after birth. So long as the heart is not still and dumb, and until the last flutter of the pulse, there is no departure out of this life. These feebly enlivened babes are at times laid aside as dead, when they are really 'still-born,' as in 1702 was Philip Doddridge, the twentieth child of his mother. Medical men have signed declarations too hastily, for only after vigorous treatment and great delay, have some children cheated death by drawing their first breath—snatched from the grave, perhaps to re-elicit from a modern parent: 'I could not tell whether to rejoice to see mine aborted infant revived.' These cases of suspended animation are comparable with those of maturer days, revived after temporary asphyxia (in its twofold sense). Samuel Johnson, who was christened on his birthday (1709, as were also Joseph Addison, 1672, and King George III, 1738), records: 'I was born almost dead and could not cry for some time.' Isaac Newton (1642, who was as well posthumous as premature), Fontenelle (1657), the Chevalier de St. George (1688), Voltaire (1694), and Lord Lyttelton (1709), were also among the immortals who, during a single century, enjoyed but a precarious entry into life.

From the Births' and Deaths' Registration Act, 1874, and Reports S. & D. (*sup.*) a negative contextual definition of the term '*still-birth*' *in a legal sense*, can alone be extracted, that is, 'not born alive.' Johnson's definition (1755) is of personal interest: 'dead in the birth, born lifeless'; in 1775, however, the Annual Register (p. 99) announces: 'the Recovery of Overlaid and even Still-born Children.' The still-born differs from the dead-born; the former is alive but its intra-uterine apnoea persists (*Fish* v. *Palmer*, *sup.*), the maintenance of the rectal temperature and the possibility of revival

mark it as not defunct. The antithesis between *quick-born* and *still-born*, as meaning postnatally alive or dead respectively, has no strict historical validity. Apparently a still-born child was one that could not cry when born; for in the absence of even a still small voice, it was numbered among the silent dead. Glanvil in 1190 gives the Common Law test of live-birth *clamans et auditus infra quatuor parietes.* In 1300 we find: 'that quick-borne child I have fordon' (*Cursor M.*). In 1330: 'the child ded bornen was' (*King of Tar.*). In 1483 'dede-borne' corresponds with *abortivus.* Cotgrave (1611) gives 'abortive, untimely' as synonyms of 'still-born.' Bishop Hall in 1613 says: 'We begin our life with tears; and therefore our lawyers define life by weeping. If a child were heard to cry, it is lawful proof of his living; else, if he be dead, we say he is still-born.' In Middleton's *Chast Mayd* (1620) Sir Oliver Kix says: 'When the child cries, for if 't should be still-born It doth no good, Sir.' It was 21 Jac. I. c. 27 which, copying a French edict, reversed, for nearly two centuries, the Common Law presumption of the dead-birth of bastards, and in 1628 Coke assumed an impossible cause of muteness (*sup.*). Fuller in 1647 says: 'These still-born babes only breathe, without crying.' In *King Henry IV, Part II* (1598) Shakespeare opposes the term to 'fair birth.' Hollyband (1593) for *mort-né* gives 'a still-borne.' In 1679, the Rev. Robert Foulkes of Ludlow, a noted preacher, was hanged at Tyburn (Jan. 30) for, as he confessed after sentence, 'murdering in Act and Execution' his bastard child; *A true and perfect Relation, &c.* (Brit. Mus.) says: 'he no sooner received it into the world but,' as Anthony Wood (*Diary*) continues, 'being still-borne (as 'tis said) he throw'd it in the privy house.' Such is the suggestive if not exhaustive early history of *Still-birth.*

V. The Status of the Foetus *en ventre sa mère.*

'Children being not yet born, neither having done anything good or bad,' are proverbially innocent, because nonentities. By a fiction a foetus is *pars viscerum matris* or even (Lib. Ass. Pl. 94, 1349) *nec unquam in rerum natura*: a position all but held by the unnamed still-born in the eye of the law to this day. Until recently in England the *jus vitae necisque* over the foetus, in the supposed interest of the mother, was all too readily exercised. John Burns, M.D., in 1811: 'As the caesarean operation is full of danger to the mother, no British physician will perform it, when delivery can, by destruction of the child, be produced *per vias naturales.*' Latterly, economic and humanitarian, if not medico-theological, arguments have prevailed, the right of the potential man and possibly prospec-

tive 'heir' to survive is acknowledged (cf. *King's County Independent*, Feb. 8, 1902).

The cautious medical practitioner obtains moral support, both by consulting with a colleague and by receiving permission to operate, before openly proceeding to 'legitimate abortion' or to therapeutic foeticide and extraction. These operations are technically felonious. Obstetricians, when reducing the bulk of the foetal passenger, to enable it to travel through constricted maternal passages, remember to very carefully destroy the vital nerve-centres *in situ*, thus precluding the emission of an awkward post-natal cry. Return S. enunciates the English Common Law: 'where there is no procuring of abortion, the killing of a child in the act of birth and before it is fully born is not an offence by the present law, although if injuries are inflicted before birth which cause the child's death after birth, the law of murder applies,' notwithstanding the fact that legal personality had not been acquired at the time of the injury (*R.* v. *Joseph Senior*, 1832, 1 Moo. 346; *R.* v. *James Dugan*, 1899, Leicester Wnt. Ass.). A premature child died, attempted abortion having accelerated its birth: 'the mere existence of a possibility that something might have been done to prevent the death, would not render it less murder' (*R.* v. *Ann West*, 2 C. & K. 784; cf. *R.* v. *Miss French*, 13 Cox C. C. 328, and *R.* v. *Handley*, *sup.*). It appears that a mature living foetus, even partially extruded and physiologically 'independent,' may be wilfully prevented from attaining to live-birth with impunity, provided its birth is not thereby hastened. Though the plea of 'necessity' might suffice in such a case, such a plea would probably not screen a 'devilish deed.' In 1863 Blackburn J.: 'If the child has an independent existence, and lives after birth and dies in consequence of wounds wilfully inflicted during delivery and before independent existence, this is enough to constitute murder. . . . I would make it a *substantive* felony for the parent of a child either before or at or during or immediately after the birth, to cause the child to be prevented from being born alive or to die' (*R.* v. *Sarah Smith*, *sup.*). This ruling would strike at such practices, recorded in ancient and modern days, as where midwives, without otherwise interfering with the natal process, have acupunctured the foetus prior to its live-birth. The qualification 'substantive' suggests that already the deed was considered as an offence under the head of a more general felony; in Germany homicide of the partially born is possible. The line of descent might be deliberately diverted by such malpraxis.

The ruling in *R.* v. *Joseph Senior* (*sup.*) has never been extended to endow the unborn foetus with a general right to be born with *mens sana in corpore sano*; nor does Lord Campbell's Fatal Accidents

Act apply, if the newly born succumbs to the effects of a prenatal accident, for it was not then a legal person. A child cannot sustain an action on the ground that it was born either prematurely or deformed ('maternal impressions'), owing to the wrongful act of another (*Dulieu* v. *White*, 85 L. T. 126; *Gorman* v. *Budlong*, 49 Atl. R. 704, R. 1; *Allaire* v. *St. Luke's Hosp.*, 76 Ill. Ap. 441; cf. *Walker* v. *G. N. R. Co.*, 28 L. R. Ir. 69). There is a French case where heavy damages were recovered from a negligent medical deliverer, by whose aid the plaintiff lost an arm as he journeyed into the world. *Qui in utero est pro jam nato habetur, quoties de eo agitur* is, however, a maxim which has its occasional application in England. A murderess 'big with a quick child' will not be executed until it is born; but a recent embryo contingently taking an estate by the civil law, may before it quickens (possibly four months later) be deprived of the contingency and of its life, by the operation of the Criminal Law, owing to the capital offence (formerly the treason or felony) of the mother (cf. *In re Corlass*, 1 Ch. D. 460). The civil status and the proprietary rights of the venter have often been considered. Mr. Justice Buckley has recently learnedly resurveyed the field, and his conclusions have been affirmed: 'The doctrine that a child *en ventre sa mère* must be considered as being born is general, and is to be treated as existing for all purposes other than descent at common law as regards rents during the intermediate period, and is not confined to cases where it is for the advantage of or is immaterial to such child to consider him as being born.' The exception is where, prior to 1833, a tenant to the *praecipe* was rigorously required (*Re Wilmer*, 89 L. T. R. 148). *Long* v. *Blackall* (7 T. R. 100) decided that such an unborn 'life in being' might be the *terminus a quo* in the application of the rule, and the ultimate *terminus ad quem* to which the rule can be strained is a similar period of foetal development. In 1871 Sir R. Phillimore stayed the assessment of damages for homicide by negligence, until the deceased's pregnant widow should be delivered of his live-born child, which was then recompensed (not merely solaced) under Lord Campbell's Act (*The George & Richard*, 20 W. R. 246, but cf. *Seward* v. *The Vera Cruz*, 10 App. Ca. 59; *Blake* v. *M. R. Co.* 18 Q. B. 93). *Sarah Day* v. *Guard. Ass. Co.* (Boston Co. Ct., Feb. 9, 1904) was a case under the Workmen's Compensation Act, 1897 (s. 7, sub-s. 2): here part of the fund was deposited for a 'dependent' unborn child. In 1864 Lord Westbury ruled that the words 'born and living at the time of my decease,' exclude a child unborn at that event, for they did not determine the persons taking, but limited the period of accumulation of a fund (*Blasson* v. *Blasson*, 11 L. T. R. 353; cf. *Re Harvey* [1893] 1 Ch. 567).

The rule in *Wild's* case, as to realty, applies even when there exists at the testator's death an unborn child of the devisee (Kelly C. B. *obiter* in *Roper* v. *Roper*, 37 L. J., C. P. 7). 10 Wm. III. c. 20 decided a moot point an after-born child may take as if born in his father's lifetime, for by the course and order of Nature, he is living at the time of the parent's decease, even should the latter be ignorant of the fact (*In re Burrows* [1895] 2 Ch. 497). Interests vest at the child's live-birth, the rents and profits only commence to accumulate for or through him as from his birthday (*in re Bolton*, 31 Ch. D. 542). There need be no limitation to trustees to preserve the contingent remainder to such a child. 12 Car. II. c. 24 allowed a guardian to be appointed to him. Minor rulings in *Thellusson* v. *Woodford* (4 Ves. 255) were: the foetus may be granted an injunction to stay waste, but only for ten months; he may be appointed an executor able to act on attaining seventeen years. In Somerset House is the will of a Cornishman, one Treffry (1500): 'I bequeath to the byrth being in the belly of Elyn Danyel . . . .' The Regency Act (1 Wm. IV. c. 2) provides for a posthumous prince. The diction of dispositions has led to many rules of construction: 'Issue' means, under the Descent Act (s. 6), 'inheritable child or children,' natural children must be specified; 'if *A* shall not have a child' embraces one as yet unborn (*Pearce* v. *Carrington*, L. R. 8 Ch. 969); 'without issue,' 'leaving no issue,' means having had no issue who have attained a vested interest (in *Treharne* v. *Layton*, L. R. 10 Q. B. 459, a boy lived but a few hours; *In re Jackson*, 13 Ch. D. 189; *In re Hambleton*, 1884, W. N. 157; *In re Booth* [1900] 1 Ch. 768; *Re Cobbold*, 88 L. T. R. 745, C. A.). It appears that in the absence of a special agreement, a child born during a voyage cannot be charged as a passenger.

As to the legal presumption that a woman, be she maid, wife, or widow, is not past an age at which she can procreate and bear children, and the rules governing and arising from such cases, see *In re White* (70 L. J., Ch. 300) and the writer's article on Forensic Physiology in vol. 39 of the *St. Bartholomew's Hospital Reports*.

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