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# NOTES

OF

# MEDICO-LEGAL CASES,

### WITH COMMENTS.

# BY JOHN CRAWFORD, M.D.,

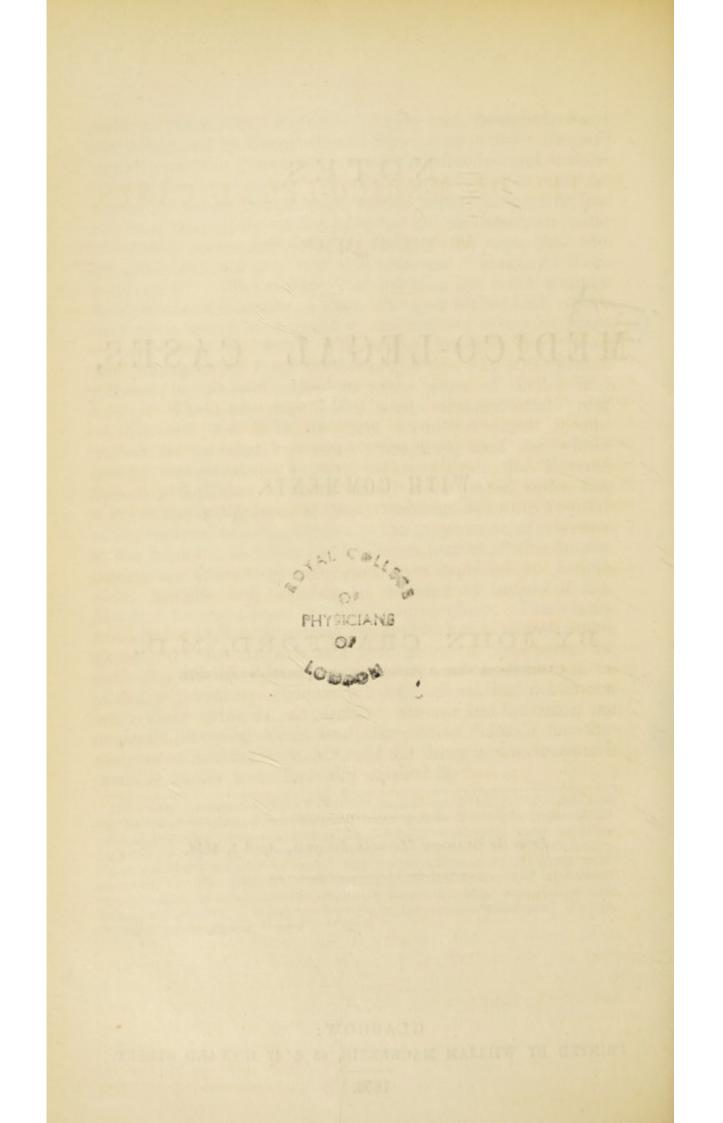
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# NOTES OF MEDICO-LEGAL CASES,

#### WITH COMMENTS.

THE following cases are selected from those which have recently come under my notice officially, as one of the medico-legal reporters appointed by the Sheriff of Lanarkshire. None of them can pretend to the interest which is derived from exciting criminal trials, and indeed only two issued in proceedings before a public court of justice; but they severally present points of considerable interest when viewed in a medico-legal aspect. I append to each, by way of comment, a few remarks, which, though necessarily fragmentary and desultory in their character, may perhaps prove suggestive to the reader.

#### Case I.—Feigned Insanity—Simulation of Fatuity or extreme Imbecility by an individual of somewhat weak mind.

Janet M'Donald, a middle-aged woman, was, in October, 1854, apprehended on a charge of theft. She was accused of having, on four different occasions, stolen from churches in Partick, some bibles and hymn books. The indictment specified the 6th of August, the 27th of the same month, the 10th September, and the 8th and 22d October, all these days being Sundays, as the dates of the several thefts. On the first three occasions she limited her depredations to the theft of a single volume; on the third occasion, emboldened apparently by her previous success, she purloined three volumes; and on her final attempt, when she was detected lingering in the church after the congregation had dispersed, she had abstracted two books. Her detection in this case led to the discovery of the others, and she was committed to prison; and although the articles stolen were of little value, the acts of theft had been so numerous and repeated, that she was indicted for trial at the Circuit Court. She had, among her acquaintances, generally passed as being somewhat silly. She was wretchedly poor, lived with her sister, and contributed little to their common support-the sister earning a scanty subsistence by going out to work, while Janet did little more than the drudgery of the house. In prison, her appearance and conduct induced some of the officials to consider her as imbecile or fatuous; and, in consequence, I was directed to visit her, and report upon her mental condition.

The first impression which her appearance produced on me was certainly in favour of the above view. Her hair had been cut short; her face was very far from intelligent-the countenance being, at a first glance, heavy, meaningless, and stupid; but, on attentive examination, an expression of cunning could be traced in it, replaced at times, but only at times, by a vacant stare, which occasionally looked very much as if it was assumed. On my first examination I attempted to get at her history, putting questions to her as to where she had lived-the length of time she had resided in various localities-her age at the time of her parents' death, &c. To none of these questions could I obtain distinct answers, the invariable reply being "I dinna ken," or "I dinna mind." I alluded to the offence she had committed. In reference to this point also her answers were very indistinct. She professed not to have a clear recollection of what she had done. It struck me, however, as a suspicious circumstance, that while she could recollect nothing else distinctly-while she was not able to remember how many books she had taken, how she had concealed them, or how she had disposed of them, she was very clear and emphatic in asserting, in answer to a question I put, that none of the books had the owners' names written on them. Dr. Gibson, the surgeon to the prison, was present during a part of this interview, and asked her, " if she would like me to take her to the Town's Hospital among the *daft* folk?" She made no particular reply at the time; but this circumstance afforded me, as will be seen, an important clue in my next examination. On the whole, I came away with my mind undecided.

Two days afterwards, I repeated my visit. At first I found her precisely in the state in which she was on the first occasion, not able to remember anything distinctly, or answer any question relative to the past clearly. Suddenly, however, her expression changed, and she said, with much earnestness, "What are you going to do with me ?- are you not going to take me away out of this?" I said-"Why, where can I take you? You don't want me to take you to a poor-house or an asylum, and shut you up with mad people?" To this she replied, "Oh! that is the only place for me; I have never been anything else than daft all my days." "Well," I said, "if that be the case, you must give me some information as to the different parts of the town in which you have lived; for you cannot go to a poor-house or an asylum till we find out what parish you belong to, and you will not tell me anything about that." On this she became all at once a different person, gave a distinct and connected account of what she had previously declared herself unable to remember-specified, with great exactness, the length of time that she had lived in different localities, and mentioned the names of the different proprietors or factors from whom the houses had been rented. Of course, I had at the time no means of testing the truth of these statements, which I have since understood to have been correct; true or false, however, they were evidently no delusions. Not a shadow of delusion, indeed, existed in her mind. For having thus gained her confidence, I no longer found her so reserved. I got a pretty full account of her usual mode of life and avocations, and the conclusion I came to was, that while she was undoubtedly somewhat weak in mind, and had led an idle, good-for-nothing life, she had none of that deficiency of memory which she had at first affected, and perfectly comprehended her position as a criminal, although, as was not unnatural in such an ignorant person, she probably exaggerated the punishment which, if convicted, she would incur.

Four days subsequently, I visited her a third time. I had, on my previous visit, written down in her presence her statements as to her former places of residence. I again interrogated her on that point, and found her answers in all respects tally with her former account. She was, on this occasion, most urgent with me to get her out of prison; but, on the whole, was less disposed to be communicative than in the latter part of the previous interview, —probably because she was beginning to distrust me.

The following is my report on this case :--

#### "GLASGOW, 4th December, 1854.

"I hereby certify that, in accordance with the instructions of William Hart, Esq., Procurator-Fiscal for the Lower Ward of Lanarkshire, I have visited and carefully examined Janet M'Donald, at present a prisoner in the North Prison of Glasgow, on the 28th and 30th ult., and also this day, with the view of ascertaining her mental condition. As the result of these examinations, I am of opinion that the said Janet M'Donald does labour under a certain degree of mental weakness, but not to the extent of being incapacitated from distinguishing between right and wrong; and that, in particular, she is perfectly able to comprehend both the moral character and the legal consequences of the offences with which she stands charged. I am further of opinion, that she is intentionally and designedly endeavouring to exaggerate her mental weakness, especially in regard to deficiency of memory, with the express purpose of escaping punishment, and procuring her transference to a lunatic asylum or a poor-house.

"All which I attest on soul and conscience.

# "JOHN CRAWFORD, M.D."

The prisoner was brought up for trial at the winter circuit. When previously visited in prison by the agent for the poor, she had relapsed into her first assumption of complete imbecility, and nothing could be made of her. When she was placed at the bar, she looked the character which she had assumed pretty well, and most spectators were, I dare say, impressed with the conviction that she was a veritable idiot. The indictment was read, and she was asked in the usual way—" What do you say to this indictment: are you guilty or not guilty?" Her answer-which, to my mind, was strongly corroborative of the opinion I had formed -was, "I dinna ken what guilty is;" and this reply was accompanied with an assumed expression very different from that which her countenance, stupid as it was at the best, wore when she gave me the details I have alluded to. A really fatuous person, or a person actually labouring under such extreme imbecility as this prisoner was counterfeiting, might have answered yes or no, or might have remained silent,-might have laughed, or might have cried, but would not have answered thus. Evidence as to her mental state was taken by the judge (Lord Deas). I read the above report, and adhered to the opinion expressed in it. The officer who had apprehended her, and the witnesses in whose presence her declaration had been emitted, were examined, and his lordship, satisfied that she was a fit subject for trial, or, as it is technically expressed, "competent to plead," ordered a jury to be impanneled. The case was clearly proven, and the prisoner was sentenced to twelve months' imprisonment, the judge adding a significant warning, that if she was brought before the court again, she would find it useless to pretend to be insane.

This case, although not possessing the absorbing interest which attaches to one arising out of an atrocious offence, involving perhaps the heaviest penalty of the law, is not devoid of some circumstances calling for the attention of the medical jurist. To him, indeed, the nature of the offence—unless so far as that is calculated to throw light on the mental condition of the accused —and the magnitude of the appropriate legal penalty, ought to be matters of comparative indifference. However trivial the crime, the insanity of the offender, if that can be established, ought to confer immunity from punishment; and, on the other hand, the plea of insanity ought not to be lightly admitted, however paltry the offence.

In all cases where a question arises as to the state of mind of an accused party, two distinct inquiries present themselves. The first has reference to the accused's mental state at the time the alleged offence was perpetrated; the second, to his condition at the time he is put upon his trial. The medical examiner, in conducting the first, has to be guided by the results of his examination, taken in connection with a certain case of facts put before him; in the second, he must rely upon his own direct observation. The first point is to be decided by the jury on the evidence, \* medical and otherwise, laid before them; the second-involving the competency of the accused to plead to the charge, and his capacity to instruct counsel for his defence-must be decided, as in the above case, by the judge, principally of course on medical evidence, before the case goes to a jury at all. In the instance I have given, the result of my examination left no doubt upon my mind that the prisoner was perfectly able to understand the nature of the crime with which she was charged, and its legal consequences, and that she was as able to instruct counsel for her defence as a person could be who had committed an offence which it was impossible to deny. Her anxiety to escape the consequences of a trial, even by transference to an asylum, showed that she was perfectly cognizant of having done wrong. No doubt an educated person, aware of the extreme difficulty which attends the ultimate liberation of an individual who has been confined as insane in consequence of the decision of a court of justice, would have preferred the definite imprisonment which such a crime as that with which she was charged involves; but such knowledge could not have been expected from an ignorant woman like her.

In regard, again, to the circumstances attending the perpetration of the offence, or rather offences, these were not of a kind to indicate insanity on her part at the time. That a propensity to theft is an occasional symptom of insanity, all medical jurists admit. Phrenological writers have described it as a morbid manifestation of "the faculty of acquisitiveness;" eminent writers on mental disease have designated it by the more sonorous and classical appellation of Cleptomania. It is exhibited in various forms of insanity, and its morbid nature is clearly proved by its being occasionally traceable to causes which have deranged the general health. For example, it has been found in pregnancy-after severe bodily illness which has affected the functions of the nervous system, and after injuries of the head. But, generally speaking, it is only one symptom among others of mental disease, and is found as such in very different mental disorders-a circumstance which suggests a logical objection to the use of the term cleptomania in a scientific classification of these affections, as elevating an incidental symptom to the rank of a specific character. We find this propensity sometimes displayed in the fatuous, the imbecile, and the idiotic. We meet with it in mania, often attending the excitement which precedes the actual paroxysm; and I have repeatedly noticed it thus presenting itself in the case of epileptic lunatics, in whom mania has generally this recurrent character. It is also occasionally observed in moral insanity, along with other perversions of conduct evincing disordered moral perception. Rarely it is found as the result of mental delusion, although a remarkable example was afforded by the case of Jonathan Martin, who, under the influence of religious delusion, set fire to York Minster, and stole the gold fringe and some other ornaments of the choir, in order to furnish himself with proofs that he had obeyed the Divine mandate which he fancied he had received. Unless in such rare cases, the act of theft is generally motiveless, and is to be ascribed to the supervention of the instinctive or impulsive form of insanity upon some of the more common and more generally recognised varieties of mental disease, although occasionally it is not of this motiveless character, and

is clearly referable to a mischievous desire to annoy or injure others. That, however, the propensity in question may be the manifestation of impulsive or instinctive insanity existing alone -not complicating or co-existing with any other form of mental disease, or ingrafted upon any other-that, in short, an individual may be led to commit theft from a mere impulse, the motiveless character of which constitutes the essential and specific feature of the disease-just as others are impelled to perpetrate homicide, or suicide, or arson, without exhibiting any delusion, or betraying any symptoms of mental impairment or deficiency in other respects-the records of legal medicine render probable. But in actual practice the medical jurist ought to be very cautious in accrediting such cases. It is only, it appears to me, where there exist indications in other respects of a departure from the normal state of the mental health (a departure, perhaps, falling short of palpable insanity, but still recognisable), or a visible derangement of the bodily functions, or a strong predisposition to insanity on the part of the individual, from hereditary taint or from previous attacks of an undoubted character, that we should be justified in shielding such cases with the plea of insanity.\*

In all the forms of mental disease, however, very different as these are in their pathological relations, their characters, and their other symptoms, in which this insane propensity to theft exists, it is generally—almost invariably indeed, with the exception of a few doubtful cases of so-called moral insanity—distinguished by the circumstance, that the articles stolen are either of little value, or such as the stealer might have easily procured by legitimate means; or, if they are of value, the purloiner converts them to no use, merely hoarding or secreting them, sometimes throwing them away, or forgetting that he has abstracted them. In general, the

\* I do not mean to deny that there may be cases in which the propensity to theft is the sole appreciable indication of insanity, but I confess to considerable scepticism on the point; and I have very little sympathy with the lady thieves, in whose defence the hypothesis has most frequently been advanced. In such cases the argument usually is, that the person's means and position in life precluded the necessity of stealing. But this reasoning is not always conclusive. Wealth is only a relative term. The fine lady who steps from her carriage into a shop from which she cleverly abstracts a piece of lace, or a few yards of ribbon, or a pair of gloves, may not be altogether the independent personage which the envy of her poorer neighbour pictures. An expensive and self-indulgent taste for finery may have outrun her allowance, however ample. Such a person seems to be in the same position-only from her age less excusable-as the illtrained child, untaught to deny himself anything, and unable-as the English Church Catechism quaintly phrases it-to keep his "hands from picking and stealing." As, in the case of the latter, a judicious use of the rod may be found necessary to enforce the lessons of the Catechism, so, in the case of the former, the exposure in a police court may sharpen the moral perception; and in both cases the punishment may operate beneficially on others. Of course, I mean these remarks to apply only to cases where there exist no other indications of insanity, or any evidence of such derangement of the bodily health, as has, in individuals not otherwise reckoned insane, seemed sometimes to have developed the propensity. act committed under the influence of insanity, whatever the form of insanity may be, is thus distinguishable from the act of a common thief. But in the case of this woman M'Donald, the thefts presented in all respects the characters of ordinary petty larceny. The stolen books found their way to the usual receptacle in such cases—the pawnbroker's shop; and although, of course, the sum thus obtained was a mere trifle, yet, to a person in such abject poverty as she was, it was a sufficient object.

Imbecility, in its minor degrees, is always a difficult subject for the medical jurist to grapple with, in reference to the plea of insanity in criminal cases, for although, in a given instance, the existence of a *certain degree* of mental weakness may be apparent, a question will often arise, whether that is so great as to remove the individual beyond the pale of legal responsibility; but the co-existence of a certain degree of imbecility, with cunning sufficient to simulate mental deficiency much more complete and general, offers a still more difficult problem for solution. It was satisfactory, therefore, that in this case my examination was so decisive in its results; establishing, as it did, not only the undoubted simulation of an impairment of the faculties that did not exist, but also the motive for this simulation, that very motive being of itself conclusive as to the capacity to appreciate moral and legal culpability.

In Marc's invaluable work, De la Fobie considerée dans ses Rapports avec les Questions Medico-judiciaires, will be found a report by Dr. Speth, a German medical jurist, upon a case which presents a considerable analogy to the one I have narrated. The subject of his examination was a female accused of incest. According to the testimony of some parties who had long known her, she had always passed for being weak in mind; and a physician, who had in the first instance been appointed to examine her, had pronounced that she was imbecile to such a degree as to exclude legal responsibility; an opinion which he founded chiefly upon her "remarkably stupid countenance and expression," and her "inability to answer questions coherently or distinctly." On the occasion of Dr. Speth's first examination of this woman, she assumed an extremely silly expression of countenance, and he could obtain from her no answer to the simplest questions he addressed to her, such as, what was her christian name? her age? &c. Suspecting, however, that she was simulating, he told her that he was sorry that her obstinacy would entail much trouble upon her, as she would require to undergo further examinations. After an interval of some days he repeated his visit, and as soon as she entered the room accosted her in a friendly tone, telling her to take a seat, in order that she might not be fatigued, as she was pregnant. Thrown off her guard, or won by the kindness of his manner, she sat down without assuming her former vacant look, answered all the questions that he had put in vain to her before;

and, in particular, was able to give a circumstantial detail of the various places in which she had served, with the different periods of service in each.\*

### Case II.—Laceration of the Spleen from External Violence—No marks of Injury Externally—Death from Shock.

On the afternoon of the 20th of July last, a little girl, aged 18 months, was allowed to stroll in one of the crowded thoroughfares of this city, in charge of her uncle, a boy about 14 years old. Engaged in play with another lad, he neglected the child for a few minutes. She strayed into the middle of the carriage-way, and when his attention was called to her, she was just being knocked down by the second of two carts which were proceeding along the street, the wheel of the last cart passing, as he averred, over her body. The driver of that cart, instead of being in it or at his horse's head, as he ought to have been, was seated in the first cart, chatting with his comrade, but holding the halter attached to his own horse in his hand. The child was immediately carried to her father's house close by, and medical aid was procured, but the surgeon who was called, finding no marks of external violence, except the slight traces afterwards to be mentioned, considered that she was only suffering from the effects of fright. It does not appear from the account which I received from the parents, that there were any symptoms of concussion or stupor, but the little patient vomited incessantly, and next morning she died, about twelve hours after the accident.

On inspecting the body on the 24th July, I found externally merely an abrasion over the right hip joint, and a slight contusion on the right temple. The external surface of the abdomen, as well as the substance and inner surface of the abdominal muscles, were free from any marks of ecchynosis. But the spleen presented, on its inferior border, a laceration about three-quarters of an inch in length, and not more than a quarter of an inch in depth; and in the abdomen there was above an ounce of blood effused, which had evidently escaped from the ruptured organ. There was no other internal injury.

The man who had charge of the second cart was tried before the Sheriff and a jury, on the charge of homicide. At the trial the boy gave his evidence as above, but another witness—who, however, was at a greater distance from the scene of the accident than the boy—deponed that, according to his impression, the wheel did not pass over the body of the child, but that she was knocked over by the *nave*, and fell *outside* the wheel. The prisoner was ably defended, and full advantage taken of this discrepancy in the evidence, which was of material importance, as the indictment expressly bore that the child had been killed in

\* Marc, tome 1, p. 422.

consequence of the wheel passing over the body; and, of course, much stress was laid on the absence of any contusion on or over the belly. In my evidence I stated, that no weight was to be attached to this last circumstance; and further, gave it as my opinion, that the internal lesion could not have been produced by the child's being merely violently thrown to the ground. The jury, however, returned a verdict finding the prisoner guilty of culpable negligence only, thus acquitting him of the charge of homicide, and he was sentenced to a month's imprisonment. The good character which he received, and the facts of his having been perfectly sober, and of the cart having been slowly driven at the time, no doubt had considerable weight with the jury.

But, in a medical point of view, it appears to me that the most interesting features in this case are-the limited nature of the injury, even as regarded the spleen itself, the slight amount of hæmorrhage, and the absence of any trace of inflammation, peritoneal or otherwise. The two last circumstances may be partly explained by the fact, that the child seems never to have rallied from the shock. But the appearance of the laceration was very peculiar. Rupture it could scarcely be called. It was more like a nip, or pinch, as if the spleen at its lower margin had exclusively sustained the force of the compression; and this peculiar character of the injury had doubtless contributed to render the amount of the hæmorrhage much less than is generally found in rupture of the spleen. The injury, in fact, partook largely of the character of a contused wound ; and hence, even in such a vascular organ as the spleen, the effusion of blood was much less than is found in cases where the lesion is of a kind more nearly corresponding to the idea conveyed by the term "rupture."

I have the satisfaction of knowing that the opinions which I expressed at the trial have the high sanction of Dr. A. S. Taylor, to whom I transmitted a notice of the case. In a communication with which he has favoured me, he observes—" I should have given precisely the opinion that you gave. It will, however, be a long time before we shall succeed in persuading a jury, that a wheel can pass over a living body without leaving the marks of a severe bruise."

To those who are conversant with medico-legal literature, or who have had much experience in surgical practice, it may seem superfluous to accumulate proofs in refutation of the popular error referred to; but the following case, which occurred to me very recently, supplies an excellent illustration, and is also well worth citing, from some special points of interest which it presents

## Case III.—Extensive Rupture of the Liver—No External Marks of Violence—Death from Hæmorrhage.

On the 6th of December last, two lads were returning to Glasgow by the Dumbarton road, in charge of a porter's or *hurley* barrow.

The younger, aged thirteen, was seated in the barrow, which otherwise was empty; the elder, seventeen years of age, was pushing it. Half-a-dozen boys came up, and volunteered to draw the barrow. They took hold of two ropes which were attached to it, one of these ropes being considerably longer than the other. Four took hold of the longer rope, two of the shorter. Subsequently, two of the former relinquished their hold, the others continuing to pull. One of these boys was by two or three years younger than the others. He was pulling at the shorter rope, and was nearest to, indeed within a few feet of, the barrow. As the boys pulled, the lad who held the trams of the barrow pushed, or, according to his own account, was hurried along. In descending a slight declivity of the road, the youngest boy, who seems not to have been able to run so fast as the rest, stumbled and fell. Some of the witnesses said that he appeared to have been tripped. There was, at all events, no evidence that he was actually knocked over by the barrow. But all agreed that one of the wheels passed over his body, "near his breast." He got up without assistance, and the lads in charge of the barrow offered to convey him home, an offer which he declined, saying he could walk himself. He sat down on the roadside, but speedily became so ill, that some parties, coming up almost immediately afterwards, had him put into a cart which was passing, and he was taken to his father's house, which was only a short distance from the scene of the accident. He died ten minutes after reaching his home, and about half an hour after the injury. Dr. Paterson of Partick, who was hastily summoned, arrived just in time to find him expiring.

The case was reported to the authorities, and on the Sth December the body was examined, under authority of a warrant from Sheriff Smith, by Dr. Paterson and myself. The following extract from our report gives the particulars of the *post-mortem* examination :—

"The body, which was that of a healthy boy, about nine years of age, presented externally no traces of violence, except a slight abrasion on the back part of right elbow.

"On opening the belly, that cavity was found to contain upwards of a quart of fluid blood, with several large and firm clots. On the upper or convex surface of the liver was a deep rent, semicircular in form, about seven inches in length, and in its middle part nearly extending through the whole thickness of the organ. The other organs of the body were healthy but pale. The structure of the liver was also healthy, but it was drained of blood."

I believe that I am correct in saying, that this remarkable case affords an example of one of the most extensive ruptures of a *healthy* liver from external violence. Ruptures of the liver, according to Dr. Taylor, "seldom extend through the whole of the organ, but consist of fissures varying from one to two inches in depth."\* In this case the liver was nearly cleft in two. When one finger was introduced from above into the deepest part of the rent, and another was pressed against the corresponding part of the concave surface of the organ, only a very thin slice of its substance was found to intervene. Here, too, there could be no doubt as to the nature of the external violence. All the witnesses on precognition were clear as to the wheel having passed over the body of the unfortunate boy, and the fact was admitted in the declaration of the inculpated party himself—the lad who was pushing the barrow. Yet, notwithstanding the terrible extent of the internal injury, there was not the slightest mark of external violence on the surface of the abdomen.

In regard to another point of importance in a medico-legal view-namely, the duration of survivorship after a necessarily mortal injury, even of a kind which might a priori be considered as likely to prove almost instantaneously fatal-this case is highly instructive. Although the injury sustained by the liver was so extreme, and the hæmorrhage so great-much greater than it generally is in cases of rupture of the liver when the vena cava is not involved in the laceration (which was not the case in this instance)-the deceased lived for half an hour. Dr. Taylor indeed says, that after rupture of the liver the individual may survive some hours. But this statement is expressly based on the supposition that (with the exception just mentioned) "ruptures of the liver are not in general attended with any considerable effusion of blood;" and he adds, that should the hæmorrhage be great in consequence of the vena cava being implicated, it is sufficient to cause the instant destruction of life. † The present case may, therefore, be looked upon as somewhat exceptional, both from the enormous hæmorrhage when the cava was not lacerated, and from the length of time that the boy survived, notwithstanding the great quantity of blood effused.

There is, however, little doubt that the blood found effused was not poured out all at once, or simultaneously with the production of the laceration. The boy was described as having, almost immediately after the accident, got up without assistance, and as having, with assistance, walked to the side of the road, where he sat down on a bank, and where he speedily became faint; and the depression of the circulation ensuing as the consequence of the shock and the first loss of blood, and the formation of clots in the laceration, which would be the natural result of that depression, would tend for a brief period to check the further progress of the hæmorrhage.

Finally, this case exhibits an instructive illustration of a principle which ought never to be lost sight of in medico-legal discussions---namely, that the extent of injury sustained by internal

\* Medical Jurisprudence, fifth edition, p. 331. + Or. Cit., p. 332.

organs is by no means always proportionate to the apparent severity of the violence by which that injury has been inflicted. It is notorious that the wheel of a much heavier vehicle, and one much more heavily laden than that which caused this accident, has frequently passed over the abdomen without producing anything like the above amount of internal lesion. In this respect the previous case of laceration of the spleen affords a remarkable contrast to the present. Even in cases where rupture of the liver has been caused by the passage of the wheel of a waggon over the abdomen, or the fall of a ponderous body on the same part, or by the fall of the individual himself from a great elevation, the rupture has rarely been so extensive as in this instance.

The circumstances of this melancholy occurrence formed the subject of a careful examination by the local authorities. A full precognition was taken and duly submitted to Crown counsel, who, however, did not think it necessary to institute proceedings before a criminal court.

#### Case IV.—Poisoning by Sulphuric Acid—Little or none of the Poison taken into the Stomach—Death from Inflammation of the Respiratory Organs.

Mrs. W., a young woman, the wife of a respectable man residing near the Broomielaw, was, on the morning of the 18th of April last, suffering from headache. She sent her mother to a druggist's shop in the neighbourhood for a pennyworth of vinegar, intending to bathe her head with it. The mother was a native of the Highlands, and spoke English somewhat imperfectly, and with a strong Gaelic accent. Whether, speaking in what was to her a foreign language, she asked the person in the shop for vitriol in place of vinegar; or whether, from her indistinct mode of speaking, she was misunderstood, is doubtful; but the unfortunate result was, that a pennyworth of vitriol was given to her. No question was put by the seller as to the purpose for which it was wanted, the article being in request for many purposes-among others, frequently, it would appear in that locality, for cleaning eggs-but he took the precaution of affixing to the phial which she had brought, a label, on which the word vitriol was distinctly printed. The old woman, however, could not read, and, on returning to her daughter's house, gave the phial to another female, who, although she could read, did not look at the label. This woman poured a portion of the liquid, which she supposed to be vinegar, and at which, therefore, she probably did not look particularly, into a cup, and went to bathe the forehead of her friend, who was in bed. Most unfortunately, the latter took a sudden fancy to swallow a mouthful of the vinegar. She took the cup in her hand, and, according to the other woman, seemed to take some of the liquid into her mouth; but instantly spat it out, at least a

great part of it, exclaiming that she was burned. Water was poured down her throat; medical assistance was procured; olive oil was applied to the lips and external parts, and magnesia administered as an antidote. The patient, however, continued to get worse, and next morning, about 22 hours after the fatal mistake, she died.

An inspection of the body, under warrant of the sheriff, was made, about 48 hours after death, by Dr. Corbett and myself. Externally, the appearances attracting attention were the following: A brown streak or stain, exactly of the colour which sulphuric acid produces upon the skin, ran downwards from each of the angles of the mouth to the chin; and over the right breast was a patch of the same colour, the skin thus stained having a charred and hardened look. The lips and gums were swollen and soft, and had evidently been affected with violent inflammation, which, in spots, had made considerable progress towards gangrene. On looking into the mouth, its whole lining was found corroded, softened, and of a greyish colour: the surface of the tongue was also corroded, softened, and whitish. On further examination, the pharynx, especially its upper part, presented nearly the same appearance as the mouth; but of neither inflammation nor corrosion was there any trace in the œsophagus or the stomach. Considerable inflammation, but no distinct cedema surrounded the glottis; the lining of the larynx and trachea was highly injected; that of the large bronchial tubes even more so, and both lungs presented throughout the well-known appearances of the first stage of pneumonia fully developed. The stomach and the stained patches of skin were removed for analysis, if that should be required; but the facts of the case being so plain, and criminality not being legally imputable, no chemical examination was ordered.

This case is one of those which are continually occurring, to illustrate the indifference on the part of the legislature and people of this country to the importance of imposing restrictions on the sale of poisons. No doubt the party who sold the vitriol did only what is done every day, and what the law permitted him to do. But surely the mere labelling a powerful poison by its popular name, when it is sold to a person who may not be able to read, or who, even if able to read, may be too ignorant, or too young to understand the label, or too hurried, or too careless to read it, affords no adequate precaution against mistakes, and, certainly, is no security at all against the wilful use of the poison, either for suicide or homicide. It is not too much to affirm, that in scarcely any other country in Europe, than the United Kingdom, could such a mistake have been made. In other countries, even in some which we are in the habit of regarding as far inferiorly governed to our own, the law interposes such precautions and formalities, in regard to such a purchase as that which led to this

woman's death, as would have been almost certain to have cleared up the mistake, and prevented the catastrophe.

In a toxicological point of view, the main interest of the case consists in the effects of the poison being confined exclusively to the mouth, pharynx, respiratory passages, and lungs. Whatever may have been the sufferings which the severe injury done to the two first-named parts may have produced, or the dangers which might have ultimately resulted therefrom, undoubtedly death was caused by the acute laryngitis, bronchitis, and pneumonia which were induced. It is very doubtful if a single drop of the poison reached the stomach. Yet Mr. Johnston, the surgeon who was first called to the case, and who saw the woman shortly after the accident, informs me that there was not only retching, but actual vomiting, the vomited matters containing dark coagulated mucus, and even what appeared to be shreds of mucous membrane. Certainly, these symptoms, which the autopsy proves to have resulted merely from the injury done to the fauces and pharynx, would, during life, have naturally led to the conclusion that some, at least, of the poison had been actually swallowed. A writer, who has treated specially of affections and injuries of the respiratory passages, has observed that "it is a singular fact, that the larynx suffers injury from the swallowing of any of the strong acids only when they are taken accidentally in mistake for some other liquid. In cases of suicide, the larynx is never injured; the epiglottis, during the act of swallowing, completely covers the upper surface of the glottis, and the corrosive acid passes down the œsophagus to the stomach without impairing, in any way, the organization of the larynx. But if the acid is taken accidentally, immediately that it reaches the gullet, the mistake is discovered; violent action of the muscles of the pharynx is excited, and the corrosive liquid is rejected through the mouth and nostrils." In this violent and spasmodic effort, the epiglottis is, according to him, pushed up, and some drops are readily forced into the glottis.\* Porter, another writer on the larynx, has expressed the same view. † It is possible, however, that the inflammation may pass downwards to the larynx and trachea merely from continuity, and I rather think that, in the present instance, this was the case, for the following reasons. In the first place, the injury chiefly implicated the upper part of the pharynx; secondly, no corrosion could be traced on the lining membrane of the larynx or trachea; and thirdly, the inflammation was more intense in the bronchial membrane, than on that of the trachea and larynx.

This brief account also suggests the probable failure of tracheotomy, even in those cases of poisoning by a powerful corrosive which might appear the most favourable to the success of the practice. It has been remarked, that it is in *accidental* poisoning

\* Ryland on Diseases and Injuries of the Larynx and Trachea, p. 273.

+ Taylor on Poisons, p. 194.

by sulphuric acid that success has most frequently attended the operation, obviously because such cases are less apt to be complicated with injury to the œsophagus and stomach. But in such a case as the present, in which the inflammation had extended so universally along the whole of the respiratory passages, from the glottis to the ultimate ramifications of the bronchi, and had seized the lungs themselves, no benefit could have resulted from the operation, although the stomach had altogether escaped.

### Case V.-Poisoning by "King's Yellow."

In November last, a woman, whose house was much infested by mice, determined, on the recommendation of a neighbour, to poison them by "king's-yellow." She accordingly purchased a pennyworth of that substance at the shop of a surgeon in Glasgow, stating the purpose for which she wanted it. The poison was given her, a printed label being affixed with the words, "Yellow Arsenic-Poison," and the young man who sold it further cautioned her as to its poisonous properties. She went home, mixed it the same evening with a quantity of peasemeal, and then divided the meal into four separate portions, which were placed in as many plates, one of which was put in each apartment of her house. In one of these apartments, which communicated with the kitchen, there slept that night, in one bed, four persons-two women, a girl seven years old, who was boarded with the mistress of the house, and a boy aged four, who was her grandchild. About eight o'clock next morning the women and children got up, the latter being then in their usual state of health; and, so far as could be ascertained, neither of them had been out of bed before the two females rose. For a short time the children were lost sight of; but, about halfpast eight, the girl began to complain of sickness and pain in the stomach, and cried for water. Scarcely had her complaints attracted attention when one of the inmates of the house, chancing to look into the room which opened into the kitchen, saw the boy with the plate in which the poison had been placed, and actually licking up the meal. As those present knew that the poison had been mixed with the meal, the cause of the sickness of the girl was at once suspected, and on being questioned, she admittedbeing, however, evidently afraid to confess the truth-that "she had taken some, but not much." How much of the poison she had taken, it is not easy to guess. According to the account of the party who sold the king's-yellow, about two teaspoonfuls had been given for the penny. This would be from eighty to ninety grains, and if it had been thoroughly mixed with the meal, and the latter had been divided into four equal portions, each plate must have contained a scruple or upwards. It is, however, very improbable that the distribution would be so exact, and it is also doubtful how much of what had been actually in the plate in

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the children's room had been taken by the girl. The witnesses described the quantity left on the plate, when it was taken from the boy, as being about a tablespoonful, and the boy, as the sequel showed, must have taken only a very small quantity. The account given by the woman herself who mixed the poison, was, that in all she had used only a teacupful of meal; but one of her lodgers, who saw her divide it, said that he thought that there was nearly a teacupful in each plate. Undoubtedly, the girl had taken a quantity which must be accounted a formidable dose of such a poison; but still, considering that the symptoms were observed at their very commencement, and that their cause was detected almost the moment they were perceived, it is not unreasonable to suppose that prompt and judicious treatment might have saved her life. The benefit of such treatment, however, she did not get. The inmates of the house ran in all directions for advice. The children were taken immediately to a neighbouring druggist, who advised that sweet milk should be given them, and a medical man sent for. A lodger ran to a surgeon, who directed him to give them white of eggs and encourage the vomiting. The mother of the younger child applied at a "Medical Hall" for advice, and there got two emetics, some olive oil, and a little croton oil, with directions to give first the emetic, and then some of the olive oil, with a drop of croton oil in it ! While this melancholy melange of treatment was being carried out, the elder child became greatly worse, and the younger one exhibited symptoms similar to those of the other, but much less severe. It was not till between three and four hours after the poison had been taken that the children were visited by a medical man; and by that time it had evidently done its work upon the girl. The surface was cold and clammy, and the pulse almost imperceptible. Notwithstanding the treatment then adopted, she became gradually worse; at two p.m. she was seized with an epileptic fit; the symptoms of irritant poisoning-vomiting, epigastric pain and tenderness, &c.-still continued; the fits recurred several times, and in one of them she died at nine p.m., about thirteen hours after the poison had been taken. The boy, whose symptoms had been very slight, had by that time nearly recovered.

The girl's body was examined by Dr. Corbett and myself, about thirty-eight hours after death. The *post-mortem* appearances are fully described in our medical report, which, as well as that detailing the results of the chemical analysis, I subjoin :---

#### " GLASGOW, 22d November, 1855.

"This is to certify, that we this day, acting on a warrant from Henry Glassford Bell, Esq., Sheriff-Substitute of Lanarkshire, inspected and carefully examined, within the house of Mrs. N., No. 27 —— Street, the body of C. M., a child apparently between seven and eight years of age. "The body was that of a healthy child, and presented externally no marks of violence. The belly was considerably distended.

"The stomach contained eight ounces of a very pultaceous fluid, of the consistence of the thickest gruel. Its inner coat, over three-fourths of its extent, was highly inflamed, and on its posterior surface there was a patch, irregularly circular in form, and nearly an inch and half in diameter, where the inflammation had evidently been particularly intense; over this part there was deposited a layer of newly-formed lymph, with some coagulated blood. In the lymph thus effused there were enveloped a number of shining yellow particles, producing a bright yellow stain, and which, when examined under the microscope, exactly resembled in appearance the commercial sulphide of arsenic.

"The intestines contained some fluid similar to that found in the stomach; but they were not inflamed or otherwise diseased.

"The other viscera were healthy.

"The appearances above described are not those of ordinary inflammation of the stomach, but are such as are produced by a powerful irritant poison; and the character of the stain found within that organ, and especially the result of our microscopical observation, render it highly probable that the poison which in this case destroyed life was a sulphide of arsenic. This, however, is a point which can only be decided by chemical analysis, with a view to which the stomach, its contents, a part of the small intestine, and a portion of the liver, were carefully removed from the body, and placed in clean vessels.

"We also, as instructed in the remit made to us, examined W. J. G., a boy about four years of age, residing in the house of the said Mrs. N., and who, it was stated to us by his mother, had, during the illness of the deceased C. M., laboured under symptoms similar to those which she exhibited. We found him free from any symptoms of irritant poisoning at the time of our examination, and his condition did not present any indication of danger.

"A small quantity of urine passed by him during our visit was preserved for chemical examination.

" All which we attest on soul and conscience.

" John Crawford, M.D. " Robert T. Corbett, M.D."

There was nothing in the appearance of the boy at the period of our visit which indicated that he had suffered from severe illness; and in particular, as is stated in the above report, he exhibited no symptoms of gastric irritation. But as it is well known that absorbed arsenic is chiefly eliminated from the system by means of the kidney, we considered it proper to obtain a sample of the urine, for the purpose of submitting it to chemical investigation. The result, as will be seen, was negative.

The following is the chemical report :---

" GLASGOW, 26th November, 1855.

"This is to certify that, at the instance of William Hart, Esq., one of the Procurators-Fiscal for the Lower Ward of Lanarkshire, we, on this day, and on the 23d and 24th instant, carefully examined and subjected to chemical analysis the following articles, which were brought to the laboratory of the Andersonian University by Dr. John Crawford, one of the reporters; viz.,

" 1. A stomach.

" 2. Eight ounces of a thick pultaceous fluid.

" 3. A portion of liver.

"4. A portion of small intestine, which contained a little fluid, of the same appearance as that above mentioned. And,

" 5. About six drachms of urine.

"1. Stomach.—The inner coat of the stomach was highly inflamed over three-fourths of its extent, and its posterior surface presented a bright yellow stain, about the third of an inch in diameter. The inflamed part was boiled in water, acidulated with muriatic acid, and the fluid filtered. The filtered fluid was divided into two portions.

"On heating one portion with slips of copper ribbon, the latter speedily acquired a coating, which exhibited the external characters of metallic arsenic; and when the coated copper was dried and heated in a tube, a white sublimate was obtained, having all the physical characters of arsenious acid, that is, common white arsenic. And this being dissolved in distilled water, gave, with the three liquid tests for arsenic, the characteristic results; and on being also subjected to Marsh's process, afforded conclusive indications of the presence of arsenic.

"The remainder of the prepared fluid was treated with sulphuretted hydrogen, which produced a yellow precipitate, having the well-known properties of sulphide of arsenic.

"2. Pultaceous Fluid.—This was subjected to a similar course of analysis, and the presence of a notable quantity of arsenic was unequivocally established.

"3. Liver.—Similar results were obtained with the portion of liver.

"4. Intestine.—The presence of arsenic was also clearly detected in the small intestine.

"5. Urine.—This, on analysis, exhibited no trace of the presence of arsenic.

"Having carefully considered the results of all our experiments in connection with this analysis, no doubt is left on our minds that arsenic existed in all the matters examined, except the urine; and from these results, and the appearances presented by the stomach, there is no question that some preparation of arsenic had been introduced into that organ, in sufficient quantity to produce death.

" All which we attest on soul and conscience.

"FREDERICK PENNY, Prof. of Chemistry. JOHN CRAWFORD, M.D."

The only remarkable feature in this case, so far as the symptoms are concerned, is the repeated epileptic fits. It has, indeed, long been known that epilepsy is an occasional symptom in arsenical poisoning; but this symptom has rarely, so far as I am aware, been observed in rapid and acute cases, such as the above, although slight and partial convulsions have been witnessed as the fatal result approached. From the description given me, the fits in this girl seem to have had all the characters of regular epileptic seizures, and they occurred contemporaneously with the ordinary symptoms of irritant poisoning. Most commonly, when epilepsy has been observed in poisoning by arsenic, it is after the irritant symptoms have subsided; and hence it has generally been in lingering cases, and especially during convalescence in patients who have ultimately recovered, that it has occurred.

In this case, the post-mortem appearances are also deserving of notice. The violent inflammation of the stomach was of itself highly characteristic of the action of a powerful irritant. The post-mortem appearances do not, in many cases of arsenical poisoning, afford evidence of such a satisfactory nature. Even had the poison not been visibly present in the stomach, the inflammation was not of a kind which could with propriety be attributed to ordinary idiopathic disease. The effusion of lymph, in particular, was a remarkable circumstance. It is rarely met with in the stomach, except from the effects of irritant poison, and even in such cases is often not found. Here, as stated in the report, it was very distinct. At first sight, indeed, mixed as it was with dark coagulated blood, it might have been mistaken for the disorganized coat of the stomach; and no doubt such an appearance misled the older writers, who have spoken of gangrene of the stomach as occasionally resulting from poisoning by arsenic. When, however, this stratum of lymph and coagulated blood was raised up, we found the villous coat beneath of a deep violet colour, the rugæ thickened, rounded, and tumid; and even the impress of the reticulated disposition of the lymph was observable, a circumstance to which Dr. Christison has directed attention, as being of a striking and decisive character, although not often met with.\*

"King's-yellow," the poison which produced death in this case, is a compound of arsenic and sulphur. But as sold in the

<sup>\*</sup> Christison on Poisons, fourth edition, p. 342.

shops, or manufactured for commercial purposes, it is seldom a pure sulphide of arsenic. The same remark applies to the orpiment of commerce, although that term is often applied, even by scientific writers, to the yellow or trisulphide of arsenic. The common orpiment of the shops is, according to Dr. Christison,\* a mixture of arsenious acid and sulphide of arsenic; while what is sold as king's-yellow is a compound of sulphide of arsenic, caustic lime, and free sulphur.† This statement, if generally applicable, is of great importance, as enabling us to estimate the comparative poisonous properties of the pure and the impure sulphides. The former are generally reckoned very much less active poisons than arsenious acid-an opinion which is borne out by the fact, that the sulphides are more difficult of solution in water, especially when the fluid is warm and acid-conditions usually obtaining in the stomach. If this view be correct, it would follow from the above statement of Dr. Christison, that the orpiment of commerce, from the admixture of arsenious acid, would be more active as a poison than the pure sulphides, and the article sold as king'syellow, from the lime and sulphur which it contains, considerably less active. But from the inquiries I have been led to make, I doubt whether the above distinctions apply to these substances as met with in the shops in this part of the country. Perhaps they apply to orpiment and king's-yellow when carefully prepared as pigments. Among the fine artists' colours made in London, both orpiment and king's-yellow are to be found, the colour of the former having a decided orange tint, when compared with the lemon yellow of the latter. But as they are sold in ordinary colour shops, no such distinction can be traced. Indeed, the two terms seem generally to be considered as synonymous by the dealers. Hence, in purchasing, whether we ask for orpiment or king's-yellow, we get the same substance-a sulphide of arsenic, often probably containing a certain proportion of arsenious acid, besides other accidental ingredients. Nay, as the arsenious acid is very much cheaper than sulphide of arsenic, there is an inducement to colour the acid by some other substance, a process which would not at all interfere with its efficacy as a poison for vermin, although it would destroy its utility as a pigment.

I obtained a sample of what was sold as king's-yellow in the case I have narrated, and which had been supplied to the retailer by a wholesale drug house. Its colour was very peculiar, being more of a brick red than a sulphur yellow. Dr. Penny was kind enough to make an analysis of this sample, and found that it con-

\* Christison on Poisons, fourth edition, p. 286.

† In the third volume of the Transactions of the Provincial Medical and Surgical Association, is an excellent account, by Dr. Symonds of Bristol, of a case of poisoning by orpiment, which resulted in the conviction and execution of the party accused-a female. The substance which had been sold as orpiment, in that instance, is described as being more of a red than a yellow colour, and on analysis by Mr. Herapath was found to contain 79 per cent. of arsenious acid.

sisted of sulphide of arsenic, with a considerable admixture of arsenious acid and sulphur, and a small quantity of selenium. There was not a trace of lime.

Selenium, which is, in its chemical relations, very analogous to sulphur, is often, I believe, found in conjunction with that substance in certain localities. When reduced to powder, it has a reddish brown tint; and to this being blended with the yellow of the sulphur and the sulphide of arsenic, the singular colour of the specimen in question may be attributed. It is somewhat remarkable that the stains found in the stomach were much more yellow than the powder obtained from the shop, and approached nearer to the proper colour of sulphide of arsenic.

Poisoning by the sulphide of arsenic is by no means so common as we might expect from the facility with which, in its commercial forms, it may be obtained. But the obstacles now interposed by law to the obtaining of arsenious acid, may lead to the more frequent use of the sulphide for criminal purposes, and hence I have been led to enter into the above details as to admixtures, which may modify the poisonous activity of orpiment and king's-yellow, as found in the shops or employed in the arts. The act to " regulate the sale of arsenic "\*- a very short act-which, amid the appalling mass of the "statutes at large," affords the solitary example of legislative interference in our country with free trade in poisons, appears to have been framed upon the constitutional principle, that even under the pressure of the clearest and most urgent necessity, the interference with time-honoured precedent should never be carried beyond the minimum. For, while it imposes various conditions and restrictions on the sale of arsenic, and, in particular, prohibits its retail unless it has been previously mixed with soot or indigo, its last clause bears that, " in the construction of this act, the word arsenic shall include arsenious acid and the arsenites, arsenic acid and the arseniates, and all other colourless preparations of arsenic." On the sale of the sulphides, therefore, no restriction is imposed! The smallest coin may purchase a poisonous dose at any drug or colour shop. The framers of the act proceeded apparently on the supposition, that those preparations of arsenic which are not colourless cannot be employed for criminal purposes without detection. The above case shows how erroneous this notion is. The witnesses described the colour of the peasemeal as not having been much altered by the admixture, notwithstanding that the poison had a much redder colour than the pure sulphide. The latter would mix with peasemeal with still less chance of detection. For the sake of experiment, I mixed a scruple of it with an ounce of peasemeal; and when, after trituration, the mixture was compared with a portion of the meal free from poisonalthough the poisoned portion had a slight yellow tint as compared with the other—the difference would never have struck an unsuspecting observer, and in fact was no greater than different samples of peasemeal present. It would be easy to specify other common articles of food, and also several medicines in common use, with which sulphide of arsenic might be mixed without its colour leading to suspicion or detection.

The above narrative also proves, that this arsenical compound shares with arsenious acid a property which has largely contributed to the employment of the latter for the purpose of murder, namely, the absence of any well-marked taste. Had the king's-yellow communicated any strongly disagreeable taste to the meal with which it was mixed, it is not probable that the mixture would have been licked up so greedily by the children.

It may not be out of place, before concluding this paper, to refer to a subject of great importance, and which recent occurrences in England tend to bring prominently before the public; that is, the best means of maintaining the inviolability of human life, and assuring to all classes of the community that protection which society is entitled to demand, by a careful examination, on the part of the authorities, of all cases of suspiciously sudden death. It has been the fashion to say, that in Scotland no efficient means are provided for such an investigation, because we have no coroner's inquest; and it is probable that the recent occurrences to which I have adverted, and the still more frightful surmises which have been circulated in reference to them, may be seized on as affording corroboration of that opinion. The inference is not very logical; for if anything like the series of crimes surmised to have been committed in one dark case, which is still sub judice in England, has really been perpetrated, success must have repeatedly attended the perpetration of the most diabolical murders in spite of the protection which the coroner's inquest is supposed to confer. But there can be no doubt that many of those who demand the institution of coroner's inquests in Scotland, are either forgetful of the existing means provided in this country for the investigation of such cases, or are ignorant of the scrupulous and conscientious manner in which those means are employed by the officers in whose province it lies to put them in operation. Above all, it is forgotten that we have in Scotland an officer whose importance is recognised in most of the countries of continental Europe, but who is unknown to the Saxon traditions of English legal polity - namely, a public prosecutor. For the want of such an officer, a coroner's inquest in England is often little more than a mere formality. Cases do occasionally occur, where an inquest brings out such presumptions of guilt, that the government or the local authorities take up the case, prepare it carefully for trial, and undertake the cost of procuring the best medical and scientific evidence. In other cases, a relative or friend of the deceased undertakes the

same duty and incurs the expense. But, except in such instances, there is no one responsible for the proper management of the case; and even in regard to the preliminary inquiry-the inquest itself-there is no security, in the majority of cases, that competent scientific evidence shall be procured. In Scotland, on the other hand, the public prosecutor, who has his representatives in every judicial district, is bound to investigate every case of suspicious death reported to him; and however humble or obscure the position of the deceased may have been, he is bound to obtain the most competent evidence, the expense of procuring which the exchequer is obliged to defray. Every private individual has a right to lay an information before the procurator-fiscal, and it is the duty of the police to report to that officer every suspicious case which comes within their knowledge. All such cases, when reported, are made the subjects of careful examination; and unless it is at once evident that the suspicion rests on insufficient grounds, a written precognition, embracing the evidence of all the witnesses, is forwarded for the opinion of Crown counsel. It then rests with these functionaries-men of high position at the bar-to decide whether the case shall be brought before a criminal court. I may here illustrate this system, and the care with which it is carried out-although unostentatiously and without parade before the public eye-by a reference to the four cases above narrated, in which life was lost. In none of these was there even a prima facie case of wilful intent or malice. In only one was there, in the opinion of Crown counsel, a case to send before a jury, and, in that instance, the jury acquitted the prisoner of the charge of homicide. Yet all these cases were minutely investigated. Warrants were granted by the sheriff for the apprehension of the inculpated persons, the inspection of the bodies, and the citation of witnesses; and the precognitions taken, which are lying before me, extended, exclusive of medical reports and the declarations of the accused, to upwards of a hundred folio pages. I have therefore no hesitation in asserting that the machinery which the Scottish system provides for the investigation of such cases, is abundantly sufficient for the protection of the community; and if occasionally individual officers may be found who are lax or indolent in the discharge of their duty, the public and the press have the remedy in their own hands.

If we further compare the working of the two systems, as regards either the detection of the guilty or the protection of the innocent, I confess that—swayed it may be by national prejudice—I much prefer our own. But I shall confine my remarks to the difference in the manner in which medical evidence is made use of in the two modes of procedure. With us, such evidence is, in the first instance, laid before Crown counsel in the form of a deliberate and wellconsidered report, which embraces both the premises and the

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conclusions deduced from them, and which is attested on soul and conscience. This report the medical witness must read in court; and he is then exposed to cross-examination on the part of the prisoner, to whom, and to whose counsel, the report is patent before the trial. The correctness of its premises, and the soundness of its conclusions, may therefore be carefully and leisurely scrutinised by the counsel for the defence, with any medical assistance that he can obtain. In England, again, the medical evidence at all stages of the inquiry is given orally, although I believe that the depositions before the coroner are taken down in writing, and are accessible to the prisoner before the trial. But there is nothing to prevent the medical witness on the trial from making important additions to his previous evidence, additions for which the prisoner is unprepared, and hence the latter does not possess the fair advantage which he enjoys in Scotland.\* On the other hand, if the medical witness in his examination before the coroner has made any rash or ill-considered statements—a circumstance not unlikely to happen in a court which, in its accessories, is devoid of those solemnities which invest a superior court of justice, and where, consequently, the witness is apt to be thrown off his guard, and allow himself more careless latitude of expression-and, if he is obliged on the trial to qualify or retract these statements, the value of his evidence on other points on which he may be right is seriously damaged; and thus, perhaps, an unfair advantage is obtained by the accused.

Even the repeated oral examinations and cross examinationsfor not only is the medical evidence led before the coroner, but it is also taken before the magistrates either in police courts or in sessions-tend to confuse the mind of a person who, perhaps, well informed enough on professional subjects otherwise, has not turned his attention specially to medico-legal investigations. Out of this system of repeated inquiries before different courts spring other anomalies, which to us, in this part of the island, seem sufficiently strange. Thus I observe in a newspaper paragraph, in reference to the celebrated case of Palmer, that the attorney for the defence gave notice at one of the preliminary investigations, that he would call on Dr. Taylor at the trial, to produce proof of the correctness of some opinions which that gentleman had expressed in his When the witness is such an eminent medical jurist as evidence. Dr. Taylor, who is not likely to emit an opinion lightly before any court whatever, no practical injustice may result from this course; but it seems a very absurd principle, and one which may lead to

\* There is, indeed, nothing to prevent a medical witness in Scotland from making, in his examination in chief, similar additions to the evidence contained in his report. But as the latter contains a deliberate opinion, it is very seldom and, unless in the interim some new facts have come to his knowledge, it ought not to happen—if he is a competent individual, that he has any important alterations or additions to make. great abuse, to treat a scientific opinion as if it were a moot point in law; and to transform a medical witness—the grave impartiality of whose responsible position, nothing should ever be allowed to disturb—into a *nisi prius* advocate! In Scotland, the public prosecutor has before him from the first the written report, as the basis of the medical evidence; while the prisoner, by having access to that report previously to the trial, has the amplest opportunity of contesting its premises, or refuting its conclusions, and of shaking, by cross-examination, the evidence of the medical witness, without requiring to take a step, which, so far as I can see, can only be productive of injustice to himself.

That in Scotland the preliminary investigations in criminal cases are private, cannot be considered an objection. The publicity given to coroner's inquests, and indeed inseparable from them, may no doubt be occasionally beneficial. By putting the public on their guard against accidents-by exposing negligence, which the public may visit with reprehension, but which the law cannot punish-and sometimes by eliciting farther evidencegood may occasionally be done. But it is scarcely to be questioned, that these advantages are more than counterbalanced by evils resulting from the open nature of the inquiry, and, in particular, by the warning which the guilty parties often receive in time either for flight, or for concocting a defence, and by the bad moral effect which is in many cases produced on the public feeling and taste. For it is not merely the facts-revolting enough, perhaps, in themselves-which must come out on the ultimate trial, that are thus published to the world; but during these inquests, which in some cases require to be repeatedly adjourned, and are thus spread over a considerable period, all the crude and untested evidence emitted before the coroner-and not only that, but all the flying rumours of the inquest-room, the gossip of the neighbouring public-house, the story of every loquacious constable, and the profound comments of every self-important beadle, are dressed up into artistic narratives by the correspondents of the press, with no results but to prejudge the case against the accused, needlessly lacerate the feelings of his relatives, in some cases furnish a guilty party with valuable hints for his defence, and in many to deprave the tone of the public mind, by pandering to the vulgar craving for the horrible. At this moment there is rapidly passing through Parliament a bill, which it is understood will be made to apply to a case still pending, to enable the Court of Queen's Bench to transfer a trial from the provincial scene of the alleged crime to the Central Criminal Court, if there is reason to believe that the prisoner might not obtain an impartial jury in the former locality, in consequence of the excited state of public feeling-a state most likely to be fostered by the publicity given to the early steps of an investigation, necessarily in many cases incomplete. It may be correct to assume that this feeling, tending to prejudge

the case, may not be so strong at a distance from the locality in which the offence is supposed to have been committed, and that it will not be so powerful in the metropolis as in a provincial district; but still, with our present facilities for the publication of news, that feeling must be everywhere more or less disseminated, and wherever the trial may be appointed to take place, will tend, in spite of the admonitions of the Bench, and the appeals of counsel, to bias opinion in the jury-box.

If, lastly, we consider the two systems in reference to the encouragement given to the cultivation and advance of medicolegal science, there can scarcely be a difference of opinion as to their comparative merits. It is only necessary, on this point, to appeal to the history of legal medicine on the Continent. In France and Germany, and in most continental countries, the system pursued in the early stages of the investigation of criminal cases, at least so far as the medical evidence is concerned, is very similar to ours. There, as here, it has long been the custom to require written reports, which should embrace both facts and opinions, premises and conclusions. There, as here, these reports, in cases of importance, are generally drawn up by more than one medical man, and are the results of deliberate consultation. There, as here, the duty of drawing up these reports is usually intrusted to individuals who are understood to devote themselves in a particular manner to these investigations, and whose frequent employment in such a capacity naturally gives them the advantage of considerable experience. And what has been the result? In these countries the courts of law have for two centuries been enlightened by the well-weighed opinions of men who had made a special study of forensic medicine; while in England, until comparatively recently, medical evidence was looked upon, and not unjustly, with great suspicion by lawyers, and was reproached for its crudity, inconsistency, and inexactness; and the most eminent physicians and surgeons made but sorry figures in the witness-French, German, and Italian medical literature were enriched by innumerable able and well-digested reports on medicolegal subjects; medical jurisprudence was cultivated as a science, and taught in the universities; and many comprehensive treatises upon it-brought fully down in all respects to the knowledge of the day, and not a few of which may still be consulted with advantage-were published and studied long before a single work on legal medicine was issued from the English press.