In the first place, the obvious consideration occurs, that between death by coma and death by asphyxia in the restricted sense of the word, there exists in many cases no further recognisable distinction than that in the one mode of decease respiration is arrested "through the intervention of insensibility," and that in the other mode of death it is arrested by a "direct impediment to the access of air to the lungs." (Alison's Physiology, p. 327), and that consequently on many occasions the one form of the fatal event cannot be distinguished from the other on a post-mortem inspection. The exceptions to this state of matters which occasionally arise in practice originate in one or other of the following *specialities*. Either from circumstances the comparative amount of congestion of the heart and lungs is so marked on the one hand, or that of the brain on the other, as to lead at once to the conclusion that in the former case the death has proceeded from direct asphyxia, and in the latter case from coma; or we find in either case appearances *superadded* which are sufficiently characteristic of some of the special modes of sudden death in either of these two ways. Thus, in the case of direct asphyxia, hanging or strangulation is characterized by the mark of the ligature and the local violence about the neck to which it gives rise, and drowning by the light watery froth, and the water which may be found in the air-passages, lungs, and stomach. But that the case before us does not belong to either of these categories will be evident on a little consideration. In Smith's body there was not that decided preponderance of congestion within the head, and comparative absence of it in the heart and lungs, which would have justified, on good grounds, an unqualified decision in favor of death by coma; neither was there here that marked degree of comparative congestion of the right heart and lungs,* as contrasted with the state of the brain, which would have authorized a positive opinion on the side of death by ordinary asphyxia. Equally observable was the absence, if not entirely, yet to a considerable extent, of those superadded appearances decidedly indicative of coma or of direct asphyxia, and the want of which throws us back to the more general inference of asphyxia in its wider sense, as not excluding either supposition. There was no effusion of blood or of serum within the head serving to suggest the existence of sanguineous or serous apoplexy. If, then, the woman died by coma, it must have been by the congestive form of this last disease. By the application of the same test—viz. the characteristic appearances—we get rid of several of the forms of direct asphyxia, leaving only that one of them which so seldom presents us with any distinctive signs—*i. e.* death by suffocation. Between these two possible modes of death—apoplexy and suffocation—it appears to me that we must be prepared to choose and to discriminate, if we are to arrive at any certainty as to the cause of Smith's death. Let us consider, then, the circumstances brought out on Robb's trial, with the view of deciding on the probabilities in favor of one or other of the two occurrences.

One of the leading features of the case in hand was the strong proof it offers of a severe struggle having taken place between the parties. This in itself might easily have led to cerebral congestion, but obviously not by any means so readily to direct asphyxia. Again, the state of the heart in Smith would have facilitated the same occurrence: the attenuation of its right walls retarding the return of blood from the head, and the hypertrophy of its left ventricle accelerating the circulation within the cerebral vessels.† The tendency to this form of disease would have also been the greater in the present instance, as the brain itself, though not probably to be set down as hypertrophied to any marked extent, was noticed to be "unusually firm," and the party had reached a period of life when dangerous consequences from this condition of the central organ of the circulation might have been justly dreaded from the application of such exciting causes as either sudden excitement or violent corporeal struggles, not to speak of the combined and simultaneous operation of both on the same occasion. To this might be added the effect of the emphysematous state of the lungs—a position of matters not unlikely to favor the production of coma under a sudden acceleration of the circulation. But to this last I would not attach any undue importance, as this condition of the lungs would obviously have been almost equally operative in facilitating death by a direct stoppage of the breathing.

There is one circumstance, however, to be observed in the case before us which may at first sight seem to negative the possibility of death by congestive apoplexy. I allude to the bloodless state of the scalp,—a condition the very opposite of that which is usually encountered to a greater or less extent in all plethoric individuals who perish in this way. The absence of this appearance, I may observe, nevertheless may be explained when it is taken into account that this woman was not at all plethoric; and, further, that her head, prior to the time of our examination of it, had remained elevated on a pillow for a period of at least thirty-six hours—a position of the head which would have favored the gravitation of the blood, fluid as it was, to the dependent parts of the body. Besides, a gorged state of the scalp is not a constant phenomena in undoubted instances of death by apoplexy.* With this exception, then, giving it all the weight which can be reasonably claimed for it, the other appearances within the body were quite consistent with the assumption of death in this particular mode. The sinuses and veins within the head were unusually loaded with dark fluid blood; the pia mater was minutely injected; the interior of the brain was closely studded with bloody points, and its cortical and grey matter generally presenting a rose hue, while the internal jugular, and especially the vertebral veins, poured out blood in considerable quantity on the removal of the encephalic mass,†—circumstances which, though not inconsistent with the idea of death by direct asphyxia, were all of them indicative rather of death by coma than in this last way.

The above remarks have not been adduced with the view of proving that death in this case certainly took place by coma, but merely in order to show that such a mode of death was not impossible, or even unlikely, in the circumstances under which Smith must have been placed at the time of her decease; and, besides, that such an explanation of the manner of its occurrence is not incompatible, if it is not to some extent confirmed by the state of the body of the woman at the period of its inspection.

The other point to which I would call attention is the consideration of the facts in the evidence which are in favor of the assumption of the Court, corroborated, as it was, to some extent, by the opinion of myself and colleague, and more fully, though still cautiously, and with a prudent reserve, by another of the medical witnesses—viz. that death here was caused by one at least of the forms of direct asphyxia, *i. e.* by suffocation. In proceeding to do so, I shall first notice the circumstances present in

---

* The bloody serum in the chest and belly certainly pointed, so far, to such a congestion of the veins of these cavities as to have led to the escape of its thinner portions after death by exosmosis: and its presence had some influence with myself in inclining me to the probability being in favor of direct rather than indirect asphyxia. That the fluid was not dropsical appeared from its red color. Its inflammatory origin was here out of the question.

* The influence of certain diseased states of the heart in favoring, not to say causing, apoplexy, has been admitted by most pathologists, and is sanctioned by experience. Thus, omitting some instances of valvular diseases of a doubtful character, in 30 cases of pure congestive apoplexy suddenly fatal which I have had occasion to examine during upwards of twenty years of medico-legal practice, I find that in eight of these cases (*i. e.* in 26·6 per cent. of the whole) such diseased states of the heart were noticed as under: viz. attenuation of the right with hypertrophy of the left heart, 3 cases; attenuation of the right heart, 1 case; attenuation (flaccidity) of both sides, 1 case; hypertrophy generally, 2 cases; and hypertrophy of the left heart, 1 case.

* In the 30 cases of congestive apoplexy previously referred to, a bloodless state of the scalp was noticed in 5 instances, or in 16·6 per cent. of the whole; while in one other instance it was noticed as being only "somewhat bloody."

† Have we a congestive form of *spinal* as of *cerebral apoplexy*? In four instances of what was considered the latter disease, I have seen a great accumulation of fluid blood about the top of the spinal canal, as compared with its amount within the cranium, and in these death was almost instantaneous. In a fifth instance of the same kind, the addition to this of a large clot within the spine settled the point in favor of spinal apoplexy.