

mission has to be obtained from the department before this can be done. This necessitates an adjournment of the inquest and a considerable increase in the expense, although the modest fee of twenty dollars which is allowed as a minimum for the chemical examination in ordinary cases is too low to permit of any good chemist and analyst profitably undertaking the work.

It is not well understood that, on general principles, the motive for desiring an analysis is simply that the cause of death is not satisfactorily explained either by the autopsy or the other evidence at the inquest. In other words, when an autopsy is performed without decisive results the expert cannot feel certain that poison has not been the cause. In such cases I have made it a practice to state that it "could not be determined by the autopsy whether poison had been taken or not, and *if the other evidence suggested poisoning* an analysis had better be made," thus leaving the matter in the hands of the jury, who should be, of all persons in the world, best qualified to decide the question. It would be better if preliminary qualitative analysis (for a small fee) could be made in all doubtful cases, but under the present jury system this course is impracticable owing to the delay involved.*

A further disadvantage lies in the fact that at present we have no means in Montreal of freezing the suspected organs so as to check the progress of decomposition. Organs left at the ordinary room temperature soon develop putrefactive alkaloids, which closely resemble those of the vegetable poisons, while at the temperature obtained in an ordinary refrigerator, though the development of these ptomaines is less abundant, their composition and reactions resemble still more closely the toxic alkaloids. On the other hand, the more unstable vegetable alkaloids, and especially morphine, rapidly become decomposed and elude chemical analysis. In *frozen* tissues they remain unchanged for an indefinite period, so that nothing is risked by delaying an analysis except the results as regards volatile substances (prussic acid, chloroform, chloral, etc.)

* I have to thank Dr. R. F. Rutten for having kindly made qualitative analyses for me in several obscure cases.