

Still further: Judicial investigation into crime has been assisted by the microscope. It is stated as the result of the most careful and oft repeated examinations, that in every kind of animal the blood contains globules which constitute its colouring matter, differing in size from those of every other, and as a consequence that human blood can be distinguished accurately and certainly when examined through this instrument. By this mode a hiatus in evidence may be filled up, for the want of which a criminal might have escaped; or, on the other hand, circumstances apparently of great suspicion may be satisfactorily rebutted, and an unjustly accused individual may be saved.

I cannot refrain from recalling to you one among many instances of the discoveries of criminals effected through the aid of the microscope, in illustration of what I have said.

A box containing money had been stolen on one of the Railways in Prussia, and, after being emptied of its contents, was filled with sand and replaced on the car. The Police were at fault; the land round most of the stations in the north of Prussia is sandy, and the contents of the box seemed to afford them no clue to the place where the exchange had been made.

Professor Ehrenberg was applied to, and having procured samples of the sand along the line of the Railway, he, with the aid of the microscope, examined them, and also compared them with the sand in the box. The powerful instrument he used enabled him at once to discover the characteristic variations in the mineralogical composition and crystallization of the various specimens of disintegrated rock from the different localities. The station from whence the sand in the box had come was thus ascertained, and the conviction of the thief was the immediate consequence.

To the same professor is also due the application of the microscope for the detection of a singular literary forgery. A pretended palimpsest, purporting to be a history of some of the ancient Kings of Egypt, was submitted to him. It was clearly shown by the microscope that wherever the professedly ancient writing was crossed by that of more modern times, the ink of the old letters lay *upon* instead of *under* those of later date: precisely the reverse of what must have been the case had the palimpsest been genuine. The fraud was immediately and unanswerably exposed.

There are other topics which claim a passing attention. Among these: the proposition to establish a railway communication from Europe to India, intended for the transport of goods as well as of