

Notes on Exchanges and Legal Scrap Book.

DETECTION OF MURDER BY MICRO-PHOTOGRAPHY.—During last month the ever-courteous Sir John Thompson, Minister of Justice, granted an audience to Dr. Richard Wicksteed, of the Law Department of the House of Commons, and Mr. H. N. Topley, Photographer to the Department of the Interior. The object of the interviewers was to ask the Minister to authorize the purchase of Photomicrographic apparatus for the public service of Canada. Dr. Wicksteed said that his attention as a jurist had been attracted by the account, in *The British Journal of Photography*, of the successful reproduction of the image on the retina of the eye of an insect, by photographic experts, at Vienna. Reports of similar feats had been published previously, but apparently these reports were fables. If evidence were procurable from the photographed image of the last object seen by murdered persons,—say for instance the girls at Cumberland,—what invaluable evidence it would be. He also drew attention to an article on the detection of forgery by similar apparatus, published in *THE CANADA LAW JOURNAL* of the 15th November (*ante* p. 557). The Minister then read the notes from Vienna appearing in *The British Journal of Photography*, which runs as follows:—

“It does not very often happen to us to have to record a greater triumph in the application of photography to scientific purposes than has recently been chronicled from Vienna. Professors Dr. J. M. Eder, Ritter von Reisinger, and Dr. Sigmund Exner have succeeded—and thoroughly too—in photographing the visual image on the retina of a beetle. The apparatus employed was the large micro-photographic installation by Zeiss, and the beetle, whose devotion to the advancement of science cost him his life, was a male of the species *Lamproyris splendidula*, the females having eyes that are far less perfect in construction. The eye was cut out, the pigment removed from the back, and immersed on a plate of mica in a solution of glycerine diluted until its index of refraction equalled that of the blood of the beetle. The object of the experiment was not only to obtain a photograph of the retina, but also to enable an opinion of the sharpness of sight of the beetle to be formed. One of the windows of the chemical lecture theatre of the Photographic Institute overlooks the neighbouring house tops, giving an excellent view of the Schottenfeld church and church tower. The windows were shut, and on one of the panes was pasted the letter R cut out in paper, and against this window the eye of the deceased fly was directed, and the resulting retinal image was fixed upon an Angerer bromide plate by means of a Zeiss apochromatic, and a projection eye-piece. Collotype reproductions of the negative have been supplied to the readers of the *Photographische Correspondenz*, and enable an accurate idea to be formed of what the beetle actually sees. In it the panels of the window are distinctly and clearly visible, as is also the letter R. The distant church appeared as of less importance in the beetle's eye, but was nevertheless distinctly visible. How it occurs that the eye of the insect, with its hundred facets, succeeds in producing upon the retina so clear and distinct a single image, still remains as wonderful as before; but, as the first permanent and indisputable record of what a beetle actually sees, we venture to think that this successful experiment of Messrs. Eder, Reisinger, and Exner is likely to become classical.”

Mr. Topley then explained the photographic details of the process. He said, further, that almost every Department at Washington possessed apparatus such as he now applied for—of this he was personally cognizant, having studied for some months in that city the refinements of photography. He wished to make