ART. XIV.—Observations on Fatty Degeneration of the Kidney and Liver. By Ben. Wills Richardson, Fellow, Licentiate, and Member of the Court of Examiners of the Royal College of Surgeons in Ireland.

A few cases of chronic renal disease and fatty deposit in the liver having been met with by me during the course of the present year, I take advantage of the opportunity offered by them to draw attention to some questions in the history of these diseases that appear to require further investigation.

The kidneys described in this paper were all, I believe, loaded with oil; however, for the sake of accuracy, it is safest to consider as such only those that were histologically examined. I would also observe, that these kidneys, as well as some I have since examined, lead me to think that oil plays a much more important part in the pathology of these organs than is usually supposed, at least in this city.

The two first cases are not as perfectly given as they should be, but, having been made the subject of a very careful dissection, I am tempted to introduce them here.

CASE I.—Fat in large quantity in the Kidney; Uriniferous Tubes deprived of their Epithelium; Death from exhaustion.

Anne Brannagan, aged 30, was under my observation but a short period, during which her symptoms were, anasarca, chronic diarrhoea, albuminous urine, and the characteristic anemic appearance of persons affected with Bright's disease. When I first saw her, it was apparent that her sufferings would not be of much longer duration. These anticipations were soon verified, for the fatal termination of her case took place in a few days afterwards. The exhaustion was extreme, but she retained her mental faculties to the last.

Autopsy.—The tissues were all blanched. There were no other morbid appearances, except in the kidneys, which were large, whitish, flabby, and both of nearly the same size, the larger being five inches and a half long, and two and a half wide. On making a longitudinal section, and exposing their secreting structure, it was at once perceptible that this increase in dimension was owing to a heterologous deposit that encroached very much upon the tubular portion of the organs. The question next to be decided was, what was the nature of this deposit?—which was quickly answered by means of the microscope; this instrument demonstrating the presence of an enormous quan-
tity of oil and granule cells. Fig. 1 delineates very accurately the morbid state of their cortical substance.

![Fig. 1.](image)

The epithelium, with a few rare exceptions, had disappeared from the uriniferous tubes. These were almost filled by oil globules of various sizes, and some of the tubes were more or less atrophied. Others contained scattered dark granular epithelium. There was likewise a vast quantity of free oil, and numbers of granule cells distributed over the field of view. At a, in the centre of the illustration, is seen one of the uriniferous tubes, containing a few dark cells; and this tube also exhibits an appearance that is supposed by some pathologists to be the early stage of cystic development in the kidney. For instance, this tubule, transparent, and almost totally deprived of its epithelium, here and there presents constrictions, giving it a beaded appearance. I can, therefore, readily understand how a further narrowing of the constricted portions would cause the dilated parts of the tube to assume the appearance of isolated cysts in the kidney.

A different opinion on the formation of renal cysts has been published by Mr. J. Simon, and others. The former gentleman supposes that they are, at first, simple nucleated cells; and from