

form collateral circulation; the subsequent pleural effusion with no ascites points strongly to good collateral circulation for the portal system. The marked improvement in the patient's general condition shows better functioning of the liver and intestinal organs after the operation.

W. L. B.

DR. H. KÜMMELL. "The Newer Methods of Examination in Cases of Kidney Disease." *Arch. f. Klin. Chir.*, Bd. 72, Heft. 1.

In this subject Kümmell, of Hamburg, is probably the most experienced man in Germany, and his conclusions deserve attentive consideration. Needless to say, he is a firm believer in the value of the finer diagnostic methods—when used by the expert and with judgment. But it is the duty of the surgeon to become expert and to acquire judgment.

In brief, his conclusions, based on several hundreds of cases, are as follows: Renal calculi are demonstrable (by the X-rays) in all cases, if you only know how to do it. Careful posturing of the patient, a soft tube, the taking of a number of plates, in each of which a shadow is found at the same place, and the possession of a trained eye are essential. (For more detail the interested reader is referred to another article in *Beiträge zur Klin. Chir.*, Bd. 37, Heft 3.)

Catheterization of the ureters is the only absolutely certain way of getting "kidney urine," and it is used by Kümmell as a normal procedure. The various instruments for intravesical separation of the urine (Newmann, Down, Luys, Cathelin) are not perfectly reliable, but are useful in exceptional cases, where the other is impossible. To determine the degree of kidney function, Kümmell has used all the various methods lately advocated; methylene blue, phloridzin, electrical conductivity, and cryoscopy of the urine, but especially of the blood. The latter he regards as the best, and has used it most. He believes one is justified in laying down the law, "that with a normal molecular concentration of the blood, there cannot be present any disturbance of general kidney function; that the latter is, in the great majority of cases, the result of a bilateral kidney lesion; and that a heightened molecular concentration of the blood is a positive indication of bilateral disease.

The usefulness of this law in its application both to prognosis and to the determination for or against operation is demonstrated by Kümmell in a large number of cases. Where cryoscopy of the blood shows a heightened molecular concentration, nephrectomy is not permissible, for there is present disease of the other kidney. In a statistical table including 168 kidney operations of his own, 70 of which were not in-