quently seen[11] in pure passive congestion. A cumulative phenomenon is only seen once in six cases in which such studies were made, e. g., Case 37 in which the freezing point was —.67 and total incoagulable nitrogen on the upper limit of normal, .47 gm. per L.

Group D—Cardiorenal Cases.—Fifteen cases fell into this group, three of which ended fatally. The relative and absolute degree of cardiac and renal involvement varied much in the different cases, so that practically all types of cardiorenal cases are included.

One patient (No. 47) died showing a normal diastase during a cardiac break in nephritis. The phthalein here was 40 per cent. first hour and 18 per cent. second hour. Two patients (Nos. 52 and 53) died with a zero output and one of these showed only a chronic passive congestion at necropsy. Two (Nos. 48 and 51) left the hospital improved after exhibiting a zero output. In six cases a normal diastase was encountered, but in three of these the renal function was good as indicated by the other tests.

It has been previously pointed out that diseases of the kidney may be clinically identical, but functionally and pathologically different, and that by the aid of the phthalein test it is possible to determine in any given cardiorenal case whether the heart or the kidney is relatively more responsible for the clinical picture presented. This is not possible by the diastase test, since the diastatic activity seems to be markedly but inconstantly depressed in both cardiac and renal disease.

Cumulative phenomena were encountered in only three cases, all of which died. Case 52 is of special interest as the necropsy showed no changes other than passive congestion, although the blood urea was 1.1 gm. per L. The freezing point was at the same time not at all depressed.

Influence of Blood and of Albumin on Diastatic Activity.[12]—In the foregoing table blood is recorded in the urine in seven instances. In the other cases microscopical examination or the guaiac test failed to show its presence. Three cases of mild nephritis showed blood and a normal or high "d." A mild nephritic on two occasions showed a low "d," one severe nephritic and one cardiac case a zero "d" value in the

11. We have now seen three cases in which cumulative phenomena have been encountered in pure chronic congestion, e. g., Cases 37 and 52 and a third case which has been reported by Marshall and Davis.

12. As stated above, this test deals only with "diastatic activity" and not with "diastase content." The activity is dependent on environment and not on actual amount of diastase. Only the influence of albumin and blood have been considered here, since they have entered into the interpretation of the findings of the test in the hands of certain authors.