cles, stimulates the secretions, furnishes the best means of oxydizing and enriching the blood and to a great extent overcomes the constipation.

DISCUSSION.

DR. J. B. MARVIN—The essayist has presented this interesting subject so clearly and with such easy diction that I fear he has glided over some of the points without emphasizing them enough. There are one or two points as to the causation; I believe he mentioned all save one. Certain conditions of the buccal and naso-pharyngeal cavities are frequent causes of chronic gastritis, and the latter will not receive benefit until the naso-pharynx and mouth have been put in good condition. I think that the naso-pharyngeal catarrh causes chronic gastritis often and not the reverse as believed by many. The essayist said nothing of the various bacteria found in the stomach and they may cut a figure in these cases. A case should never be classified until we have examined other important organs, heart, liver and lungs, and especially the kidneys. Chronic interstitial nephritis is a most frequent cause of gastric catarrh. Diabetes frequently causes gastric catarrh. It has been my misfortune to see cases who came for treatment of their stomach trouble and who had sugar in their urine. Another point is, I doubt if any case of chronic gastric catarrh fails to present evidences of malnutrition. There is a close connection between the stomach and bowel. I always put the question, and generally answer it in advance, if there is constipation, and a gastritis does not improve until the bowels are improved. They go hand in hand. I think a line should be drawn between gastric catarrh and the so-called nervous gastritis or gastrectasis. We frequently see most marked reflex nervous symptoms in chronic gastric catarrh. Those who have read Bouchard on "Auto-Intoxication," and those who have not, will be repaid by doing so; will remember he accounts for these nervous phenomena by auto-intoxication. The essayist said nothing of the chemic tests which we use in all cases at the Kentucky School Dispensary. These are best applied after a test breakfast has been given, consisting of tea, without milk or sugar, or warm water may be substituted, with a roll; or we can use this test breakfast alone and it tells us a great deal. In acute gastric catarrh the pain comes on quickly. In chronic gastritis if due to a hypersecretion, it comes on several hours after, and if due to deficient secretion we have pain, a sense of weight and fermentation. As to treatment we hardly know what to do. We begin to question whether the stomach tube does good or harm. It makes them think of their stomachs, and they may begin to use the tube themselves to their own detriment. But it is an excellent remedy; the benefits are so quick and striking that it forms a valuable part of our treatment. It is not well to pet the stomachs with peptonized milk and predigested foods; they do more harm than good. The stomach must be made to work; it needs a stimulant and exercise as it is degenerated. One of the bitters not mentioned and which far surpasses all others in my estimation is condurango. It is used in a fresh infusion. These cases need muriatic acid, and nearly all will object to acid; they complain of sour stomach, and can not understand why they must take acid, and one has to resort to all sorts of devices to make them take it.

DR. J. B. BULLITT—I wish to say a word in regard to exercise of the stomach. A rather singular method which I have heard of from one source is this: You take a stomach tube open at the end, and not at the sides, and pass it into the stomach. When the end reaches the stomach, a contraction is caused, and a gush of fluid takes place; if the tube is withdrawn slightly and again pushed in, another contraction is produced. This procedure is called, gastric gymnastics; chronic atonic conditions of the stomach and dilatation are said to be much benefited by these gastric gymnastics.

DR. CHAPMAN—I am glad Dr. Marvin emphasized two points; one that chronic gastritis is caused by naso-pharyngitis. I did not lay sufficient stress upon it. The nose and throat men are inclined to think that the pharyngitis is caused by the gastritis. As to the impression that lavage can prove harmful, I can heartily concur in that. It is a treatment which gives more relief, and comes nearer curing than any other agent that I know. But it does harm to continually introduce it as is done if the patient has one himself. As to the point mentioned by Dr. Bullitt in regard to stomach gymnastics, I always use a tube open at the end, and I nearly always fail to obtain the stomach contents, unless I have the patient press on his stomach or gag or cough. This is perhaps due to the tube being soft and compressible.

DR. J. M. RAY—I am sorry not to have heard the paper but I wish to speak of one point I heard in the discussion. That is in regard to naso-pharyngitis in relation to gastric diseases. I can not agree with the statement that so-called chronic naso-pharyngitis produces often chronic gastric disturbances.

There is only one form of muscular naso-pharyngeal disease accompanied by an increased secretion from the mucous surfaces, and that is acute coryza. The chronic form it is claimed by Bosworth, interferes with the function of the mucous glands and by hypertrophy obstructs drainage. So that secretions may become obstructed in the drainage and while there is apparently an increase of secretion there is really a diminution. The normal secretion is said to be about 1 per cent. in twenty-four hours. There is a red roughened granular condition found often in the pharynx that I believe is the result of gastric disturbances, but I can not see how nasal disease causes disturbances in the stomach. The idea seems quite prevalent especially among the laity that most of the ills of mankind are due to nasal catarrh. We all know that the great majority of nasal diseases are found to be due to local changes in the nose.

DR. CHAPMAN—In washing out stomachs I have found frequently, large quantities of muco-purulent material, often almost crusts, especially in the young who have naso-pharyngitis, who swallow it while asleep. These when in the stomach neutralize the stomach secretions, irritate the mucous membrane and undoubtedly cause chronic gastritis.

ACUTE NEPHRITIS IN AN INFANT.

Read before the Chicago Pathological Society, Jan. 14, 1895.

BY ELIZA H. ROOT, M.D.

CHICAGO.

Mother's history: A. B., age 19, unmarried, primipara, admitted to Chicago Hospital for Women and Children, Jan. 25, 1894. Urine albuminous; legs edematous; purulent leucorrhea and urethritis. Specific taint denied. Albuminuria and edema disappeared under milk diet and Basham's mixture, and leucorrhea controlled by salicylic acid injections. Child born February 26, after a normal labor lasting twelve hours. February 27, decided albuminuria with puffiness of lids, which latter soon disappeared, the albuminuria, however, continuing for four or five weeks. On the tenth day temperature rose to 103 degrees F., from mental excitement over her child's condition, but promptly fell to normal. Mother left hospital March 13 in good condition except that the uterus was still large and congested. Her occasional visits to the dispensary for six weeks enabled me to confirm the absence of syphilis.

Infant's history: Male, weight nine pounds, well developed, urination from the first manifestly somewhat difficult and painful. The fourth day temperature rose to 102.5 degrees F., attended with incessant crying, and the appearance of a papular eruption, mainly on the neck and face. About the tenth day temperature rose to 103 degrees and later 104.5, only slightly reduced by wet pack or bath. Skin became dry and branny with fissures in axilla and groin and about wrists and ankles. During the last two days of the illness the temperature fell to normal and then to 96.5 degrees. Bowel movements became thin and greenish; eclamptic convulsions appeared and then paralysis of left leg. The child gradually became comatose and died March 10.

Post-mortem findings: kidneys were swollen and full of blood, presenting the appearance of acute inflammation. The vena cava ascendens, beginning at or near the junction of the renal veins was filled with coagulated blood having all the appearance of an ante-mortem thrombus. This thrombus was followed into the left common iliac, into the external and internal iliacs, thence to the deep and superficial

veins of the thigh and readily traced into their smaller tributaries. The presence of this thrombus accounts for the paralysis of the limb and the watery semi-transparent whiteness of the foot. The umbilical vein and arteries presented nothing unusual; liver and spleen large and filled with blood; lungs congested; pericardial sac filled with straw-colored fluid; no evidence of cardiac inflammation. Veins of the brain and its membranes contained dark blood but no thrombi. Ureters and urethra patent and normal; bladder empty; stomach and intestines normal; thyroid and thymus glands normal. Perirenal fat absent or nearly so, while subcutaneous fat was present in a very small degree. Microscopic sections of the kidney have been kindly made for me by Dr. Latham, who will present them for the inspection of the Society. They show the changes of a subacute nephritis. The question that has presented itself to my mind in considering the cause of renal disease in this case is, Was the disease due to septic infection, and, if so, how did it occur? The mother was unhealthy, as her history shows. She was considered an unclean case and extra precautions were taken against further infection. She was isolated, during the lying-in, to the extent of being assigned to the care of one nurse who cared for her and her child only. I can not disabuse my mind of the idea that the infective matter still remained somewhere in the parturient canal and that infection took place through the umbilical cord.

NOTE.—Since I read this paper I have seen two infants, hospital cases, in which I made the diagnosis of renal inflammation, acute; one a boy, the other a girl. Both infants presented symptoms similar to those described in the case reported, but not so severe, as both babies recovered. The dryness of the skin, its cracking in the creases of the flexures and the temperature were nearly the same as in report, except that recovery began when temperature reached normal. In the case of the baby girl we obtained enough urine to test for albumin and found it abundant, but not enough to determine quantity per volume. Both children were very ill. I expected both to die, especially the girl, as she was worse than the boy. The mother of the little girl was not so well generally as the other, and at one time, prior to delivery, had a small amount of albumin in urine. The other mother seemed quite well. Both had a normal lying-in and left the hospital well, the babies still showing the effects of their illness but bidding fair for full recovery. Both babies showed stigmata of faulty development in the bones of the head and the ears. Mothers presented no similar signs.

DISCUSSION.

DR. G. H. WEAVER—Dr. L. Emmett Hall, of New York, has written two articles on primary nephritis in infants. The first appeared in 1887; at that time he had collected from his own practice and that of his friends during eighteen months, eight cases of what he called primary nephritis in infants, whose ages varied from 2 days to 2 years. From the literature he collected eleven more, making nineteen cases. He concluded that primary nephritis in infants is not a rare disease, but that it occurs quite frequently, although not usually recognized. Five years later, in 1892, he reported two additional cases, being all that he had seen in five years, so he then modified his first conclusion, and says that primary nephritis in infants is rare and occurs infrequently.

The symptoms he described in this condition are as follows: Continuous fever of an irregular type, generally quite high; dullness and apathy with no focal symptoms of brain disease; marked anemia without emaciation, moderate gastro-intestinal disturbance in the early part, usually vomiting later and a tendency to diarrhea; and later a tendency to bronchitis. These cases all emphasize the fact that in cases of irregular fever in infants for which there is no apparent cause the urine should be examined, and that in case of convulsions in infants the urine should always be examined. In only a few cases was there marked diminution in the amount of urine observable. Dr. Root's case, it seems to me, might possibly belong in this class, the disease of the

kidney not having been caused by infection through the umbilical vessels. Changes in the liver would have been expected and changes in the vessels themselves if the infection had taken place in this way.

DR. ROOT—The temperature in this case was high and during the last two or three days irregular, as Dr. Weaver says, but there was a marked decrease in the flow of urine. No examination of the urine was made, for the reason that we could not secure a sufficient quantity of it.

DR. EDWIN HAMILL—In regard to the last point mentioned by Dr. Root, that of securing a sample of urine from a baby, by placing a flat sponge over the genitals, one may succeed very often in securing urine, without resorting to the use of the catheter.

A CASE OF NEPHRECTOMY FOR SARCOMA OF THE KIDNEY.

Read before the Chicago Pathological Society, Jan. 14, 1895.

BY D. W. GRAHAM, M.D.

CHICAGO.

This sarcoma was removed from a child 18 months old. There was no history of injury or acute disease. About six months before the operation a tumor was discovered in the child's right side, which gradually enlarged. I saw the case the last week in September and told the parents I would operate if they desired it but did not offer them any encouragement. They declined the operation at that time but returned the middle of November with the request that I operate, even if the child died. I operated with a kind of protest, they knowing all the dangers.

At the time of operation the tumor filled the entire side of the abdomen extending down into the pelvis; it was of enormous size compared with the size of the child. I operated by what is called Langenbeck's method. The incision through the wall is made in the linea semilunaris. The colon is pushed toward the middle line, the peritoneum over the kidney and tumor is cut through and stripped off with the fingers, the tumor being thus enucleated. The pedicle consisting of the usual vessels and the ureter is isolated, the tumor freed from behind and the vessels secured. I will pass this tumor around. The kidney substance is at the upper end, the capsule seems to have been ruptured and the whole mass protruded downward. The mass seems to have come out as a fungus at the pelvis of the kidney, shooting out toward the mid-line of the body, and even surrounding the vena cava. The ureter ran across the tumor. The pedicle was secured in the usual way without great loss of blood. There was a good deal of hemorrhage but it came from the bed of the tumor, there being a good deal of venous oozing which could not be checked readily. For the age and size of the patient a good deal of blood was lost, although the absolute amount was small. The patient lived about four hours and died of shock. A diagnosis of sarcoma of the kidney was made before the operation, and the microscopic examination shows it to be sarcoma of the round-celled variety. The diagnosis was based chiefly on the age of the patient. There is no way of determining beforehand from the clinical symptoms whether a tumor of the kidney is carcinoma or sarcoma, but we know that malignant tumors of the kidney in young children are relatively much more frequently sarcomata rather than carcinomata. Dr. Bishop will describe the sections he has made.

MICROSCOPIC EXAMINATION BY DR. D. D. BISHOP.

Pieces were taken from the portion of the specimen which projects above the capsular-like structure and ex-