

bone to the extent of nearly an inch above the point at which it was removed. The bone removed at the secondary operation showed an undoubted development of bone in the periosteum thus detached.

Dr. SHEPHERD said that this case was most interesting in connection with the views recently given by Dr. MacEwen of Glasgow in the October and November numbers of the *Annals of Surgery*. That authority held that periosteum does not initiate the reproduction of bone. In Dr. Bell's case the periosteum had certainly developed bone. He had no doubt of the correctness of Dr. MacEwen's views when he states that the periosteum is not the chief factor in the reproduction of bone, this function being performed by the soft tissues in the bone itself.

Dr. MILLS thought that the Society was much indebted to Dr. Bell for having brought to its notice a specimen that might readily have been overlooked, and which illustrates one of the great laws of reproduction of lost tissue in the adult, in a structure but imperfectly understood as yet. There were other methods of ascertaining the laws of the organism than by laboratory experiments. Disease was one of nature's own experiments; and medical practitioners might supplement the work of the physiological and pathological laboratories by the results of their clinical observations. The views most likely to be correct and lasting were that resultant of the comparison of facts derived from many different fields of observation. It was, moreover, to be remembered that however carefully conducted our laboratory experiments, there was always some disturbance of nature's processes, a principle often forgotten by over-confident investigators.

Purulent Meningitis.—Dr. JOHNSTON reported a case which had been under the care of Dr. Molson, and in which he had performed an autopsy. Patient was a healthy woman, who, whilst in the sixth month of pregnancy, fell and struck her head. She developed soon after brain symptoms, deviation of the eyes, flexion of the neck to one side, and active delirium. She was admitted to the General Hospital, miscarried, and some days after died. At the autopsy, the ovarian veins were distended but patent, the renal veins free. There was severe parenchymatous nephritis with slight interstitial nephritis. Spleen and liver enlarged and soft. Uterus enlarged, cavity dilated, placental site free from inflammation. On the right side

there was purulent meningitis of the inner surface of the pia mater extending to the base in the middle and anterior fossæ of the skull. There was thrombosis of the right lateral sinus and inferior petrosal sinus. No fracture of the base of the skull was found, but there was purulent otitis media of the right side with pus in the mastoid cells. The tympanic cavity was covered with granulations. In this case there was no history of ear trouble. Dr. Johnston had no doubt that the otitis was the cause of the meningitis, and that the fall a short time previously had very little to do with the fatal result of the case.

Rupture of the Heart.—Dr. H. L. REDDY exhibited a heart showing rupture of the left ventricle, and related the following history:—S., aged 68, day watchman by occupation, enjoyed good health for the thirty years preceding his death. Good family and personal history. Was a tall, well-built man, but not obese. On Monday last he left his house at 5 A.M. to go to work. When going down the steps of his house he was seized with a severe pain in chest; he managed to walk about a quarter of a mile, when he was forced to return and go to bed. In my absence Dr. Spendlove kindly saw him for me, and has given me the following note: "Patient complained of severe pain below the lower third of the sternum and extending two inches to the left of the sternum and three or four to the right; pain down both arms to the fingers, and a sensation of tingling in the finger-tips, general malaise, and a feeling as if a heavy weight was on the chest; slight dyspnoea; no cough; lungs normal; pulse slow and full but intermitting once in four beats; heart-sounds slightly indistinct, no murmurs to be heard; vomited once after taking a cup of tea. Dr. S. gave him a small dose of nitro-glycerine, which apparently had the effect of removing the intermittence." I saw the patient about 12.30 P.M.; he complained of severe pain in the epigastrium, and was greatly troubled with eructation; pulse was then normal, and there was no symptom pointing to the heart as the cause of the trouble. I ordered him $\frac{1}{4}$ gr. of morphia, which relieved him greatly, and in four hours another $\frac{1}{4}$ gr., which relieved him entirely. The patient, after the second dose of morphia, seemed quite well, and enjoyed his broth diet. On the afternoon of the 8th, or four days after the first attack, whilst reading the newspaper, he threw back his head and died instantly.

At the autopsy Dr. Johnston found the follow-