of the shot that entered at this point were found upon the same rib, on the outside of the brachial plexus of nerves, completely encysted.

The shot that entered the region of the right jugular and carotid, had perforated the anterior wall of the former vessel, and lodged on the inner surface of the opposite wall, where it had become completely encysted. The vein bore no evidence of inflammation; its cavity, however, was somewhat diminished by the projecting cyst; the opening in front was perfectly closed; and there was no external or internal clot.

No morbid appearances were discovered in the brain or spinal cord, except a little serum in the lateral ventricles of the former.

Louisville, Dec. 13, 1847.

ART. VI.—*Ligature of both Primitive Carotids.* By GEORGE C. BLACKMAN, M. D., Fellow of the Royal Medical and Chirurgical Society of London.

My object in the following report, is to add another to the list of successful cases of ligature of both carotids. The *principle* involved in the operation, and the *final result* of the case, whether favourable or unfavourable, will form the subject of a future communication.

On the 24th of August last, I tied the right primitive carotid artery, on a son of Mr. Gideon Birdsall of Plattekill, who was about fifteen years of age. The circumstances which gave rise to this operation were as follows: Some two years before, a surgeon had attempted to remove what was supposed to have been a polypus from the right nostril. In this attempt he was but partially successful, and the failure was attributed to the restlessness of the patient, &c. &c. But there is reason to believe, from facts subsequently developed, that the fleshy growth proceeded originally from the right maxillary sinus, instead of from the nose itself. This firm vascular mass continued to increase in size, and so to encroach upon the left nostril as to prevent the patient from breathing through either nasal aperture. It was subject to frequent attacks of bleeding, and the boy's health was rapidly failing. In this condition he consulted one of the oldest and first surgeons in New York, who made another attempt to remove the fungous growth which protruded from the nose, but was obliged to desist in consequence of the excessive hemorrhage to which it gave rise. This surgeon dismissed the patient with the advice never to submit to another effort of the kind; but if he suffered anything more to be done, to have a ligature placed upon the carotid artery of that side, for the purpose of arresting the growth of the tumour and prolonging his life. As the parents of the boy resided in the vicinity of Newburgh, they called upon me to perform the operation. During the interval which passed from the time he left New York, (in May,) till the period when he came under my care (in August), the disease had become much more extensive than it was at the time this last effort at its extirpation had been made. The right cheek

had become enormously swollen, and there was a small tumour just beneath the skin and about an inch below the external angle of the eye, which, together with the general appearance of the boy, told too plainly of the malignant nature of the morbid growth, and of the hopelessness of the case. I frankly told the parents, and the patient, how little they could expect from any treatment which might be adopted.

I made them fully acquainted with the hazardous character of the proposed operation, and expressed to them my doubts whether the benefits to be gained would compensate for the risk which the patient must encounter from its performance. The attacks of bleeding had now become more frequent, and it was evident to all, that, unless the disease was checked, the patient could survive but a very short time.

Seeing the inevitable fate which awaited him, after two days' deliberation, the parents and the boy determined to avail themselves of the chance, however slight, which the operation might offer, and it was accordingly performed on the day above mentioned, in the presence of several physicians from Newburgh and the adjoining towns. Nothing worthy of note occurred during or after the operation. The ligature came away on the 13th day, and the whole wound was soon healed. The effect of this proceeding was most decided in arresting the growth of the morbid mass, and in diminishing the tumefaction of cheek. In the course of a fortnight, however, he began to complain of considerable uneasiness about the junction of the upper lip with the right ala of the nose, at which point there was some swelling. The cause of this was soon explained by the appearance of a fungous growth on the under side of the upper lip, which increased so rapidly as to protrude, in four or five days, something like an inch below its margin, and which prevented him from longer taking solid food. Besides it bled repeatedly, and it became very soon apparent, that unless the left carotid was tied, all that had been gained by the first operation would be lost. Indeed, the whole aspect of the case was now most unpromising. After a full examination of all the dangers connected with a second operation, they concluded to have it done. At this period, three weeks after the first operation, the mass which protruded from the nose was shriveled, and instead of the red, vascular appearance which it before presented, it was now of a dark colour. The septum of the nose and the left nasal aperture which were before concealed, were now distinctly visible, and with the exception of the fungous growth in the mouth, the patient's appearance had considerably improved. The livid appearance of the skin over the little tumour below the outer angle of the eye, had changed for the better, and the tumour itself had decreased in size.

During the last operation, one or two circumstances occurred which it may be well to mention. The ligature in this instance was placed above, whilst in the other, just below the omo-hyoideus. A large vein was seen running parallel with the artery, just above its sheath, and recollecting the case which occurred to Dr. Warren, where the patient nearly perished from the admission of air, every precaution was taken to guard against such an accident. In this, I was greatly assisted by my friend Dr. Bowman, of Medina, who drew it aside, while I opened the sheath. In neither case was the par vagum exposed, the carotid sheath having been opened to an extent barely sufficient to admit the aneurism needle. When the ligature had been carried round the artery, the patient was carried to his bed, and allowed to remain with his head low, for some twenty minutes, at the end

of which time, I gradually drew the first knot. The patient was then asked if he felt anything different from usual. He replied, he thought not. This was no sooner spoken than vision in the left eye was lost. Apprehensive that more serious consequences would soon follow, I waited half an hour, and as by this time his sight had become partially restored, I ventured to make the second knot and close the wound. From this moment not an unpleasant symptom followed, with the exception that for some weeks his memory was impaired, and he did not perfectly regain his sight. Both these faculties now (six months after the operation), seem to be of their natural strength. The last ligature came away on the 14th day, and in a day or two after the wound was united. To see whether allowing both ends of the ligature to remain, would, by the more copious suppuration which it might produce, expedite its detachment, I omitted in the latter instance, to cut off one end, but, as we have already stated, it was not separated until the 14th day.

In less than a week from the last operation, the protruding growths, both from the nose and mouth, had dropped off. His tongue, which for weeks had been coated, became clean; his appetite good, and in a few weeks he was able to ride, as he did, some 30 miles.

His strength is now about natural; the swelling in his face is constantly subsiding; there is no trace remaining either of the fungous mass in the nose, or of that which protruded from the mouth: and whatever may be the *final result* of the case, one thing is *certain*, that a patient, who, had it not been for the steps which have been taken, must, weeks ago, have been in his grave, is now in the enjoyment of tolerable health, and from present appearances bids fair to live for *months*, if not for *years* to come.

Newburgh, New York, Feb. 1848.

ART. VII.—*Statistics of Large Surgical Operations.* By Usher Parsons, M.D., formerly President of the Society. (Communicated for publication by the Rhode Island Medical Society, before whom it was read.)

THE medical profession have occasionally been favoured with valuable reports from hospital surgeons, on the results of large surgical operations that have occurred in hospital practice, particularly by Drs. Norris and Hayward, of this country, and by several European surgeons. It has occurred to me, that similar reports from private practitioners would possess some interest. I therefore present the following brief summary of cases that have come under my care, during a practice of thirty-five years, hoping that other practitioners advanced in life, will pursue a similar course.