the limb generally has much diminished, though a prominent ridge has been thrown out at the part embraced in the wire-loop. The wire having become somewhat loose, it is twisted as much as the patient can easily bear.

July 25. To-day, while tightening the wire, it became detached, and was removed with the loop unbroken. The external wound has closed, excepting at the point where the wire projected. A well-formed callus seems to embrace the fracture, and the arm can be lifted from the splint without displacement, though the connection is yielding.

August 6. Since the last record, two or three small bits of bone have been discharged from the wound. Swelling has nearly disappeared, and the wound has closed, excepting a mere point. The prominent callus is also disappearing, though the consolidation is now so great that the bone will sustain the weight of the forearm without bending. Removed the splint and applied a *gum* and *chalk* bandage from the hand to the axilla, cutting a small aperture in the bandage opposite the wound for the purpose of dressing, &c.

8*th*. Having ascertained that the stiff bandage is well borne, dismissed the patient, with directions to begin to use the hand after two weeks, and to wear the bandage as long as it fitted closely, or the arm needed support.

The present condition of the limb will be seen by the following extract from a letter, dated December 7th, from Dr. B. F. Skinner, his attending physician:—

"I examined T.'s arm day before yesterday. It is evidently firmly united. He has worked constantly with a one-horse team for two months or more, drawing wood, gravel, goods from the depot, &c. He says the arm feels as strong as the other. I am unable to see why the cure is not complete."

ROTLAND, Vt., January 7, 1860.

ART. V.—*Case of Ununited Fracture of the Humerus. Failure of Brainard's Operation, and of the Seton.* By C. S. FENNER, M. D., Memphis, Tenn.

ON the 4th of May last I visited, at Germantown, in consultation with Dr. J. M. M. Cornelius, his attending physician, Mr. William Walker, a gentleman, 35 years of age, who, in the month of December, 1858, was thrown from his buggy, and received a fracture of the left humerus. He was seen immediately by a physician, and the arm put in splints and tightly bandaged, so as to give him great pain. After a few weeks, no union taking place, the case came under the charge of Dr. Cornelius, who, with

the view of exciting inflammatory action, placed the patient under the influence of chloroform, and forcibly rubbed the ends of the bones together, then, carefully adjusting them, applied splints and bandages to keep them in apposition. No benefit resulted from this treatment.

On examination, I found an oblique fracture, commencing four inches above the external condyle, and extending four inches up the humerus. The crepitus was distinct, the ends of the fragments rosily separated, and no ligamentous union or rounding off of the ends of the bones. His general health had always been good. We determined on "Brainard's operation," as the one most simple, and at the same time promising the best chance of a cure. Placing the patient slightly under the influence of chloroform, I punctured with a small bistoury the soft parts about two inches above the end of the upper fragment, introduced the drill, and bored the upper and underlapping lower fragment. I then withdrew the drill from the bone, but not from the soft parts, and perforated the bones at another point, and repeated it, thus making three perforations through each fragment. The drill was now withdrawn, a piece of adhesive plaster applied to the wound, and the arm carefully put in splints and bandaged. Ten days after I visited Mr. Walker again, and finding he had suffered no inconvenience from the first operation I repeated it, introducing the drill at another point through the soft parts, and making three perforations through each fragment. This time the operation, after two or three days, was followed by considerable pain and throbbing, which Dr. Brainard thinks an indication that the process of bony union is going on. In thirteen days I again repeated the operation; this was followed by but little pain, and after waiting seventeen days, and finding no enlargement of the bone, or evidence that the formation of callus had begun, I operated with a larger drill, perforating the bones in every direction. The parts were then carefully adjusted, and the splints and bandages reapplied. No benefit resulting from this effort, we deemed it useless to persist further with the drill, as we thought we had given it a fair trial. So, waiting until August 9th, we determined on the use of the seton. I passed a piece of silk tape, half an inch in width, through the arm, between the fragments of bone. After remaining in twenty-three days, during which time the patient did not leave his bed, at the request of Dr. Cornelius I again visited our patient, and found such an amount of swelling, extending from below the elbow to the shoulder, and so much constitutional disturbance, that we considered it unsafe for the seton to remain longer, and so removed it. No benefit was derived from this treatment.

We now spoke of the propriety of excising of the ends of the bones; but the patient, after fully understanding the nature and extent of the operation, and the probability of a failure, did not feel willing to submit to further operative proceedings. From the obliquity of the fracture, it would have required unusually extensive incisions to have turned the ends of the

booes out, so as to have sawed them off; and then to have given each end a directly transverse surface, the arm would have been shortened to the extent of the obliquity of the fractare.

Cases of pseudo-arthrosis ore frequeotly met with that resist every plan of treatment with which we are acquainted; therefore, it becomes a matter of interest to determine which plan offers the best and safest prospect of a cure. This can only be decided by experiment; hence, the report of every case, and the treatment adopted, whether successful or unsuccessful, is of interest, with the view of determining thot point.

ART. VI.—*Exsection of the Right Superior Maxilla, and a portion of the Left, for Disease of Long Standing.* By WM. H. GOTT, M. D., of Readstawn, Wisconsin. (Cammunicated by JAS. M'NAUGHTON, M. D., of Albany, N. Y.)

I was consalted in April last by Peter Guist, aged twenty-three years, respecting a tumour of the right superior maxilla. From his awn account, it appears that while residing in Morgan County, Ohio, ten years ogo, a tamaur of the size af a small pea was abserved ta be growing on the under surface of the jaw, behind the canine teeth, and attached ta it by a delicate pedicle. After the lapse of a year or so, when the tamour had ottoined to the size of a small marble, a physician was consulted, who advised its removal without delay; it was accordingly snipped off by the scissors close to its point af ottachment to the boae.

For three or four months nothing mare was seen of it, and the hope was indulged that its remaval would prove effectual; it, however, shortly reappeared at the site of the ottachment of the pedicle to the bone, and increased in size gradually, so that by the end af a year, the alveolar process as far as the first molor tooth had become implicated.

In the fall of '51 or '52, he emigrated to Badax County, in this State. In '54 or '55, he submitted to an operation at the request of a physician, under the pramise af a speedy and permanent eure. The aperatian had recaarse to, as far as I have been able to learn, consisted in the extraction of a few af the teeth and the shaving off of the body of the tumaur fram the bone.

The hemorrhage following this operation was very profuse and was with great difficolty coatrolled; na benefit was experienced, for the tamour soon began ta enlarga with more rapidity than farmerly.

The faregaing history is imperfect in its details, bat is as full as could be obtained from the patient. He first came under my abservation in the