

kind of water-lizard, I shall not pretend to determine: but, considering its size, if it should be deemed a tadpole, as first produced from a spawn, and in its progress towards a frog, such a frog, when full-grown, if it bears the same proportion to its tadpole that the frogs in Europe do, it must be of an enormous size; for our full-grown frogs exceed the tadpoles, and young fry of perfect frogs, at least fifty times in magnitude.

London, March 27, 1760.

LXI. *An Account of a remarkable Operation on a broken Arm; by Mr. Charles White, Surgeon at Manchester, communicated by George Lloyd, Esq; F. R. S.*

Read March 27, 1760. **R**obert Elliot, of Eyam, in Derbyshire, a very healthful boy of nine years old, had the misfortune, about midsummer in the year 1759, by a fall, to fracture the *Humerus*, near the middle of the bone. He was immediately taken to a bone-setter in that neighbourhood, who applied a bandage and splints to his arm, and treated him as properly, as, I suppose, he was capable of, for two or three months. His endeavours, however, were by no means productive of the desired effect, the bones not being at all united. A surgeon of eminence in Bakewell was afterwards called in; but as he soon found he could be of no service to him, and, as the case was very curious, he advised the lad's friends

friends to send him to the infirmary at Manchester : he was accordingly brought thither the Christmas following, and admitted an in-patient. Upon examination, we found it to have been a simple oblique fracture, and that the ends of the bone rode over each other. His arm was become not only entirely useless, but even a burthen to him, and not likely to be otherwise, as there was little probability, that it would ever unite, it being now near six months since the accident happened.

Amputation was therefore proposed as the only method of relief ; but I could not give my consent to that ; for, as the boy was young, and had a good constitution, it was hardly possible that it could be owing to any fault in the solids or fluids, but that either nature was disappointed in her work by frequent friction, while the callus was forming, or rather that the oblique ends of the bone being sharp, had divided a part of a muscle, and some portion of it had probably insinuated itself betwixt the two ends of the bone, preventing their union. Which ever of these might be the case, I was of opinion, that he might be relieved by the following operation ; *viz.* to make a longitudinal incision down to the bone, to bring out one of the ends of it (which might be done with great ease, as the arm was very flexible), and cut off the oblique end, either by the saw or cutting pincers, then to bring out the other end of the bone, and cut off that likewise ; afterwards to replace them end to end, and then treat it intirely as a compound fracture.

The objections, made by the other gentlemen concerned to this proposal were, 1st, The danger of wounding

wounding the humeral artery by the knife; 2d, the laceration of the artery by bringing out the ends of the bones; and, 3d, that we had no authority for such an operation. As to the first, that was easily obviated, by making the incision on the side of the arm opposite to the humeral artery. The place of election appeared to me, to be at the external and lower edge of the deltoid muscle, as the fracture was very near to the insertion of that muscle into the humerus, the danger of wounding the vessel not only being by that means avoided, but after the operation, while the patient was confined to his bed, the matter would be prevented from lodging, and the wound be easily come at, to renew the dressings. The second objection will not appear to be very great, when we consider, that in compound fractures, the bone is frequently thrust with great violence through the integuments, and seldom attended with the laceration of any considerable artery, and as this would be done with great care and caution, that danger would appear very trifling. The third and last Objection is no more than a general one to all improvements.

This method, which I have been proposing, was at last resolved upon, and I assisted in the operation, which was performed by a gentleman of great abilities in his profession, on the third of January, in the present year. The patient did not lose above a spoonful of blood in the operation, though the tourniquet was not made use of. When the operation and dressings were finished, the limb was placed in a fracture-box contrived on purpose, the lad confined to his bed, and the rest of the treatment nothing different from that of a compound fracture.

The wound was nearly healed in a fortnight's time, when an erisipelas came on, and spread itself all over the arm, attended with some degree of swelling: this by fomentations and the antiphlogistic method soon went off, and the cure proceeded happily without any other interruption. In about six weeks after the operation, the callus began to form, and is now grown quite firm; that arm is as long as the other, but somewhat smaller by such long continued bandage; he daily acquires strength in it, and will soon be fit to be discharged.

Manchester,
March 17, 1760.

C. White,
*Surgeon to the Infirmary
at Manchester.*

LXII. *An Account of a Bone found in the Pelvis of a Man at Bruffels; by Terence Brady, M. D. In a Letter to the Rev. Tho. Birch, D. D. Secretary to the Royal Society.*

Rev^d. Sir,

Read Apr. 29, 1760. **I** Send you here inclosed a draught of a bone found in the pelvis or basin of a man, that died in the military hospital of this town the 12th of March 1760, of a seven days inflammatory distemper. This extraordinary concretion weighs about 20 ounces, has all the external appearances of a bone, with the hardness, solidity, and specifick gravity