fidering the particular Structure of that Substance, as described by the late Learned Dr. Hook, in his Micrographia.

VII. A Lettrr from Mr. Edward Naish, Surgeon in York, to Claudius Amyand, Esq; SerjeantSurgeon to his Majesty, and F. R. S. Concerning an Ossification of the Crural Artery.

Tork, Sept. 11. 1721.

R. Consett, of Cleveland in Yorkshire, a Gentleman of Sixty seven Years of Age, who all his Life before had enjoy'd a perfect good State of Health, sent for me on account of a Mortification. which began about a Month before on one of his Toes, and by gradual Advances in that Time had reach'd half way his Leg; and this without any manifest Cause. This was the State I found him in: viz. a perfect Mortification, or Sphacelus of his Foot, and half his Leg. In fuch a Case, what was to be done? The Gentleman faw himself dying daily by Piecemeal; but Heart-whole, as he express'd it, and had a pretty good Pulse. I proposed Amputation, as the only Remedy, which (I told him) would give him fome Chance for his Life; tho' the Odds was against him. This he readily confented to; and as foon as I could get my Dreffings ready, I went about the Operation; assisted by Mr. Mitford, a Surgeon of Northallerton, and Mr. Moon of Stockton, who before had attended the Gentleman.

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The Leg being taken off at the usual Place, (which was four Inches above the Mortification) about two or three Ounces of Blood issued out from the Muscular Part; but upon flackening the Turniket, in order to look for, and tye the Artery, not one Drop of Blood flow'd out; to my no small Surprize. And upon feeling the Extremity of the Artery, I found it hard and callous; however, I fecur'd it by a Ligature, as usual, and dress'd the Stump. The Patient ( who had born the Operation with the greatest Resolution) being put to Bed, I was defirous to examine the Leg; and having diffected the Artery, with its two confiderable Branches as far as the Tarfus, I found them for the most part offisied; that is to say, the Trunk, where it was amputated, was offified about two thirds of its Circumference. About a Quarter of an Inch lower, the whole was bony, leaving fo finall an Orifice, that it would only admit of a Hog's Bristle; not a very fine Probe, that I endeavour'd to introduce. A little lower, it was on one fide bony, on t'other membranous; then again an entire Case of Bone. Here and there, for the Breadth of a Barly-Corn, there would be no Bone at all. about two Inches of the internal Branch immediately above the Malleolus, it appearing blacker than the rest. After it had been wash'd, I found in it about two or three Drops of coagulated Blood; and now 'tis expanded and dry'd, 'tis one entire Lamina of Bone, as thick as the Shell of a Pigeon's Egg, and of an unequal Surface. I diffected three Ramifications of this internal Branch into the Foot; only one of them had a very small Bit of Bone in it, about half an Inch from the Trunk. The other great Branch, that runs Ii 2 on

on the Ligament that ties the Fociles together, was not fo much offified as that which I have defcribed.

This Offification (which is the compleatest of any I have yet heard of) was, no doubt, the Cause of the Mortification, and of the Death of my Patient, which follow'd four Days after the Amputation, as Mr. Mitford inform'd me, being oblig'd to leave him the next Morning; though I should have been curious, had I been present, to have seen how high the Ossification reach'd.

I must observe to you, That this bony Shell, or Lamina, was contain'd within the Tunicles, or Coats of the Artery. I don't doubt, but these Cases are more common than we imagine. For when we see Mortifications seize the Extremities of Aged People, which we commonly attribute to a Decay of Nature, or an Extinction of the Vital Warmth; this, I believe, is often the Cause. And I am the more inclin'd to think so, from two or three parallel Cases I have been concern'd in, since I came into Torkshire.

I am, Oc.

Edward Naish.