

use of the method, not only to astronomers, but to all others concerned in making of experiments of any kind (to which the above reasoning is equally applicable). And the more observations or experiments there are made, the less will the conclusion be liable to err, provided they admit of being repeated under the same circumstances.

Other examples, and particulars might be added, in confirmation of what is here determined; but as I would not appear tedious to your Lordship, I here conclude, who am,

Woolwich,  
March 4, 1755.

My Lord,

Your Lordship's

most obedient humble servant,

T. Simpson.

XX. *An Account of the Success of Agaric, and the Fungus vinosus, in Amputations: By Mr. James Ford, Surgeon, of Bristol.*

Bristol, March 31, 1755.

Read April 10, 1755. **I**N 1753 I had some pieces of the agaric of the oak brought me from France, which I have frequently used with success in hæmorrhages, particularly once after the operation for the stone, where a large artery lay so deep, that it could not conveniently be taken up with a needle. After the publication of Mr. Warner's observations, Mr. Thornhill applied it successfully to an

an amputation of an arm, and a leg, in adult subjects. I had very early suspicions, that this effect of the agaric was more owing to its texture, than any specific stypticity, and therefore determined to try a fungus, very similar to it in substance, that grows in great abundance on the casks, walls, &c. in wine-vaults, and which the coopers here apply to their wounds, whenever they cut themselves. I have inclosed two pieces of this *Fungus vinosus*, one from the cask, which is of a firmer texture than the other, which was taken from a partition-door in the cellar. I made choice of the former in the following experiment.†

*A. B.* Aged 36, strained his ancle two years ago, from whence an abscess in the joint, and caries, ensued: the pain and discharge brought on many hectic symptoms, particularly a very troublesome cough. On the 5th instant I amputated the leg in the infirmary; and, after the operation, applying my finger to the great artery, unscrewed the tourniquet, to discover the small ones, which the assistants covered in like manner. I then screwed it to such an exact degree of tightness as to stop the bleeding from the large artery, which I spunged very dry, and applied a thick bit of the fungus, with some lint over it, and so to each of the others, and dressed it up, as usual, with a slight bandage. In five minutes I began to unscrew the tourniquet, and by slow degrees (so that the blood might not rush too suddenly on the extremity of the artery), in half an hour loosened it intirely. In unscrewing the tourniquet, I kept an account how many turns I made; that, if the artery had bled, I might be able to determine what exact

exact degree of tightness was necessary to compress it again. Four hours after the operation, he had occasion to use the bed-pan, and his efforts to raise himself made it bleed so as just to stain the roller, but it stopped without doing any thing to it. On the seventh he had a violent fit of coughing, followed by a vomiting, which renewed the bleeding, and it bled about three or four ounces, but before any one could come to his assistance, it stopp'd: however, the tourniquet was screw'd so as to make a slight pressure on the femoral artery for a few minutes, when it was loosened again. On the 10th the stump was opened; it had a very fair appearance, and has gone on very well. The fungus did not drop off from the great artery till the 17th.

March 15, Mr. Thornhill performed an amputation, in the infirmary, above the knee, on a man of twenty-one years of age, and applied this fungus. On the 20th it was opened, without the least stain of blood; but on the 22d it bled, from a fit of coughing: tightening the tourniquet for a short time stopped it, and it has not bled since. The fungus adhered to the wound till the 30th.

James Ford.