

XXXIII. *Part of a Letter from Dr. Fred. Slare to Dr. Hans Sloane; concerning a Person who had a new Set of Teeth after 80 Years of Age; with some Observations upon the Virtues and Properties of Sugar.*

S I R,

I Have had Reason to give a great Character of Sugar, on account of some extraordinary effects it seem'd to have on my Grand-Father 40 Years since. He made it his daily practice to take or lick up as much Sugar as his Butter spread upon Bread would receive, for his constant Breakfast, unless he happened to exchange it for Honey sometimes. He frequently sweetned his Ale and Beer with Sugar: He had Sugar put to all the Sauces he used with his Meat. He had all his Teeth in his Mouth at 80 Years, strong and firm; never had any Pain or soreness in his Gums, or Teeth; never refused the hardest Crust. In his 82d Year one of his Teeth dropt out, and soon after that a second, which he put into my Hand, and was one of the fore-Teeth: He bid me feel the Cavity, where I struck my Nail upon a Bone. In short, all his Teeth came out in two or three Years, and the young ones filled up their room: He had a new Set quite round. His Hair from a very candid white became much darker. He continued in good Health and Strength, without any Disease, and dy'd in his 99th or 100th Year, of a *Plethora*, as I guess, for want of Bleeding. This is no Romance: He was a *Bedfordshire* Gentleman of an old *English* Family; and the case well
 N n known.

known. This reconcil'd me much to vindicate Sugar, which I have done formerly before the *Royal Society*; and have shewn the unjust Calumny of the famous *Willis* against Sugar, who charges it with a Corrosive Liquor, as bad as *Aqua fortis*; He calls it *Aqua Stygia*. I examin'd it, and found the Charge unjust; That Sugar contain'd no worfe substance in it, than Milk, and Honey, and *Manna*, nay even Bread itself. The Experiments were approv'd of, and are in your Journals:

Some Years past I shew'd Dr. *Lister* the Figure that Sugar did naturally make, or shoot into, and would have had him describe it, and add it to those curious Cuts of Salts before his Book of Mineral Fountains; but we could not then well express the Figure, which I have since been able to do more accurately. For the difficulty lies here; all other Salts shoot or crystallize, and make their Figure in a cool Place; but Sugar will crystallize only in a hot Stove, and is more apt to be compounded, and not to shew its true primitive Texture. Thus it happens to Snow, which in its true simple shape is an Hexagon; but cannot be always discover'd single. This is yet more easy to be accounted for than Snow; and we have been able to chuse such parcels of that Sugar call'd Candy, as do represent the following Figure, being a Prism, as you may see by the Figure. I never question'd but that it was a true Salt, having all the Properties of a Salt; and therefore made many unsuccessful Experiments before my Acquaintance with Sugar Bakers. I have consider'd the Virtues (and Vices of Sugar, if there be any) for many Years, and have some few Considerations on that subject; &c.

Tab. VI. Fig. 5. Shews the Form of the Crystals or Salts of Sugar, having two Bases, opposite, equal, and parallel; the other are Parallelogramms.

Fig. 6. Shews the Basis of the preceding Figure.

Fig. 1.

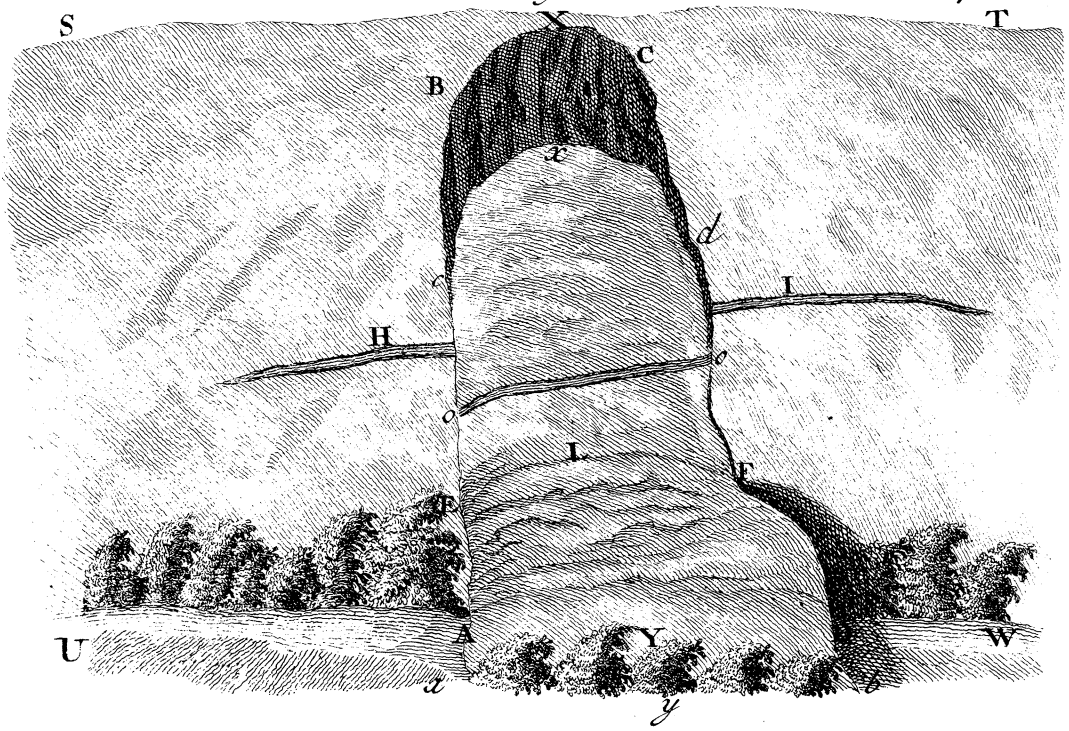


Fig. 5.

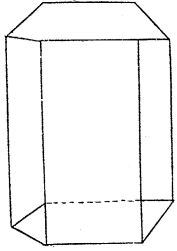


Fig. 6.

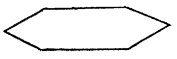
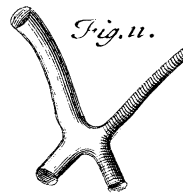
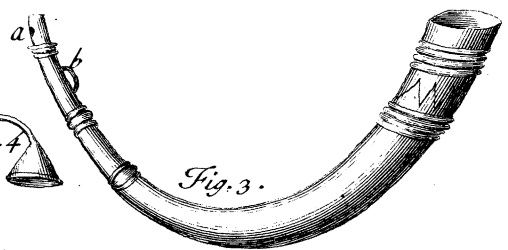
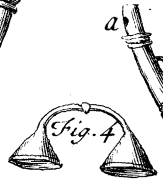
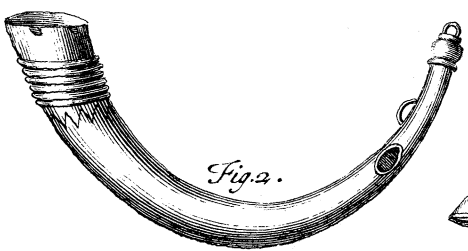


Fig. 12.



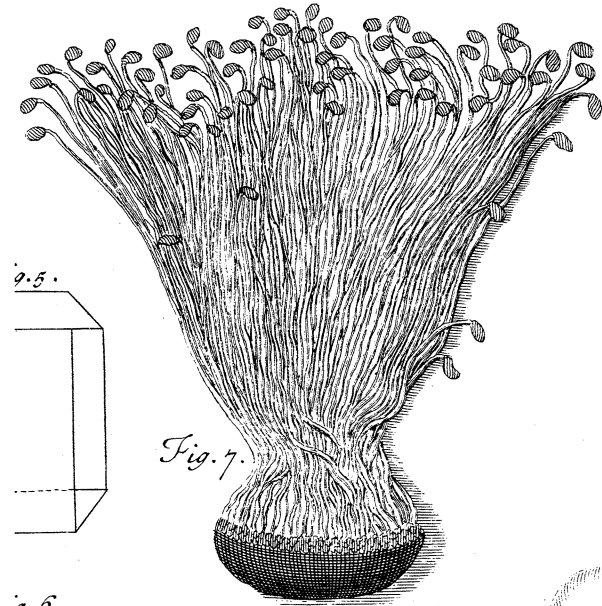


Fig. 7.

Adiantum aurcum marinum &c.



Fig. 9.

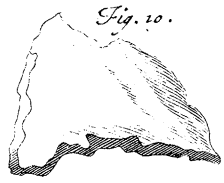


Fig. 10.

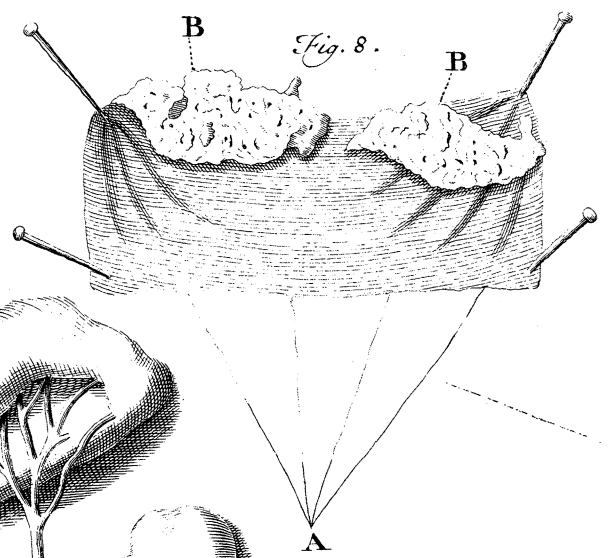


Fig. 8.

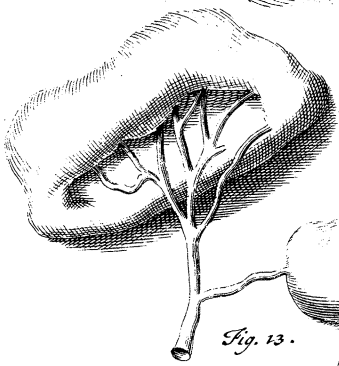


Fig. 13.

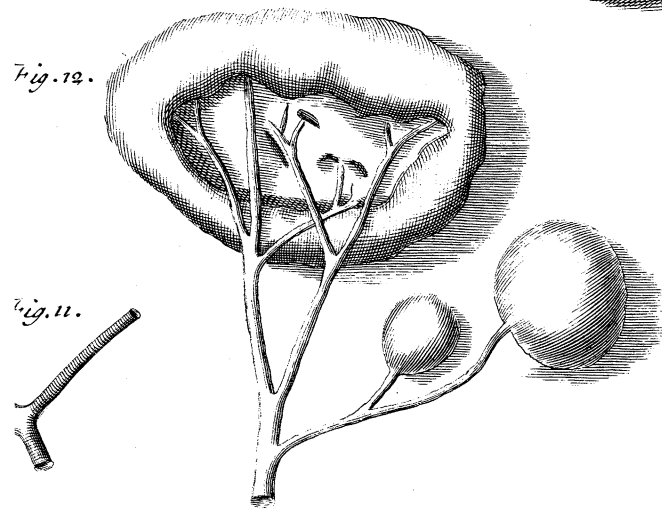


Fig. 12.

Fig. 11.

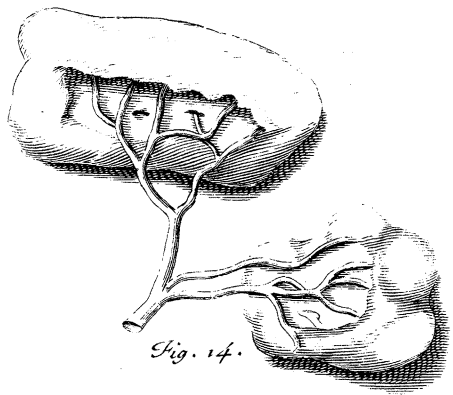


Fig. 14.

