

if their distance be so great, that colours begin to appear in the light before its incidence on the second Prism, those colours will not be destroyed by the contrary refractions of that Prism.

These things being observed, the round image Q will appear of the same bigness, which it doth when both the Prisms are taken away, that the light may pass directly towards Q from the hole without any refraction at all. And its diameter will equal the breadth of the long image PT, if those images be equally distant from the Prisms.

If an accurate consideration of these refractions be designed, it is convenient, that a *Lens* be placed in the hole F, or immediately after the Prisms, so that its *focus* be at the image Q or PT. For, thereby the Perimeter of the image Q and the straight sides of the image PT will become much better defined than otherwise.

An Account of a Stone cut out from under the tongue of a Man; lately sent in a Letter of Mr. Listers to his Grace the Lord Archbishop of York.

May it please your Grace,

IN obedience to your Grace's Commands, I have penned the Circumstances of a not common Medical observation, viz. the Excision of a *stone* from under the tongue. And I here with present your Grace also with the stone its self, as I had it from the person it was taken.*

* This Stone is now in the custody of the R. Society, to whom it was presented afterwards.

As to the occasion and time of its birth, he tells me, (My Lord, you may be pleas'd to give firm Credit to every particular, that he hath answered me at your Grace's instance) it was from a winter Sea-voyage, which lasted much longer than he expected, and wherein he suffered an exceeding cold; and that, not long after his landing, he found a certain *Nodus* or hard lump in the very place whence this stone was cut. There was about 8 years betwixt its breading and being taken away.

As to its growth, and the inconveniences thence ensuing; he further saith, that upon all fresh-cold-taking, he suffered much pain in that part especially; and yet, that cold once being over, that part was no more painful than the rest of his mouth. He adds, that towards the 7th and 8th year it did often cause sudden

sudden swellings in all the Glanduls about the mouth and throat upon the first draught of beer at meals; which yet would in a short time fall again.

Lastly, as to the particulars remarkable at the time of its being taken away, he relates; That it began its work with a sudden *vertigo*; which vertiginous disposition continued more or less from Spring 'till August; in which month, without any previous cause save riding, the place where it was lodged suddenly swelled, and ran purulent matter at the aperture of the *ductus Whartonianus*: that it suddenly stopped of its running (which he cannot attribute to any thing but Cold,) and swelled with a great inflammation, and very great danger of choaking; it being scarce credible, what pain the party suffered in endeavouring to swallow even beer, or any liquid thing.

This extremity lasted 5 days, in all which time, the party had so vast a flux of spittle running from him, that it was not possible for him to repose his head to sleep, without wetting all the bed about him; insomuch as that it was very much questioned by some friendly visitants, whether he had not of himself, or by mistake, made use of some Mercurial medicine.

The varieties or degrees of this *spontaneous salivation* were such, that he urged me not to omit them in the relation I was to make to your Grace, as thinking them very notable.

The first day, the *saliva* ran thin and transparent, almost like water without any bubbles. The 2 day it ran frothy; it tasted salt, (which yet he is apt to think hot rather than really salt, because that day the inflammation was at the height). The 3 day it roaped exceedingly; on which day a small pin-hole broak directly over the place of the Stone and ran with purulent matter as formerly. The 4 day the *saliva* ran *insipid*, sensibly cold in the mouth; (which again confirms me in that opinion, that the former sharp taste was the effect of heat, and not the immediate quality of a salt humour;) very little frothy. The 5 day (which was the day of the incision,) it ran as on the 4th but left an extream claminess on the teeth, insomuch that they often clave together, as though they had been joyned together with glue.

Upon the incision, which proved not wide enough, the membranes or baggs, wherein the Stone lay, came away first. As to the Stone it self, it was so hard as to endure the *forcipes* in drawing it

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forth : it was covered over with grass green matter, which soon dried, and left the stone of a whitish colour, as it is to be seen. It is but light in proportion to its bulk, weighing about 7 grains; and 'tis much of the shape of our ordinary horse-beans. There are visible impressions upon it of some Capillary and small vessels, it was bred amongst. Lastly, it is scabrous or rough, sand-like, although the substance is Tophaceous.

The Accidents accompanying the working away of this Stone, (for the incision was meerly obstetrical,) and the place of its birth give occasion to call the distemper a *Ranula*. Yet in truth this was nothing else but one of those Tumours called *Atheroma*; and therefore we will name it *lapis Atheromatis*.

An Extract of a Letter of the same Mr. Lister, written from York April 12. 1672. concerning animated Horse-hairs; rectifying a Vulgar Error.

Sir,

I Cannot discover any thing new and rare in natural Philosophy, but I must forthwith make you participate of my good fortune; and I assure you, the relation, I am about to make you, is of a thing very surprising.

It hath been credibly reported, that *Horse hairs* thrown into water will be animated; and yet I shall shew you by an unquestionable observation, that such things as are vulgarly thought animated Hairs are very Insects, nourished within the bodies of other Insects, even as *Ichneumones* are within the bodies of Caterpillars.

I will premise the particulars concerning this Animal, as I find them collected by the Industry of *Aldrovandus*, and save you the trouble of that voluminous Author.

This Insect (saith he) seems to have been unknown to the Ancients; as it is called by the moderns *feta aquatica* or *vermis fetarius*, either from the most slender figure of the body; or because it is thought to be generated of an horse-hair putrifying in water. The Germans call them by a name rendred *Vituli aquatici*.

It is bred in corrupt waters; perhaps of horse-hair, for (saith *Albertus* upon his own frequent trial, as I find him quoted by *Aldrovandus*,) these hairs, put into standing water, move and are inanimated, or, as he words it, *vitam & spiritum accipiunt, & moventur*.