Letter from Anton van Leeuwenhoek, Published in The Proceedings of the Royal Society of London, ca. 1683.

In my letter of the 12th of September 1683, I spoke among other things, of the living creatures that are in the white matter which lies betwixt [between] . . . one's front teeth or one's grinders. Since that time . . . I have examined this stuff many times; but to my surprise, I could discover no living creatures in it.

Being unable to satisfy myself about this, I made up my mind to . . . look into the question as carefully as I could. But because I keep my teeth uncommonly clean, rubbing them with salt every morn-

my teeth uncommonly clean, rubbing them with salt every morning, and after meals generally picking them with a fowl's quill, or pen; I found very little of the stuff stuck on the outside of my front

teeth; and in what I got out from between them, I could find nothing with life in it. Thereupon I took a little of the stuff that was on my . . . grinders; but though I had two or three shots at these observations, it was not till the third attempt that I saw one or two live animalcules. . . .

time, methinks I have now got to the bottom of the dying-off of these animalcules. The reason is, I . . . pretty near always in the morning drink coffee . . . so hot that it puts me into a sweat: . . . Now the animalcules that are in the white matter on the teeth . . . being unable to bear the hotness of the coffee, are thereby killed . . .

Having allowed my speculations to run on this subject for some

from off the teeth further back in my mouth, where the heat of the coffee couldn't get at it. . . . and then I saw with as great a wonderment as ever before, an inconceivably great number of little animalcules, and in so unbelievably small a quantity of the foresaid stuff, that those who didn't see it with their own eyes could scarce [believe] it. These animalcules, or most all of them, moved so nimbly among one another, that the whole stuff seemed

Accordingly, I took (with the help of a magnifying mirror) the stuff

alive and all moving.

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