

conclude that if the Retina were the Organ of sight, this dog would not see the objects indifferently enlightened, which are about the candle, although at 3 or 4 foot distance, because they would receive a great deal more impression from this reflexion, and that a great sensation doth obliterate a lesser, which is contrary to experience, and it is not at all likely, there should be such a defect in the sight of Animals.

The third is, that the Eyes of *Birds* are so framed, that the Optique nerve after its insertion into the Eye is inflected, and extends it self on the Concavity of the *Sclerotis* about the breadth of 2 or 3 lines more or less according to the bigness of the Eyes; and the length of this inflection is covered by the *Chorooides*, leaving but one little white streak in the middle, from whence the *Retina* takes its Original, which extends it self on the *Chorooides* through all the bottom of the Eye, but it is covered on the side of this white streak with a little black membrane as long as the inflexion of the nerve, and almost as broad; which proceeds from the *pia mater*, and is as it were an appendix of the *Chorooides*: and if you consider the situation of this membrane, you will find it is near the Axis of sight, and that the rayes of the Objects, which the *Birds* look on with both Eyes, fall precisely upon it after their refraction. Since then in the place, where Vision ought to be strongest, the *Retina* is covered, and that no man doubts but *Birds* are more clear-sighted than other Animals; you ought to acknowledge, that the *Retina* is not the principal Organ of Vision, but that that preeminence belongs to the *Chorooides*.

AN ACCOMPT

Given by Doctor Edward Brown, concerning the Copper-mine at Herrn-ground in Hungary.

Herrn-ground is a little town, seated very high between two Hills, upon a part of land of the same name, an Hungarian mile distant from *Newsol*. In this town is the entrance into a large Copper-mine, very much digged.

I went in through a *Cuniculus*, called *Tach-stoln*, and continued divers hours in the Mine, and visited many of the most remarkable

markable places in it. The steep descents in this Mine are made by Ladders or Trees set upright, with deep notches or stayers cut in them to stay the foot upon. They are not troubled with water, the Mine lying high in the hill, so that the water may drain away; but they are molested with dust and damps.

The Veins of this Mine are large, many of them cumulate, and the Ore very rich; in an hundred pounds of Ore they ordinarily finde twenty pounds of Copper, sometimes 30, 40, half Copper, and even to 60 in the hundred. Much of the Ore is joyn'd so fast to the rock, that tis separated with much difficulty. There are divers sorts of Ore, but the chief difference is between the Yellow and the Black: the Yellow is pure Copper-ore: the Black contains also a proportion of Silver.

They find no *Quick-silver* here: the mother of the ore is yellow; and the Copper ore, heated and cast into water, maketh it become like that of some Sulphureous Baths.

They separate the Metal from the Ore with great difficulty.

The Ore commonly passes 14 times through the furnaces: sometimes it is burned, and other times melted; sometimes by it self, and sometimes mixt with other minerals and its own dross.

There are divers sorts of *Vitreol* found in this Mine, Green, Blew, Reddish, and White. There is also a Green Earth or sediment of a green water, called *Berg-grün*. There are likewise stones found of a beautiful green and blew colour, and one sort, on which *Turcoises* have been found; therefore called the *Mother of the Turcois*.

There are also two Springs of a *Vitriolat* water, which are affirm'd to turn iron into Copper. They are called the Old and the New *Ziment*. These Springs lye deep in the Mine. The Iron is ordinarily left in the Water 14 dayes. I here present you with some pieces of it, and with an Heart and a Chain. formerly Iron; now appearing to be Copper. Divers of these pieces I took out of the old *Ziment*. They are hard within the water, and do not totally loose their figure, and fall into powder, as you will perceive by them; they will easily melt, I have sent a piece melted without the addition of any other substance. They make handsome Cups and Vessels out of this Salt of Copper: I

drank out of one of them, when I was at the *Verwalter* of *Hern-grownd* his house: It was gilded over, and had a rich piece of Silver-ore, fastned in the middle of it, and this Inscription grav'd on the outside,

*Eisen ware Ich, kupfer bin Ich,
Silber trag Ich, Gold bedeckt mich.*

i. e. Copper I am, but Iron was of old,
Silver I carry, cover'd am with Gold.

AN ACCOMPT

Concerning the Baths of Austria and Hungary; as also some Stone-Quarries, Talcum rocks, &c. in those parts: By the same hand.

IN order to answer some of the other *Queries*; I here present you with this Accompt concerning *Baths*, and some other subjects, contained therein.

Baden is a little City in *Austria*, four German miles Southward from *Vienna*, seated on a plain, but nigh unto a ridge of hills, which are the excursions of Mount *Cetius*. It is much resorted unto by reason of the Natural Baths of that place, wherein the Springs are so numerous, as to afford convenient Baths; two within the Town, five without the Wall, and 2 beyond a rivolet called *Swechet*.

The *Dukes-Bath* is the largest, about 20 feet square, in the middle of an house of the same figure, built over it. The Vapour passes, through a tunnel of wood, at the top: and the Water is conveyed into the bottom of the Bath, at one corner, through wooden pipes and trees, under the Town-wall, from the Spring head, which riseth at a little distance Westward. The Springs of the rest of the Baths rise under them, and are let in through holes of the Plancher, for all the Baths are wainscoted, the seats, sides and bottoms being made of Firre. The Water for the most part is clear and transparent, yet somewhat blewish, and maketh the skin appear pale in it, as doth the smোক of Brimstone. It coloureth Metals (except Gold, whose