

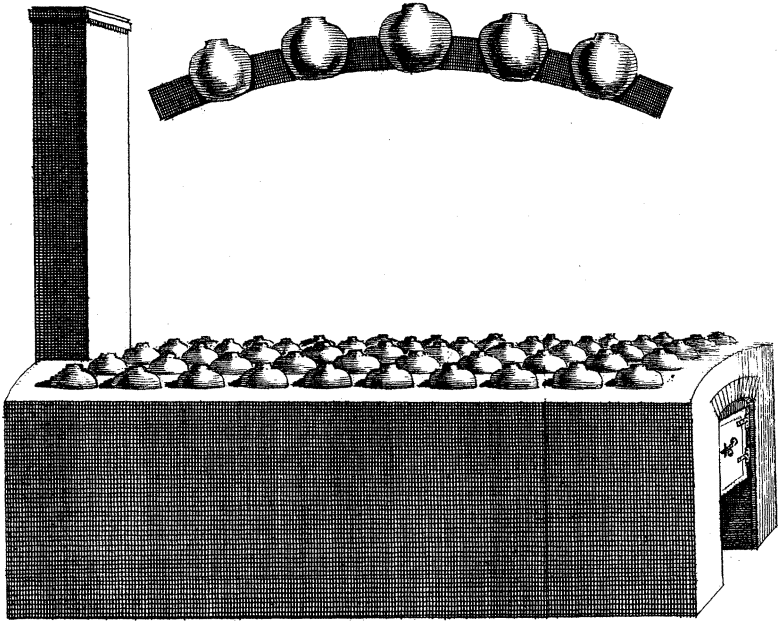
the evidence I have brought insufficient to prove it, he is desired to invalidate what I have here said, by a deduction of fresh evidence, and to account for these several expressions in old authors, which seem to prove, that such a change has really happened.

XLVIII. *The Method of making Sal Ammoniac in Egypt; as communicated by Dr. Linnæus, from his Pupil Dr. Haffelquist, who had been lately in those Parts: By John Ellis, Esq; F. R. S.*

Read Jan. 31, 1760. **S**AL Ammoniac is made from the soot arising from the burnt dung of four-footed animals, that feed only on vegetables.

This dung is collected in the four first months of the year, when all their cattle, such as oxen, cows, buffaloes, camels, sheep, goats, horses, and asses, feed on fresh spring grass, which, in Egypt, is a kind of trefoil, or clover: for when they are obliged to feed their cattle on hay, and their camels on bruised date kernels, their excrements are not fit for this purpose; but when they feed on grass, the poor people of Egypt are very careful to collect the dung quite fresh, and, for that purpose, follow the cattle all day long, in order to collect it as it falls from them; and, if it is too moist, they mix it with chaff, stubble, short straw, or dust, and make it up in the form of cakes, about the same size and shape as it lies on the ground.

Then



*A Plan of the subliming Furnace or Oven for making Sal. Ammoniac in Egypt
taken from the description here given.*

Then they fix it to a wall to dry, till it is fit to be burnt.

For want of wood, which none but the rich in Egypt can afford to buy, they burn this dung through the whole country, and sell a vast quantity of it to the salt-makers.

The excrements of the camel are not found at all preferable to any other; and its urine is never used for this purpose, although generally reported so by authors.

The salt-workers pretend, that the human excrements, and those of goats and sheep, are preferable to any other.

The months of March and April is the only time they make the salt.

Sal ammoniac is made in the following manner:

They build an oblong oven, about as long again as broad, of brick and moist dung, of such a size, that the outside, or flat part of the top of the arch, may hold fifty glass vessels, ten in length, and five in breadth, each vessel having a cavity left for it in the brick-work of the arch. *See Tab. XI.*

These glass vessels are globular, with a neck an inch long, and two inches wide.

These vessels are of different sizes, in different salt-works, containing from a gallon to two gallons; but, in general, are about 18 inches diameter.

They coat each vessel over with a fine clay (which they find in the Nile), and afterwards with straw; they then fill them two-thirds full of soot, and put them into their holes on the top of the oven.

They make the fire gentle at first, and use the afore-mentioned dried dung for the fuel; they increase

crease the heat gradually, till they bring it to the highest degree, which the workmen call hell-fire, and continue it so for three days and three nights together.

When the heat is come to its due degree, the smoke shews itself, with a fourish smell, that is not unpleasant; and, in a little time, the salt sticks to the glasses, and covers the whole opening. The salt continues subliming, till the above-mentioned time is expired; then they break the glasses, and take out the salt, just in the same form, and of the same substance, that it is sent all over Europe.

At each salt-work, they have a glass furnace, to melt the old glasses, and make new ones.

XLIX. *Montium quorundam præaltorum, magna ligni fossilis copia quasi infarctorum, brevis descriptio* Sam. Christ. Hollmanni, *Philosophiæ Professor. Goettingensis, et S. R. Sodalis.*

Read Feb. 14, 1760. **S**UNT in Hassiæ et principatus Goettingensis confiniis montes quidam præalti, qui tanta *ligni fossilis* copia abundant, ut fidem fere superet. Horum alter non procul Mundenfi oppido, circa Werram Fuldamque confluentes posito, versus meridionalem plagam ad tantam altitudinem affurgit, ut mercurius barometricus in eodem ad 1" 25'" pedis Lond. ab illo gradu descendat, quem ad Werræ Fuldæque, ipsiusque adeo ex iisdem oriundi Vifurgis, ripas habet: unde ex repetitis in utroque