

## MARYLAND GAZETTE,

Containing the freshest Advices, Foreign and Domestic.

WEDNESDAY, August 30, 1749.

From the GENTLEMAN'S MAGAZINE.

Extract of the exact Description of the House of Ice, erected at St. Peter sburg in January, 1740; and of it's Furniture. By George Wolfgang Krafft, Professor of Natural Philosophy, and Member of the Imperial Academy of Sciences at Petersburg.

IN a planet where the cold is more severe and lasting than ours, as in *Saturn*, we have reason to think, that ice acquires a solidity equal to that of our stone or marble; and we may suppose the inhabitants there use it in like manner to build their houses.

This way of reasoning is confirm'd by the account of an experiment worthy the curiosity of the reader, we mean the destruction of a pleasure-house, such as we may conceive in a planet remote from the sun, and such as was really built at *St. Petersburg*.

Mr. *Wolfgang* begins with observing, that ice or water congeal'd has been for a long time consider'd as a substance little proper for certain works of art; to cut it into pieces to transmit light, like our quarries of glass, or making cups for drinking, or even forming a kind of burning glasses. These were the only uses ice was employ'd in, 'til in 1740, at *Dibec* in *Germany*, a lion was carved of ice, seven feet long, so artfully wrought, that scarcely the best sculptor in wood or stone could have surpass'd it.

But the undertaking begun and finish'd at *St. Petersburg*, will give the reader a juster idea of the houses or palaces we may suppose in *Saturn*. A structure of ice was erected according to all the rules of modern architecture. *M. Alexis Danilowitsch Taischitschew*, lately made chamberlain to the Czar, had the honour of the invention and construction of this edifice.

About the end of the year 1739, it was begun upon the river *Neva*. The Czarina *Anne*, who was a lover and protectress of arts, having granted all the assistance necessary for the design. The building met with some obstacles, when the walls were carried up some length, the ice wanting the solidity and thickness requisite, gave way; a thaw that followed, contributed to spoil the work, but the frost returning, and no necessary materials being deficient, the undertakers had no further difficulty, but to chuse a right situation. The place fix'd on for this purpose, was between the fortress of the admiralty built by *Peter I.* and the winter palace built by the Czarina *Anne*; choice was made of the cleanest and largest pieces of ice, which were cut into blocks by rule, and agreeably to all the methods of architecture, as well as adorned with all it's embellishments.

These ice blocks were raised with pulleys, and regularly laid on each other, and their joints cemented with water, which being poured into them, froze in an instant, and serv'd as mortar for this surprizing edifice, which in a short time was finish'd, in length 56 *English* feet, by 17 and a half broad, and in height 21.

To give the reader a just notion of the design, we shall describe the structure according to a copper plate representation of it.

This place consisted only of one story, a few degrees raised above the ground floor. The front presented to the eye seven openings at an equal distance, of which the middlemost form'd the entrance, or door, with a portico; the six others the windows. The portico was crown'd with a pediment, from each side of which proceeded a balustrade, surrounding the top of the building, having a statue on each corner, and two others adorned the top of the entry.

windows, whose frames, painted in resemblance of green marble, were of ice, as was the floor, and also the statues before-mentioned. These windows being at night illuminated by a great number of lights, whose lustre met with no obstacles, the walls being transparent, discover'd at once to the spectator all the inside of the building. All this the reader may easily conceive, but it is not so easy to form a notion of the manner in which the chambers were adorned with all the necessary furniture, and with a suitable magnificence.

In one of these chambers was a state bed with it's curtains and the other apparatus; a toilette, on which was placed a large mirror, and candles of ice, which being smeared with naphtha, gave a clear light. A chimney filled with pieces of ice bedaubed in the same manner, presented a seeming fire, tho' the whole was nothing but ice in different forms.

In a second chamber were statues, carv'd and gilt sofas, a pendulum clock, through which was seen the clock work, as if real. A table, on which lay real cards frozen over; a cupboard with a compleat tea equage. In all which objects the ice had not only the form, but the colours, of the object it represented.

As to external decoration, it was incircled with a balustrade, interspersed with pillars bearing large balls. This enclosure had three entries, one facing the front or grand entry before-mentioned the others at each side. The pillars that stood at these side entries, supported urns with orange-trees, whose branches, leaves, and flowers, were all of ice. Further distant on each side, but without the balustrade, rose a square pyramid, which being hollow was illuminated by night on the inside. Lastly, on the right side beyond the pyramid appear'd an elephant, big as the life, upon whom was sculptur'd a *Persian* with his arms in his hand, and at each side a figure of his own nation, all in their natural size. This animal, during the day, threw water from his trunk, and at night spouted inflam'd naphtha; he also cried like a real elephant.

At some distance on the left, to answer to the elephant, was a sort of pavilion or tent, beneath which was a hot bath, which Mr. *Wolfgang* assures us was put in use. What is still more extraordinary, is six cannons of ice charged with iron ball, which were let off on this occasion, and two mortars which threw out bombs of 80 pounds weight.

Mr. *Wolfgang*, with regard to this last article, gives us some expianation, as probably he thought it would be more difficult to believe, than all that preceded it. For as he does not tell us, how these internal illuminations, that each night render'd this palace so splendid, nor how the flame produced by the naphtha on those ice candles, or the flame ejected by the elephant, did not melt the object they surrounded, he no doubt ascribes it to known experiments, which prove that certain matters are capable of inflammation, without heat. As to the objection, how it is possible for cannons of ice to resist the force of gunpowder, he replies in this manner: If the ice be more capable of resisting the action of the powder than the bullet discharged, the cannon will remain whole. This way of reasoning, tho' true, is a kind of begging the question, because it is bringing the effect the cause produces, for an explanation of the cause itself. What he adds, to prove that a cannon of ice is capable of such a degree of resistance, is not more satisfactory; that is, That ice, like other solid bodies, is capable of a degree of resistance in proportion to the intenseness of the cold. But there is another property he ascribes to ice, which makes more for his purpose; *viz.* that it is endow'd with a kind of elasticity, by means of which it yields or gives way to a certain degree, and then returns to it's former state.

As to gunpowder, which remains equally combustible, tho' laid on ice, Mr. *Wolfgang* shews from experience, that not only