The fourth Experiment is made on the Cedar of Libanus, grafted on the Laryx, which drops its Leaves in the Winter; yet maintains the Cedar in as flourishing Condition, as if it had been on a Tree that held the Leaves all the Winter; and the Part of the Graft, left below the Grafting, is in as good Health as the Part above the Grafting.

II. An Account of an extraordinary Cure by Sweating in Hot Turff; with a Description of the Indian Hot-Houses; by the Honourable Paul Dudley, Esq; F. R. S.

IN the Year 1704. Peter Coffin, Esq; of Exeter in 1 New England, being then seventy four Years of Age, had taken a great Surfeit, as 'twas thought, by drinking cold Water, in a very hot Day, and when he had heated himself in the Woods. This Surfeit settled principally in his right Side, but gave him a racking Pain all over his Body, and particularly depriv'd him of the Use of his right Arm: In this Condition he kept his House and Bed for nine Weeks, and his Recovery, confidering his Age, was despaired of; when a Son of his, from whom I had the Relation, making a Visit to his Father, proposed the Sweating of him in Turff: The Father readily agreed to it, having used many Medicines, from other Physicians, without any Effect. Immediately Orders were given to cut a large Oven full of Turff; the Pieces might be to eighteen Inches square. The Turff it self was of English Grass, and only the Swerd, or Top of the Earth, with the Grass. the Turff was put into the Oven, the Doctor rubb'd the graffy Side of the Turff, with fome Spirit, or Ovl. and then doubled the Grafs-fides together, and fo fet When they were well baked, which was in about two Hours, he took them out, and made a Bed of them upon the Floor, (the Place for the Head raised); as foon as that was done, he ordered his Father to be taken out of his Bed without his Shirt, but wrapp'd up in a Sheet, and laid upon the hot Turff, and then proceeded to cover him over with the rest of the Turff. more especially on his Side, where the Seat of his Pain was, but they laid none on his Breast or Head; then they cover'd him with Blankets to keep the Heat in: While the Father was in this Bath, the Son gave him warm Cordials, to prevent fainting, which he was in great Danger of; after he had lain thus about three Quarters of an Hour, which was as long as he could bear it, he was put naked into the Bed very well warm'd, where, in a few Minutes, he fell afleep, and fweat to that Degree, that it run, thro' his Pillow and Bed, upon the After about two Hours Sleep they dry'd him, and put him on warm Cloaths, and the old Gentleman found himself much eased and refreshed: This was in the Morning; and before Night, he walked about the House comfortably, his Pain being in a manner all gone; the next Day the Doctor repeated his Cordials, and the fourth Day he fweat his Father a second Time, in the fame manner as above; and the next, viz. the fifth Day, he went abroad about his Bufiness, and lived eleven Years afterwards in perfect Health, and free from The Doctor tells me, great Care must be taken that the Patient do not lie too long in the Turff, and that even a Quarter of an Hour may be fufficient for fome Perfons; and when e'er the Patient begins to fetch his Breath short, or faint, he must be put to Bed immediately, and the Phylician, or Operator, must by no means

means omit his Cordials. I should have been glad to have made this Account yet more perfect, by acquainting you, what the Specifick was the Doctor put upon the Turff, before he set them into the Oven, but I could not possibly prevail upon him to tell me. As to the Matter of Fact, or Story of curing the old Gentleman, in this new and wonderful Manner, it was fam'd throughout the Country in the Day of it; but the Particulars I lately had an Opportunity of having from the Son, who so happily made the Experiment.

Houses, to sweat in, were common among the Aborigines, when the English first came into New England, tho' now but little used. A Gentleman of the Island of Nantucket, where the Indians sometimes practise it, even at this Day, or very lately, gives me

the following Relation.

The Cave was usually four Foot high, and to eight Foot Diameter; the Roof supported with Sticks or Boards, covered with Earth, and they dug it in the Side of a Hill, and, as near as could be, to some River, Pond, or Place of Water: The Entrance into this Cave was small, and the Door (when any Person was sweating) was covered with a Blanket or Skin; near the Cave they make a good large Fire, and heat a Parcel of Stones, to the Quantity of five hundred Weight, and roll them in red-hot, piling them up in the middle of the Cave; when this is done, the Indians go in naked, and fet round the heated Stones as many as please; as soon as they begin to grow faint, which may be in a Quarter of an Hour, they come out, and plunge themselves all over in the Water for a Minute or two, and then in again, as long as they can well bear it, and fo in the Water a second Time, and then dress themselves. has been used with Success for Colds, Surfeits, Sciatica's, and Pains fixed in the Limbs; and even the English lish have many times found Relief by it. I don't understand, but that it may be practis'd at any Time of the Year, without Hazard or Inconvenience. The Indians often used it before, and after long Journies, Hunting or Voyages, to strengthen and refresh themselves.

III. An Attempt to account for the rising and falling of the Water of some Ponds near the Sea, or ebbing and flowing Rivers; where the Water is lowest in the Pond, at the Time of high Water in the Pond, at the Time of low Water is highest in the Pond, at the Time of low Water in the Sea or River. As also for the increasing or decreasing of the Water of such Pools and Brooks as are highest in the dry Seasons, and lowest in the rainy Seasons: With an Experiment to illustrate the Solution of the Phænomena. By the Reverend J. T. Defaguliers, L. L. D. and R. S. S.

Ero Alexandrinus, and other Hydraulick Writers, have describ'd a Cup (call'd a Tantalus, from its Essect) which will hold any Liquor very well, when it is not fill'd above a certain Height mark'd in the Cup; but if it be fill'd higher, not only the Liquor above the Mark will run out, but the whole Liquor that was in the Cup. This is perform'd by a Syphon in the Cup, which is sometimes conceal'd to make the Essect the more surprising.