[488]

of multiplying itself by Sprigs or Suckers. Nothing can exceed the Sagacity with which he has conducted those Experiments that have led him into the Know-ledge of things so very wonderful and surprising, that they may truly be said to exceed all that Natural History had yet afforded of this Sort.

III. An Account of an extraordinary Case of the Bones of a Woman growing soft and flexible; communicated to the ROYAL SO-CIETY by Mr. Sylvanus Bevan, F. R. S.

HE Wife of one B. S. in the Year 1738. was taken with a Diabetes, Read May 5. 1743. with the usual Symptoms, viz. A frequent and copious Discharge by Urine, a gradual Wasting of the Body, a hectic Fever, with a quick low Pulse, Thirst, great Pains in her Shoulders, Back, and Limbs, and Loss of Appetite. She continued in this manner Two Years, (notwithstanding the Use of Medicines generally prescribed in such Cases) much emaciated; at which time she was attacked with an Intermittent, which foon left her; after which the Diabetes gradually decreased, so that in some few Months she was intirely free from that Disorder, but the Pains in her Limbs still continued. She recovered her Appetite very well, breathed free and easy, and her Hectic very much lessened, though she had some Appearance of ir at times.

About Eighteen Months ago, she had such a Weakness and Pains in her Limbs, that it confined her to her her Bed altogether; and in a few Months her Bones in her Legs and Arms felt somewhat soft to the Touch, and were so pliable, that they were bent into a Curve; but, for several Months before her Death, they were as limber as a Rag, and would bend any way, with less Difficulty than the muscular Parts of a healthy Person's Leg, without the Interposition of the Bones.

The 12th of April 1742. after a long and tedious Illness, she died, near the Age of Forty: And, having the Consent of her Friends, I had the Curiosity to examine more particularly into the feveral Matters before-mentioned. Upon raising the Cutis, I found the Membrana Adiposa much thicker than I expected in a Person so much emaciated: The Sternum and Ribs, with their Cartilages, were very foft; and all the cartilaginous Parts of the Ribs, at their Articulations, from the Clavicle downwards, were doubled over one another on the Left Side, about an Inch, in this Form _____, only flatter. Upon raising the Sternum, I found the Lungs adhered very close to the Ribs. for Four or Five Inches on each Side; but were more loose and flaccid than usual, and much less in Size: Her Heart was of the common Bigness. Upon viewing her Liver, I found it at least a Third Part bigger than common; and her Spleen was about an Inch and a half in the longest Part, and a Quarter thick: The Intestines were very much inflated.

She had Appearances of several Anchylosses's formed in the small Joints, viz. carpal and metacarpal Bones; but, upon laying them open, I found them only like a thin Shell: The cartilaginous Epiphyses of the Bones were intirely dissolved, and

[490]

no Parts of the Heads of the Bones remaining, but an Outside, not thicker than an Egg-shell.

Upon making Incisions in her Legs and Arms, Five or Six Inches long, I found the outer Laminæ of the Bones soft, and become perfectly membranous, about the Thickness of the Peritoneum, containing (instead of a bony Substance) a Fluid of the Consistence of Honey, when it is thick, of a reddish Colour, not at all disagreeable to the Smell: There was no Appearance of any Bones in her Leg and Arms, except near the Joints, which were in part dissolved, and what remained were very soft, and full of Holes, like a Honey-comb: Also the Bones of the Head would easily give way to the Pressure of the Finger.

It is remarkable, that those Parts of the Bones that are the most compact and hard, were first dissolved, while their Heads, which are more spongy and soft, had not so intirely lost their Substance.

When she was in Health, she was Five Feet high, as I am informed by her Husband: I measured her after her Death, and she was but Three Feet Seven Inches in Length, though all her Limbs were stretched out strait, which is Seventeen Inches shorter than she was in her Health: The Bones, which serve as Levers for the Muscles to act upon, being dissolved, these had nothing to keep them extended in their usual Position.

The Person was under the Care of Dr. Cadwal-lader of Pensilvania.