Snow or ice water is always deprived of its fixed air, which escapes during the process of congelation. Accord­ingly, as some of the inhabitants of the Alps who use it for their constant drink, have enormous wens upon their throats, it has been ascribed to this circumstance. If this were the cause of these wens, it would be easy to remove it by ex­posing the snow-water to the air for some time. But seve­ral eminent physicians have rejected the notion that snow­water is the cause of these wens ; for in Greenland, where snow-water is commonly used, the inhabitants are not af­fected with such swellings ; and on the other hand, they are common in Sumatra, where snow is never seen.

SNOWDON, one of the highest mountains in Wales. It is within the county of Carnarvon, but extends to the bor­ders of Merionethshire. The highest point of the range is 3571 feet above the level of the sea. The snow begins to fall on it in November, and is seldom melted till the middle of June. It is easily accessible in several directions. The view from the summit is extensive and grand, on a clear day, which does not often occur. The hills of Scotland are to be seen, with a part of the coast, as well as the Isle of Man; and the hills of Lancashire, Westmoreland, and Cumberland, and, in some very translucent days, the hills of Kerry, in Ireland, have been perceived. The mountain of Snowdon was held sacred by the ancient Britons.

SNYDERS, Francis, a Flemish painter, born at Ant­werp in 1579, and bred under his countryman Henry Van Balen. His genius first displayed itself in painting fruit ; he afterwards attempted animals, huntings, &c., in which he exceeded all his predecessors. He also painted kitchens, &c, and gave dignity to subjects that seemed incapable of it. He was made painter to Ferdinand and Isabella, arch­duke and duchess, and became attached to the house of the cardinal infant of Spain. The king of Spain and the elec­tor Palatine adorned their palaces with huntings by this ar­tist. Rubens, Jordaens, and Snyders, used to co-operate in the enriching of each other’s pictures according to their se­veral talents ; and thus they became more valuable than if finished by either of them singly. Snyders died in 1657.

SOAGHIM, a town of Hindustan, in the Mahratta terri­tories, province of Malwah, sixty miles west from Ooojain. Long. 74.50. E. Lat. 23. 12. N.

SOANE River has its rise on the east of the table land of Omercuntire, in the province of Gundwana. It flows through Pindarah, where, being joined by numerous other streams from the north-east side of this mountainous terri­tory, it proceeds in a northerly course to the Ganges, which it joins in the province of Bahar, after a winding course of about five hundred miles.

SOANK, a small river of Hindustan, in the province of Bahar, whence it flows in a southerly direction, and being joined by the small river Borkee, their united streams form the Braminy Noddy river.

SOAP, a composition of caustic, fixed alkaline salt, and oil, sometimes hard and dry, sometimes soft and liquid ; much used in washing, whitening linens, and by dyers and fullers. Soap may be made by several methods, which however all depend upon the same principle. The soap which is used in medicine is made without heat.

In manufactures where large quantities of itare prepared, soap is made with heat. A lixivium of quicklime and soda is made, but is less concentrated than that above referred to, and only so much that it can sustain a fresh egg. A part of this lixivium is to be even diluted and mixed with an equal weight of oil of olives. The mixture is to be put on a gentle fire, and agitated, that the union may be acce­lerated. When this mixture begins to unite well, the rest of the lixivium is to be added to it ; and the whole is to be digested with a very gentle heat, till the soap be complete­ly made. A trial is to be made of it, to examine whether the just proportion of oil and alkali has been observed. Good soap of this kind ought to be firm, and very white when cold ; not subject to become moist by exposure to air, and entirely miscible with pure water, to which it com­municates a milky appearance, but without any drops of oil floating on the surface. When the soap has not these qua­lities, the combination has not been well managed, or the quantity of salt or oil is too great, which faults must be corrected.

In soft or liquid soaps, green or black soaps, cheaper oils are employed, as oil of nuts, of hemp, of fish, &c. These soaps, ex­cepting in consistence, are not essentially different from white soap. Fixed alkalies are much disposed to unite with oils that are not volatile, both vegetable and animal, since this union can be made even without heat. The compound resulting from this union partakes at the same time of the properties of oil and of alkali ; but these properties are modified and tem­pered by each other, according to the general rule of com­binations. Alkali formed into soap has not nearly the same acrimony as when it is pure; it is even deprived of almost all its causticity, and its other saline alkaline properties are al­most entirely abolished. The same oil contained in soap is less combustible than when pure, from its union with the alkali, which is an inflammable body. It is miscible, or even soluble, in water, to a certain degree, by means of the al­kali. Soap is entirely soluble in spirit of wine; and still better in aquavitæ sharpened by a little alkaline salt, accord­ing to an observation of Mr. Geoffroy.

The manufacture of soap in London first began in the year 1524 ; before which time this city was served with white soap from foreign countries, and with gray soap speckled with white from Bristol, which was sold for a penny a pound ; and also with black soap, which sold for a halfpenny a pound.

Concerning the decomposition of soap by means of acids, we must observe, first, that all acids, even the weakest ve­getable acids, may occasion this decomposition, because every one of them has a greater affinity than oil with fixed alkali. Secondly, these acids, even when united with any basis, excepting fixed alkali, are capable of occasioning the same decomposition; whence all ammoniacal salts, all salts with bases of earth, and all those with metallic bases, are capable of decomposing soap, in the same manner as disen­gaged acids are ; with this difference, that the oil separated from the fixed alkali, by the acid of these salts, may unite more or less intimately with the substance which was the basis of the neutral salt employed for the decomposition.

Soap may also be decomposed by distillation, as Lemery has shown. When first exposed to fire, it yields a phlegm called by him a *spirit;* which nevertheless is neither acid nor alkaline, but some water which enters into the compo­sition of soap. It becomes more and more coloured and empyreumatic as the fire is increased, which shows that it contains the most subtle part of the oil. It seems even to raise along with it, by help of the oil and action of the fire, a small part of the alkali of the soap: for, as the same che­mist observes, it occasions a precipitate in a solution of cor­rosive sublimate. After this phlegm the oil rises altered, precisely as if it had been distilled from quicklime, that is, empyreumatic, soluble in spirit of wine, at first sufficiently subtle and afterwards thicker. An alkaline residuous coal remains in the retort, consisting chiefly of the mineral alkali contained in the soap, and which may be disengaged from the coal by calcination in an open fire, and obtained in its pure state.

Alkaline soaps arc very useful in many arts and trades, and also in chemistry and medicine. Their principal utility consists in a detersive quality that they receive from their alkali, which, although it is in some measure saturated with oil, is yet capable of acting upon oily matters, and of ren­dering them saponaceous and miscible with water. Hence soap is very useful to cleanse any substances from all fat matters with which they happen to be soiled. Soap is there­fore daily used for the washing and whitening of linen, for