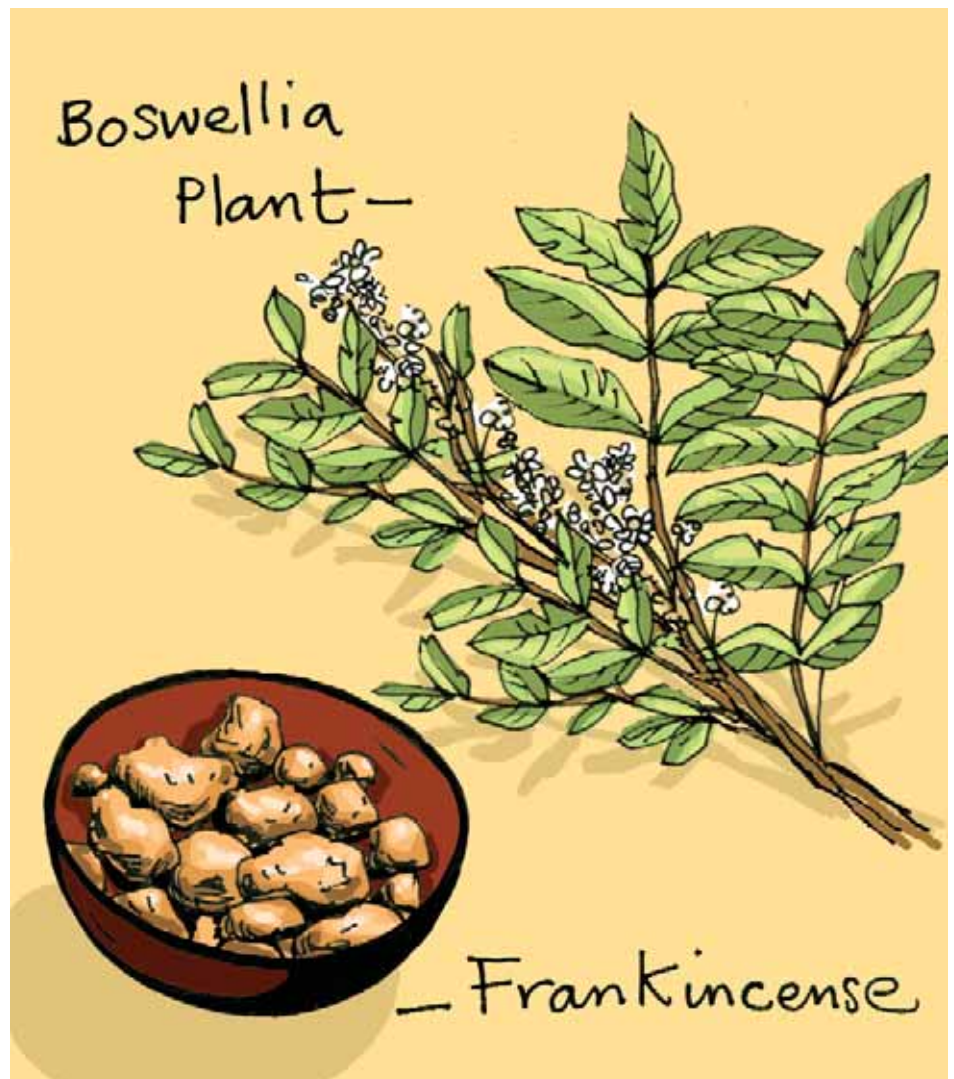


Christmas — a time for frankincense

At this time of year we hear much about the three royal gifts of gold, frankincense and myrrh, which were brought to Bethlehem by the three kings. The first of these has for generations been regarded with some superstition and, in some quarters, loathing for its vulgar appeal. Incense belongs to quite a different category. The word "frankincense" derives from the Old French *franc encens*, which denotes "pure incense". It is a resin produced by small trees of the genus *Boswellia*, growing in sub-Saharan Africa from Nigeria to the Horn, to Arabia and the foothills of the Himalayas. These bear white to pale rose flowers on short pedicels. The resin exudes from leaves and shoots and especially from wounds in the bark. Young trees furnish the most valuable gum, which is tapped every three weeks, starting at the end of the summer monsoon and continuing throughout the dry season.

The future of frankincense is now regarded by some investigators as highly problematical. The constant harvesting of resin from the time of floral induction may prove to be a severe drain upon the carbon resources of the tree. In studies of the seed germination potential of tapped and untapped trees, the seeds from annually tapped trees showed a success rate of some 20 per cent compared with 80 to 90 per cent for untapped trees, with fewer inflorescences and fruits. Accordingly the natural regeneration of *Boswellia* in Eritrea has been reduced substantially. To overcome this trend, the amount of resin taken from each tree and seasonal rests, together with protection from intense grazing will be necessary.

Taken medicinally, frankincense was once held in high repute as a stimulant. Pliny considered it an antidote to hemlock poisoning and Avicenna recommended it as a treatment for tumours, ulcers, vomiting, dysentery and fevers. In China it is still prescribed for leprosy. It is used in plasters in place of balsams and inhalation of vapour is said to relieve



bronchitis and laryngitis. The religious use of frankincense was common in ancient Persia, Babylonia and Assyria and among the Parsis. As a cosmetic it was melted to make a depilatory and made into a paste to perfume the hands. When charred with other resins it was

incorporated in the kohl with which Egyptian women painted their eyelids. Notably, the resin played an important role as a constituent of the incense that many different kinds of churches employed in their ceremonies.

The menace of noise — coping with machines and raised voices

Noise has been defined as the effect on the senses of an irregular or a periodic wave of sound. It implies that our ear is being assailed by undesired stimuli, whether created deliberately or resulting from the unplanned interference of vibrations. On appropriate occasions noise is created to serve as a warning sign when, for instance, we wish to communicate a linking hazard and express a desire. More often than not there is no real motive in creating a noise, but it is almost inseparable from going about our daily tasks, particularly in these civilised days when machines have taken over most of the primitive functions of the individual.

According to the World Health Organization thousands of people worldwide are dying prematurely or succumbing to disease as the result of the insidious effects of chronic exposure to noise. Exposure to daily traffic noise may account for 3 per cent of deaths from ischaemic heart disease in Europe. Recent reports of com-

plaints about noise have multiplied. Many refer to noisy neighbours and to the effect of clubs and public houses in increasing the problem.

Many Europeans suffer severe sleep disturbances. Exposure to loud traffic is claimed to cause tinnitus. Noise from leisure activities adversely affects children's ability to learn lessons and to study in general and the close proximity of major roads and airports has been shown to have adverse effects on the reading skills of children in schools and on their memory recall.

One increasingly important aspect is the tendency of political antagonists to raise their voices and increase their rate of speaking when trying to counter the statement of an opponent. It is now common to find people unable to finish a sentence because of interruption, making logical argument quite impossible. It is just one more example of the menace of noise.