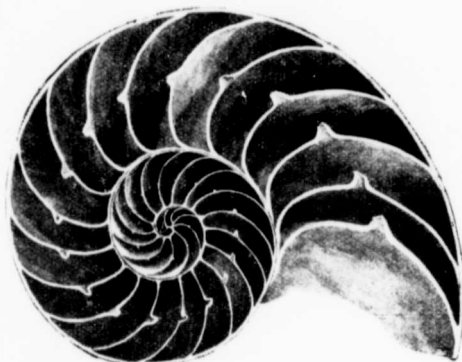




CHAMBERED NAUTILUS.

delightful lesson from the formation of this shell.

"Build thee more stately mansions, O my soul,

As the swift seasons roll,
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,

Till thou at length art free,
Leaving thine out-grown shell by life's
unresting sea."

Another species known as the paper nautilus has a pure white and exquisitely fragile exterior, in form resembling the common nautilus but without any chambers inside. Indeed, instead of being a solid and polished substance, its shell is of an extremely delicate and thin material, furrowed into long wavy wrinkles.

For ages this shell has been represented, as in the accompanying drawing, sailing along on the surface of the sea like a fairy bark, with two tiny sails uplifted to catch the wind. It was said to have given to man the idea of navigating the ocean; Aristotle thus described it. Pope writes, "Learn of the nautilus to sail;" Montgomery and other poets allude to its being seen thus floating on the sea, but alas, the rude hand of science has brushed away the charming poetic fancy, and we are told that the two flattened membranes which were supposed to be sails, are only used for the prosaic purpose of secreting calcareous matter in order to repair the shell when injured.

We do not readily part with such a charming vision as the poet thus describes:—

"Light as a flake of foam upon the wind,
Keel upwards, from the deep emerged a shell,
Shaped like the moon ere half her orb is filled,



ARGONAUT OR PAPER NAUTILUS (mythical).

Fraught with young life,
it righted as it rose,
And moved at will along
the yielding water.
The native pilot of this
little bark,
Put out a tier of oars on
either side;
Spread to the wafting
breeze a two-fold sail,
And mounted up, and
glided down the billow,
In happy freedom, pleased
to feel the air,
And wander in the luxury
of light."

"Pelican Island," by
Montgomery.

One could wish to be a
fairy watching this little
skiff come towards one
across a halcyon sea!

SNOW CRYSTALS.

Winter does not afford many living creatures as subjects for our study; we must therefore turn our attention to other natural objects.

To-day, as snow is falling, we will go out with a powerful magnifying glass and examine the beauty of snow crystals.

It is not always possible to see the formation of snow; if there is much wind the crystals are apt to be broken, and unless the cold is severe the flakes melt away too soon to allow us to examine them.

In sharp frost, on a calm day, the first flake of snow we look at through a lens will reveal

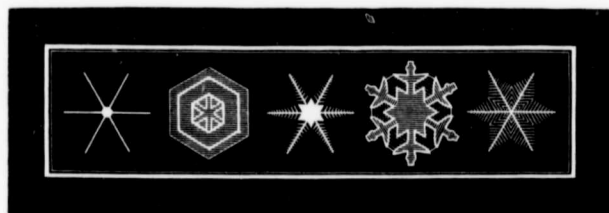
form of frost decoration according to the shape of its leaves.

I could have spent hours in sketching the various designs, so marvellously intricate were



FROSTED LAUREL LEAF.

they and beautiful, but the cold was too severe to admit of that, and I can only reproduce from memory the laurel fringes which are shown in the illustrations.



SNOW CRYSTALS.

the beautiful six-rayed crystals of which it is composed, and although each one has invariably six points, yet the ornamentation is infinitely varied. Each lovely star is fringed with most delicate tracery, and the flower-like forms glisten like burnished silver.

I have read somewhere that no fewer than a thousand different patterns and devices have been found of these snow crystals, and as we examine the flake we have placed beneath the glass, we see for ourselves something of the indescribable beauty of these "ice-morsels." The silvery frost-work upon the window-pane shows the same crystalline law, only the stars are often merged into continuous tracery so that the six rays are not always so easily discerned as in the snow-flake.

Several winters ago a severe frost wrought wonderful effects in my garden. The tree-branches, down to the finest twigs, appeared as if they had been turned into spun glass, and when the sun shone out the effect was beautiful beyond description. Every shrub had some special

The frost-needles were quite half an inch long and gave a curious effect to the sprays of leaves, an effect I have never seen either before or since.

THE CHRISTMAS ROSE (*Helleborus Niger*).

The Christmas rose, which cheers us with its snow-white flowers in the depth of winter, is an imported plant from Southern Europe.

Two species of hellebore are, however, found growing wild in some parts of England, though even they are not believed to be truly indigenous.

Helleborus foetidus is now flowering in my garden, and is an interesting and rather showy plant, with clusters of green bell-shaped flowers edged with purple.

Helleborus viridis is found on chalky soils, and has also pale green flowers and dark green leaves.

The species figured in the illustration is *Helleborus purpurascens*; it shows very plainly the curious construction which is common to all hellebore flowers. What we should naturally call the petals are really the leaves of the calyx—called sepals—which do not fall off, but after a time become of a greenish hue and share in the work of leaves by helping to