Precious Ointment.

Do not keep your box of ointment,
Break it o'er your friends to-day;
Do not keep it in the darkness,
Half forgotten, laid away.
Little deeds of love and kindness,
Don't forget to give them now;
Don't forget to smooth the pillow—
Don't forget to bathe the brow.

Send your flowers to the living,
Do not keep them for the grave—
They may comfort some poor mourner,
They may strengthen, help and save.
Send them in the fragrant beauty—
Show your friendship true and warm;
What would I care a rosewood casket?
What would care a lifeless form?

Hearts there are with burdens laden,
Bearing bravely toil and care;
Ready to receive your kindness
Should you have your ointment there.
Don't forget the kindly counsel—
Don't forget the loving tone;
They will make the cross seem lighter
To some sorrow-laden one.

All along life's rugged pathway
Stretch your hand and lift your voice,
Bringing all your love and kindness,
Making every heart rejoice.
Keep your ointment ever ready—
Use it freely—there is room—
It will bring you richest blessings,
Smooth your passage to the tomb.

—*Selected.*

Giants and Dwarfs of Plant Life.

In 1846, the inhabitants of the country in the vicinity of Lyons, France, awoke one morning to find that an unusual and remarkable visitation had appeared during the night.

The sun rose like a red ball, casting lurid rays aloft; the air seemed to be filled with a fine, impalpable dust; and as the day grew, the surface of the earth was seen to be covered with a fine, red powder. The roofs of houses, the grass, fences, animals, in fact everything was transformed in a single night.

At nearly the same time, vessels sailing one thousand miles from the coast of Africa had their decks, sails, and rigging covered in a similar way, causing the sailors to believe that some fearful disaster was at hand, as wherever water struck the decks the red powder or dust mixed with it—seemingly turning to blood. A large number of vessels experienced the same phenomenon, and from later computation it was estimated that the "blood rain" covered an area of more than a million square miles.

In the year 1755, a similar phenomenon appeared at Lake Maggiore, in Northern Italy. For over two hundred square leagues the surface presented a blood-red hue, while the snow upon the Alps assumed a similar colour, so that the majestic peaks seemed capped in vivid red.

The snow held this hue for a depth of nine feet, showing that the flakes had been coloured while in mid-air; while on the surface of the ground the colouring matter was about two inches deep, it being estimated that there was an amount equal to about two thousand seven hundred cubic feet for every English mile.

For many centuries the blood-rains were a source of terror, but finally a scientist collected some of the powder, and, aided by microscopic examination, found that it was made up of the remains of animals and plants—principally the latter, which are known as diatoms.

They were the dwarfs of plant life, caught up in inconceivable numbers by the wind, and borne away through the air to great heights miles above the earth, there remaining suspended, perhaps for months or years, finally being precipitated to the surface.

The red hue was owing to the presence of red oxide of iron. In one shower forty-nine different species of plants were found; in another, at Calabria, sixty-four; and it has been estimated that, during the shower at Lyons above-mentioned, over seven hundred thousand pounds of organic matter fell to the earth, of which ninety thousand were parts of these minute plants that, under the microscope, present a beautiful appearance, owing to the wonderful diversity and structure of their forms.

In the far north we find low, bush-like plants creeping near the rocks as if for shelter, which, upon examination, are found to be identical with the great trees farther south, here reduced in size by the rigours of the Arctic winter. The Japanese delight in attempting improvements upon both animals and plants; and in the latter they have produced some remarkable results, one of the most striking cases ever seen being an apple tree four inches high, covered with ripe apples, each about as large as a currant. Both leaves and fruit were perfect in shape, colour, and vigour, and only reduced in size.

Dwarfs are not always produced by extremes of cold. Near Cape Negro, in Africa, on a plateau about six miles wide and three hundred miles long, is found a curious tree, named after its discoverer, Dr. Welwitsch. The diameter of the stem is about four feet, but the entire tree is only one foot high, presenting a curious appearance, especially as it possesses only two woody leaves, that have to last during its life, as no others appear.

These dwarfs look like round tables scattered over the sandy plain, the two leaves, often six feet long, and broken up into ribbons, extending outward, and waving in the wind like signals of distress.

As unfavourable circumstances tend to produce diminutive plants, the reverse, in many cases, results in actual giants. In our common plants we have numerous examples, that, being familiar, do not attract our attention.

Bamboos are gigantic grasses, and attain wonderful growths. Entangled together, they form a solid mass from which sometimes one hundred spears arise a foot in diameter, and one hundred and twenty feet in height.

The rattan grows to a length of twelve hundred feet, and the short period required for it to attain maturity is not the least interesting phase of its life. A hot-house bamboo has, by actual measurement, been seen to grow one foot in twenty-four hours; and in the Chinese jungles they grow twice or thrice as fast—or three feet in a day.

The palms brought to this country give but little idea of the beauty and grace of the largest of these forms. A single leaf of the South American palm *raphia* measures one hundred feet in length and fifty in diameter. In Ceylon the leaves of the talipat palm are used in building houses; two of them are sufficient for a hut capable of sheltering fifteen or twenty persons.

In South America, many vines are found that are almost as large as trees. They are called *lianes*, and hang like huge snakes from the limbs, binding the forests together in an almost interminable maze.

In the streams of this same country are found the giants of the pond-lilies—upon one leaf of which thousands of the blossoms of our common form could be placed. The leaf is buoyant enough to support several children, and they are used by the natives for various purposes.

It is, however, in the isolated continent of Australia that the most gigantic forms of plant life are seen. These are the famous gum trees *(eucalyptus colossea)*, and an idea may be given of their extraordinary dimensions by imagining one standing by the side of the pyramid of Cheops.

The pyramid is four hundred and eighty feet high, and if surrounded by a group of the Australian giants, its top would be shaded by their branches, which would tower twenty feet above it, or five hundred feet from the ground.

A group of these monsters presents a most extraordinary spectacle. One of the first discovered was known as a *kani eucalyptus*, and was found in a glen of the Warren River. The discoverers came upon it in riding through the wood. It was a fallen monarch of untold age, and completely hollow; and, without dismounting, the entire party rode into the gigantic trunk until fifteen or twenty were within it.

In the deep, dark recesses of the forest about Dandenong, another party came upon an erect tree that was four hundred and twenty feet high. One on the Black Spur, near the town of Healesville, measures four hundred and eighty feet—forty-six feet higher than the loftiest spire of the Strasbourg Cathedral.

The wonderful giant trees, *sequoia*, of our own country, while they do not equal the giants of Australia in size, exceed them in bulk and the general majesty of their appearance.

The number of the *sequoia gigantea* that may be considered giants is about two hundred, and they are found in seven distinct groves. One of the largest measures four hundred and fifty feet from the root to the he—this specimen being at the base ninety-four feet in circumference; and to show more clearly its majesty, at the great height of three hundred and fifty feet it is ten feet in diameter.

Yet all these mighty growths sprang from seeds so small that fifty thousand would not weigh a pound. The age of the largest is unknown. Eighteen hundred circles have been counted in some, but they are probably many thousands of years old.

Among the giants remarkable for their shape, the bottle trees of Australia claim our attention. At one locality nine were found resembling huge bottles from a distance. They were not over seventy feet in height; their energies tending to an increase in another direction, as at the height of a man's head from the ground they were thirty-five feet in circumference.

Equally interesting is the African Baobab, that seems to resemble in full growth some gigantic animal sprawling over the ground like some of the fabulous monsters of old, and certainly the tree has some of the tenacity of life that constituted their attributes, as when great fires devastate the country they are left seemingly unharmed, and even when cut down they continue to grow. One of these trees in Senegal is supposed to be four thousand years old.

In the same country is found the giant banyan—one tree alone, with its branches, encloses five acres of land, and has afforded protection from the sun to an army of fifteen hundred men. One at Ceylon measures a quarter of a mile around its branches.

Another, at Mer-Budda, measures a circuit of two thousand two hundred feet, possesses three hundred and fifty-four large separate trunks, and over three thousand five hundred smaller ones—all connected to the ground in the form of pillars. The branches of this giant have given protection to over seven thousand persons at one time.

The flowers of giant plants are not necessarily large, and the largest flower known has little or no plant to support it.

Dr. Beccari has discovered in Sumatra a giant of flowers, related to the little European *wake robin*. The tuber of this giant is five feet in circumference, and the central spadix six feet in height. The diameter of the spathe alone is three feet, bell-shaped, with a crumpled edge richly tinted a pale greenish colour, forming a strange contrast to the exterior, which is a bright, dark purple.

Almost as striking are the flowers of the climbing *aristolochia* of the South that are four feet across, the native children, in play, drawing them over their heads as caps.

If we should turn to the sea in search of giants we should find innumerable forms. The great *macrocystis* has leaves two hundred feet in length, with stems thicker than the human body.

These cables are sometimes used by vessels, one end being hauled aboard—the vessel swinging to the plant. This species attains a length of seven hundred feet, and in other localities stems have been measured twelve hundred feet long—truly giants of the submarine world.—*C. F. Holder.*