



CONTENTS FOR SEPTEMBER



FRONTISPIECE (The Penn Cottage)				PAGE
THE PENN COTTAGE	•	Allen Biddle .	•	. 237
WITH WASHINGTON AT VALLEY FORGE (Serial) Illustrated by F. A. Carter		W. Bert Foster .	•	. 239
IN THE FLORIDA EVERGLADES .	•	William A. Stimpson	•	. 246
AUDUBON AT BIRD ROCK	•		•	2 49
A DAUGHTER OF THE FOREST (Serial) Illustrated by Ida Waugh	•	Evelyn Raymond	•	. 250
THE FLOWERLESS PLANTS Illustrated by Nina G. Barlow	•	Julia McNair Wright	•	. 257
WHIP-POOR-WILL	•	Geo. E. Winkler .	•	. 259
LITTLE POLLY PRENTISS (Serial) .	•	Elizabeth Lincoln Goul	ld	. 260
WOOD-FOLK TALK	•	J. Allison Atwood	•	. 268
WITH THE EDITOR	•	• • • •	•	. 270
EVENT AND COMMENT	•		•	. 271
OUT OF DOORS			•	. 272
THE OLD TRUNK (Puzzles)			•	. 273
IN-DOORS (Parlor Magic, Paper VII)		Ellis Stanyon .	•	. 274
WITH THE PUBLISHER		· · · ·	•	. 275

YOUTH

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YOUTH

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THE PENN COTTAGE

BY ALLEN BIDDLE

"PITCH upon the very middle of the plat where the town or line of houses is to be laid or run, facing the harbor of the great river, for the situation of my house; . . . the distance of each house from the creek or harbor should be, in my judgment, a measured quarter of a mile; or, at least, two hundred paces, because of building hereafter streets down to the harbor." Such were the instructions which William Penn, founder of Philadelphia, gave to his commissioners, William Crispin, John Bezar, and Nathaniel Allen, for the building of what is now known as Penn's Cottage.

It was in 1681 that the great Quaker completed the negotiations for the grant of Pennsylvania, and in the next year the first work of the building of the Proprietary House was begun. The plat chosen for its site was the one bounded by Front, Chestnut, Letitia, and High streets, the last now being named Market. In the place of the little cottage and its surrounding yard there is, to-day, one of the most thicklybuilt portions of Philadelphia. But the true centre of the city, at one time radiating from this point, has now, owing to the growth of two hundred years, moved a mile to the westward.

According to one tradition, the Penn or Letitia House was the first brick building erected in Philadelphia; to another, it was the first house to have a cellar. The name, "Letitia," was given to it by Penn himself, as the house was intended eventually to be the portion of his daughter, Letitia. It is from this source, too, that Letitia Street gets its name.

One of the most interesting stories of this little structure is that the bricks and most of the finer building materials used in its construction were brought over from England. More recently doubt has been thrown upon this statement by the discovery that even at that time quite as excellent a quality of brick was being made in Philadelphia.

Despite its diminutive size, the cottage required what, to-day, would be an unusual time in its building, and it was well into the year 1683 before it was ready for the housewarming. Quaint, angular, and comfortable in appearance, it faithfully reflects the spirit of Philadelphia's early people. True to the founder's ideal in the laying-out of the city, the house, too, is characterized by economy of space and absence of mere ornament. Doors, windows, sills, and sashes everything, in fact, except the gabled roof, is plain and rectangular.

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THE FLOWERLESS PLANTS

By JULIA MCNAIR WRIGHT

THE year around and the world around, journey the plant pilgrims. Among those perennials which are found in all latitudes and seasons are the lichens and iungi. In September, while we wait for fruits and seeds to finish ripening, let us make small studies in these related groups in the vegetable sub-kingdom called the thallogens.

This sub-kingdom, one of the chief divisions of the vegetable kingdom, is known as the class thallophytes. It contains the simplest forms of vegetable life. Its chief groups are the fungi and algæ, the lichens being related to both, as if algæ and fungi had united in one plant, dividing and somewhat changing the characteristic of each.

At any period of the year you can find lichens in abundance. They cover ragged rocks, dress up old roofs, walls, fence rails and dead stumps, especially delighting in the north side of trees. If we examine them through a magnifying glass, we shall see that they are made up of cells, laid side by side like little chains of beads, or of cells expanded into short tubes or threads lying like heaps of tiny fagots. Instead of seeds, lichens have a fine dust, called spores, from which they develop.

Lichens are exceedingly long-lived and excessively slow of growth. The lily attains its lovely maturity in a few months; the oaks, elms, pines, become great trees in twenty or thirty years; the humble lichen often lives forty or fifty years before it is old enough to complete its growth by producing spores. Botanists say that the life of a lichen is fitful and strange, and is practically indefinite as to duration. Lichens simply live on and on.

Some lichens have been known to live nearly fifty years without seeming to grow; they appear to dry up, and nearly vanish; then, suddenly, from some cause there is a revival of growth—they expand again. Small and insignificant as these lichens are, they often outlive those longest-lived of trees, the cedar of Lebanon and the California redwood.

The condition of lichen existence is water. for from moisture alone, in dew or rain. they secure their food. The carbon, oxygen, ammonia, hydrogen, in air and rain, afford them their nourishment. The lichen generally refuses to grow in foul air laden with noxious gases. In the impure air of cities few appear, but they abound in the open country. They absorb by all the surface, except the base by which they are fastened to their place of dwelling. Thev have no roots, and simply adhere to bare rocks, sapless wood, even to naked glass, from which they can receive no nutriment whatever.

In comparison with what is known of plants in general, our knowledge of lichens is yet very limited. They seem to be made chiefly of a kind of gelatin which exists in lichens only. Humble as they appear, they have always been of large importance in arts and manufactures. They produce exquisite dyes—a rich, costly purple, a valuable scarlet, many shades of brown, and particularly splendid hues of blue and yellow are obtained from these common little growths, which in themselves display chiefly shades of black, gray green, varied with pink, red, and orange cups, balls, and edges.

Fungi

While not so abundant as lichens, the fungi are well known everywhere. We cannot claim, as for the lichens, that they are harmless, for many are a virulent poison; others have a disgusting odor, and nearly all are dangerous in their decay. On the other hand, many of them are a useful, delicious food, and nearly all are beautiful when first developed. Their variety, also, is very fascinating.

In a walk of less than two miles in a wet summer, may be found twenty different kinds of fungi—some no larger than a pea, some eight inches in diameter. They may be round, oval, flat, cup-shaped, horn-

shaped, cushionshaped, saucershaped ; they are snow-white, gray, tan, yellow, lavender, orange, dark brown, pink, crimson, purple, and variously mottled, scaly or smooth as with varnish. Placed on a large platter among dark green mosses, they will be, for one day, a magnificent collection.

One large, egg-shaped variety, growing in pairs, is of a purple shade, very solid, and when broken open seems filled with glittering

matter like iron or steel filings. Another tan-colored, plum-shaped fungus, firm and smooth, is of a nearly royal purple within.

September is a good month for the study of fungi, especially after the early fall rains, when the woods and pastures will be found well-filled, not only with brilliant, useless, or poisonous varieties, but with delicious edible kinds. Popularly, people call the edible specimens "mushrooms," and the rest "toadstools," the number of poisonous or of edible instances so named depending rather upon the amount of knowledge of the collector than upon the real qualities of the fungi, for many denominate as "toadstools" what others know to be an excellent food.

Many varieties not usually eaten are wholesome, and many which human beings reject, other animals thrive upon. One large, brown "toadstool" of the woods is, at this season of the year, the chief food of that epicure, the wood-tortoise.

> In general a fungus may be defined as a thallophyte without any chlorophyl or leaf-green in its composition. Among the brilliant colors displayed by fungi no green or blue can be found.

The most popular and most useful fungus is the table mushroom. This rarely ever grows in the woods, in shade, on wet lands, or decaying on stumps. It prefers the open, breezy, wellsunned pastures, where the grass is kept short by the grazing of

Seawood Seawood Mushrooms Mushrooms

THE FLOWERLESS PLANTS

sheep or cattle. Early in the morning or shortly before sunset, the dainty white or cream-colored buttons, borne on snowwhite stalks, push up through the soil and gradually expand until the discs are flat or slightly convex. From two to six inches is the diameter, seldom more than three.

Varieties of the pasture mushroom are few and can readily be learned. The mushroom is composed of stem and cap; the stem is finger-shaped, with the roundish end in the earth. About half way up is usually a ring of the covering skin, where, in the button shape, the veil of the mushroom was attached.

This veil extends over the cap and is left at the edge of a little frill; it can be easily stripped off. Under the veil the flesh is ivory-white, and is smooth and firm.

The under side of the cap is laid in plaits, called gills, from their resemblance to fish gills. They never grow fast to, or down upon, the stem, usually stopping short off, about one-tenth of an inch from its juncture with the cap. Mushrooms are cultivated in gardens or cellars. They grow from spores or little finger-like lengths, called spawn, which are produced by the spores. Mushrooms turn black or purplish after the first twenty hours of growth. When the gills have taken this dark hue, the mushroom is unfit to eat.

Some fungi grow in very wet places; the woods are likely to be full of them after a few rainy days. They are all short-lived.

INDEPENDENCE

A LTHOUGH not new to some of our readers, we think the following anecdote, illustrating one phase of Benjamin Franklin's character, will bear repeating:

Not long after he began editing his newspaper, Franklin's free manner of criticism called forth the disapprobation of many of his patrons. One of them in particular felt so greatly moved as to make it his duty to tell him so. "The doctor listened with patience to the reproof, and begged the favor of his friend's company at supper on an evening which he named; at the same time requesting that the other gentlemen who were dissatisfied with him should attend.

"When the guests arrived, the doctor received them cordially, and his opinions were thoroughly criticised and much advice given. Supper was at last announced and the guests invited into an adjoining room. The doctor begged the party to be seated, and urged them to help themselves; but the table was only supplied with two puddings and a stone pitcher of water. Each guest had a plate, a spoon, and a bowl. They were all helped, but none of them could eat. The doctor took freely of the pudding, and urged the others to do the same; but it was out of the question. They tasted and tried in vain. Upon inquiry, they learned that the pudding was made of sawdust.

"When the facetious host had made sure that they could not eat, he rose and addressed them thus: 'My friends, anyone who can subsist upon sawdust pudding, as I can, needs no man's patronage.'"

The doctor's life has proved his statement. The person who can adapt himself to all circumstances and deny himself when necessary can attain true independence.

WHIP-POOR-WILL

WHEN the ev'ning shadows lengthen Down the hill and 'cross the vale,

And the trees are imaged darkly

Where the river glimmers pale; Then I love to sit and listen.

While the air is warm and still,

To a voice from out the poplars, Crving softly, "Whip-poor-will!"

Slowly, slowly creeps the twilight From the east unto the west,

Till it fills the peaceful valley,

Sends the forest folk to rest;

All except a noisy fellow

In the poplars near the mill,

Whose demands are most insistent For the punishment of "Will."

Soon the vale is dark and lonely, Closed in sleep each drowsy eye;

Through the clouds the stars are peeping For their watch tower in the sky;

Only winds that whisper softly,

In the poplars by the mill,

Listen to the night-bird calling, Till the daybreak, "Whip-poor-will."

-Geo. E. Winkler.