THE BROKEN HARP.

BY WILLIAM WINTER.

If this now silent harp could wake,
How pure, how strong, how true
The tender strain its chords would make
Of love and grief for you!
But like my heart, though faithful long
By you cast forth to pain,
This hushed and frozen voice of song
Must never live again.

Yet haply when your fancy strays
O'er unregarded things,
And half in dream your gentle gaze
Falls on its shattered strings,
Some loving impulse may endear
Your memories of the past,
And if for me you shed one tear
I think 'twould wake at last:

Wake with a note so glad, so clear,
So lovely, so complete,
That birds on wing would pause to hear
Its music wild and sweet;
And you would know—alas, too late!—
How tender and how true
Is this fond heart that hugs its fate—
To die for love and you.

In the Vale of the Dargle, September 18, 1888.

A MEADOW MUD-HOLE.

BY DR. CHARLES C. ABBOTT.

THE least suggestive spot in the world to most people is a mud-hole. The common impression seems to be that fish avoid it, that frogs and birds pass it by, and plants decline to cover its nakedness. This, like a great many other common impressions, is really very wide of the mark. If the water be not unutterably filthy, fish will condescend to tenant the shallow depths, frogs will thrive therein, bitterns and the little rail-bird find such a spot attractive, and many an aquatic plant grows nowhere else so vigorously.

There are, as all know, mud-holes that are but blotchy remnants of man's interference—mere accidents, as it were, which do not concern us; and also those deeper scars where the fair face of the landscape has been wounded severely, as when the ice-gorged river burst its proper bounds, leaving a shallow pool in my pasture meadow: such as these are never beneath the notice of a contemplative rambler. The truth is, in the valley of the Delaware the

average mud-hole is eminently respectable. Giving the matter a sober second thought, one will see that mud is not necessarily offensive. That of the meadows, if analyzed, proves to be compounded of very worthy entities-water, clay, sand, and leaf mould. Why, because they are associated, should they be so studiously shunned? No chemical change has taken place resulting in the formation of a dangerous mixture. Mud is unlovable only when you are made its prisoner; but even a fool knows it is best to remain outside the bars when he comes to a lion's cage. The lily loves the mud from which it springs, and who in the wide world loves not the lily? Let us accept her as an authority that this mud has merit.

There is a typical earth scar of the worthier sort within easy reach of my dooryard. I chanced upon it one February morning when the surrounding meadows were frost-bound, but the water was free, sparkling, and full of active aquatic life;



ON THE NILE.



WILD-RICE.

and there is not a month that it has not its growth of green, if not a wealth of blossoms. Even the plant life of the preceding summer serves as a covering in winter, and a January thaw starts the hardier grasses as surely as it quickens the sheltered upland dandelions into bloom. And on this bleak February day, when the meadows were like smooth rock, the river a glacier, and with scarce a trace of green to be seen on the hill-side, the expanding spathe of the fetid cabbage-a plant full worthy of a better name-was well above the ground, darkly green and beautifully streaked with purple and gold; and a foot or more below the surface of the water were even greener growths, tangles of thread-like vine that quivered whenever a frightened fish rushed by. Indeed these delicate growths are a delight to our many hardy fishes that, scorning to hibernate when food and shelter are so accessible, must laugh, I think, at the darting ice-crystals that gather and grow strong until they shut out the sun, but never reach their weed-grown habitations

It was greener still in March; but in April, when the meadow ditches are being decked with splatter-dock and calla, arrowhead and sweet-flag, golden-club and equisetum, then from the bottom of more than one small pond spring up sharp, spear-pointed rolls of rank green leaves, growing until the water's quiet surface is pierced, and a stout stem bears into view two parallel rolls of delicate leaf tissue. I refer to the rare yellow lotus. Perhaps not for all time a native, but it has long since earned its right to a place in our flora.

Most interesting is the beautiful adaptation of the leaf to its surroundings at the outset of its growth. Tightly twisted and pointed obliquely upward, it meets with no resistance from the water, and runs no risk of entanglement with other growths. Once at the surface, the unrolling is rapidly effected, and a bronze chalice with an emerald lining is ready to catch the dew as it falls. The circular perfected leaf, often twenty inches in diameter, is usually supported on a footstalk five or six feet in height, and among them often many floating leaves. Certainly no other of our aquatic plants has so striking an appearance, not even the wild-rice at its best-

"That tangled, trackless, wind-tossed waste, Above a watery wilderness."

Grav gives as the range of the American species the "waters of the Western and Southern States; rare in the Middle States: introduced into the Delaware below Philadelphia." Introduced by whom? The Indians are said to have carried it to the Connecticut Valley, where it still flourishes in circumscribed localities, and this I find is the impression in southern New Jersey and in the neighborhood of a little lake in the northern part of the State, where also the native lotus is found growing, but I have not yet found a positive statement to that effect. Rafinesque in 1830 remarked, "As it is scarce in the Atlantic States, it is said to have been planted in some ponds by the Indians."

The fact that the Southern and Western Indians valued the plant is significant. Nuttall records that "the Osages and other Western natives employ the roots of this plant, which is of common occurrence, for food, preparing them by boiling. When fully ripe, after a considerable boiling they become as farinaceous, agreeable, and wholesome as the potato. This same species....is everywhere made use of by the natives, who collect both the nuts and the roots."

Early in the century it was growing in the meadows of the Delaware below Philadelphia, and Dr. Benjamin Smith Barton considered it indigenous. He says also that "efforts at cultivating this plant and multiplying its sites of growth have been unsuccessfully made in the neighborhood."

It is curious that Kalm, who gave so much attention to the food plants of our Indians, should not mention the lotus. It certainly could not have been at the time of his visit here (1748) a common plant, yet the lower Delaware, where a half-century later it was still found, was a locality about which he botanized with much industry. It is hard to believe that had he once caught sight of its enormous leaves, often thirty inches in diameter, or seen the bright yellow blossoms on their towering stems, he would have omitted to make mention of such an experience. Kalm spent a considerable part of his time among his countrymen at Raccoon, now Swedesborough; and at Woodstown, but a few miles away, the native lotus grows luxuriantly, a relic, it is believed, of Indian water-farming.

There is no improbability in the opinion that the Indians cultivated the plant.



They were certainly practical horticulturists as well as growers of field crops. It was of an Indian orchard that the pioneer settler of a New Jersey town wrote when he stated, in 1680, that peaches were "in such plenty that some people took their carts a peach-gathering. I could not but smile at the conceit of it. They are a very delicate fruit, and hang almost like

our onions that are tied on ropes." The peach was probably introduced into Florida by the Spaniards, and in about a century or less its cultivation by the Indians had reached northward as far as New Jersey. The nuts and roots of the lotus could as readily be transported as the pits of the peach, so no obstacle was in the Intertribal intercourse was very far-reaching, as shown by the occurrence of peculiar forms of stone implements common in distant localities, and Mexican obsidian and Minnesota red pipe-clay all along our eastern Atlantic seaboard.

While yet we have the Indian in mind it is well to refer also to the very significant fact that these people took the golden-club (Orontium aquaticum) from the tide-waters and planted it in upland sinkholes, miles from the nearest spot where

it grew naturally.

Perhaps we can never be positive about the matter. If a fiction, it is so pleasing a one I trust it will never be overthrown. To stand upon the bank of a pond and see in it traces of both an aboriginal flower-garden and a farm certainly adds to the interest that surrounds the plant.

We have it on the authority of Emerson that Thoreau expected to find the Victoria regia about Concord. It was but an extravagant method of expressing his opinion of the merits of that region; but I am not so sure that the Victoria is the most beautiful of all aquatic plants. Finding it growing and blooming every summer in an open field near by, I have surely the right to express my preference for another. It and the lotus grow in the same waters, and I love the lotus more, give it the first place among flowers, although there floats upon the surface of these same waters royal red lilies of India, tooth-leaved white lilies from Sierra Leone, the golden one of Florida, and, perhaps more magnificent than all, the splendid purple lily of Zanzibar. I can start across lots and quickly come upon them all in an open field; but it is the lotus that holds me.

I cannot rid myself of the thought that with the Victoria, as with all its attendant lilies, the hand of the care-taker is necessary. A very Amazon itself, it needs an Amazonian setting. We look for a naked baby on the largest pad, and the infant's mother in a canoe gathering Victorian seed-vessels. These, with a troop of scarlet ibises, spur-winged jacanas, and chat-

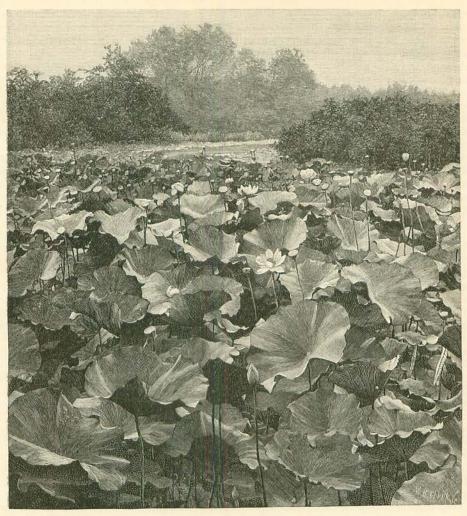
tering macaws, are all needed to complete the picture. With them, the world has perhaps nothing more striking to offer: without them, the plant is too bizarre, too like the eagle when shorn of its priceless gift of liberty. Not so with the lotus: it accords well with the unpretending valley of the Delaware, is not a thing apart, but the culmination, as it were, of nature's vigor here, and seemingly not out of place even when it fills a meadow mud-hole.

One species is, as we have seen, truly American, native, and to the manner born. even if introduced and cared for by the Indian along our Eastern seaboard; but now, where the wildness of the Indians' day has been long lost to us, and novelty is sweet, we rejoice to find the lotus of the East is no longer a stranger in the land.

In a now nameless little stream, filling the narrow interval between low hills, till within a few years there grew little but the yellow dock, white arrow-leaf,

blue pickerel-weed, and here and there a lily. It was simply a typical muddy brook, such as is found everywhere in the "drift" areas of the State. Every plant was commonplace; but far be it from me to infer that any one was mean or merit-Not a flower named but is really beautiful; yet, save the lily, none would be gathered for nosegays. Why, as is so common, speak disparagingly of the yellow nuphar, our familiar splatter-dock? Let it be gathered with care, with no fleck of tide-borne mud upon its petals, and see how rich the coloring, and with what grace the flower has been moulded. I doubt not, were the nuphar fragrant, it would be extolled as it deserves, as, were the rose fetid, it would be despised. Thus one writer remarks, "From its filthy habits it has been called, with some justice, the frog-lily." But wherein lies its filthiness it is hard to determine. It has no decided preference for waters too stagnant for its fairer cousin the white nymphæa; and then smirched lilies are no novelties. A pond may be too muddy for even them to preserve their purity, yet they will grow as luxuriantly as their unstained sisters. That the nuphar may remain longer in polluted waters than will the nymphæa does not argue that it prefers such conditions, and never a frog but loved clean water better than foul. Botanists should not speak slightingly of the animal world;

it too has its beauties. And the reference



A COLONY OF THE EGYPTIAN LOTUS.

to the frog shows a woful ignorance of that creature.

How many have held the flower-stalk of the arrow-head—a sea-green staff studded with ivory? They, at least, will admit its beauty. Nor will the spike of violet-blue flowers of the pickerel-weed fail to be admired even if gathered; and what flower when torn from its stem but loses grace? No shrub so sprawling but fills its niche fittingly.

Where these native aquatic plants grow they complete the little landscape. Each would be quickly missed were it absent; they are part and parcel of an evolved microcosm, needing nothing. Such was this little creek.

Into the deep mud of the stream, widened here by a dam to a pond of several acres, a single tuber of the Egyptian lotus was placed eight years ago, and the result awaited with much curiosity, if not anxiety. That same year it sprouted and grew luxuriantly. It was soon too prominent a feature of the landscape for its own good-the cows came, saw, and tasted, but did not fatally wound. It withstood the summer's heat, but would it withstand the winter's cold? The pond that before was like all other ponds is so no longer. The native growths that seemed so firmly rooted have disappeared, and the lotus has taken all their places-so completely, indeed, that now even the water is shut from view for more than an acre's space. As the spot is approached from the neighboring hill-top we get a bird's-eve view, the effect of which is striking and thoroughly un-native, so far as plant life is concerned, and in a measure disappointing. Recall some rainy day in a crowded city when from an upper window you have looked down upon the street. No sidewalk and but little wagonway to be seen-nothing but a waying expanse of upraised umbrellas. Hence the disappointment, if you have read travellers' tales of the lotus's bloom. But worthier thoughts well up as you draw

One has but to glance over Grav's Botany to notice how many plants have been introduced from Europe, and are now so firmly established that native species are forced to retire before them. The pond before me exhibits another, and so recent an instance it has not yet been recorded. What radical changes this Egyptian plant will work are yet to be determined: that we can foresee one of them-the crowding out of the nuphar—is unquestionable. That any change will be one to be regretted is highly improbable. To introduce the lotus is not to repeat the blunder of the English sparrow. It is certain not to oust other plants that are more valuable, for as yet we have found little if any value in the products of our marshes. Since the country's settlement it has been the aim of the thrifty to convert them into dry land whenever practicable. Thanks to whomsoever thanks are due, many are irreclaimable.

Seeing how forcibly this wonderful flower of the lotus impressed itself upon the minds of the ancient Egyptians and the East generally, how prominently it figures in Eastern religions—"all idols of Buddha are made to rest upon opened lotus flowers"—it is safe to conclude that when familiar to all, even in this utilitarian age, it will not be merely ranked as one of many flowering plants; it is of too commanding an appearance for this, and to literature will prove a boon. Asters, golden-rods, and buttercups can have a well-earned rest.

Years ago the cultivation of the American species proved a failure, and those who are now best capable of judging still record the curious fact that the native lotus is much more difficult to establish in our waters than the Eastern, and does

not grow with quite the same luxuriance. Its introduction by the aborigines along our Eastern seaboard has been mentioned: perhaps it has lost vigor since it lost their care, and has disappeared excepting where its environment was peculiarly favorable. And the question arises, after all, is it in the strict sense a native? May it not, indeed. have been brought hither in prehistoric times? The question of a superlatively ancient communication between the continents is a tempting subject for study. and how appropriate when resting in the shade of the Eastern lotus! Such a train of thought need not stir up any ghost of a mythical lost Atlantis. Still the American form has certain marked peculiar-The mature torus has a decided constriction some distance from the insertion of the stem, wanting in the foreign species, and the seeds of the former are globular instead of distinctly oval. Whatever the history of the American form. that of the Eastern, or Egyptian, as it is usually called, is too well known to need repeating, however briefly, and yet the plant is still wrapt in mystery. A word, however, concerning the term Egyptian in connection with it. At present it is a plant of India, of China and Japan, Australia, the Malay Archipelago, and the Caspian Sea—an enormous range; but it is no longer found in the valley of the Nile. The use of the name rests upon the fact that it was once there, not only a cultivated plant, but held sacred by the people of that country, as it is by the Hindoos. Egyptologists, however, are not of one mind as to the relation of the lotus to the antiquities of the Nile region, some questioning the matter altogether, and considering the sculpturing to represent the lily of the Nile, one of the grandest of the white nymphæas. Quite recently, too, it has been ably argued to be the renowned rose of Sharon. "Of such a kingly flower Solomon might well have said. 'I am the rose of Sharon.'"

Perhaps we should be contented with our splendid native flora, but surely there is room in waste places, our unappreciated marshes and mud-holes, for the lotus—

> "a flower delicious as the rose, And stately as the lily in her pride."

A treasure in other lands, why should it not be in ours? If he who causes two blades of grass to grow where but one grew before is a public benefactor, so he who adds the lotus to our meadows must likewise be so accounted. "A piece of color is as useful as a piece of bread."

With the blooming lotus within reach, let us come now to a few plain statistics. In the little mill-pond it has been exposed to precisely the same conditions as the native plants, and now flourishes in absolute perfection. Mingled with the fully expanded blossoms may always be seen the buds in every stage of growth, and this from early summer until frost. Happily there is not, as is so often the case, a magnificent but brief display, then nothing but leaves. If not a joy forever. it is at least one of a protracted season. Buds or blossoms, they are alike beautiful. Among many that are pale yet distinctively tinted there often stands out one or more with the loosening petals tipped with deepest crimson. Far more are like gigantic tea-rose buds, that soon open like a tulip, creamy white and rosy at the tips. Often these glorious flowers measure ten inches across when fully open, and are supported by stems extending far beyond the tallest leaves. One such that I measured was more than eight feet high.

When the flower is fully expanded, the huge seed-pod, or torus, is a prominent object. Herodotus likened it aptly to the nest of a wasp. It is of the richest yellow, and surrounded by a delicate fringe of the same color. The seeds are seen imbedded in the flat upper surface, gems in a golden setting so lavish that their own beauty is obscured. After the petals have fallenthey are miniature boats of a beautiful pattern, that, catching the breeze, sail with all the grace of model vachts—this great seed-pod continues to grow, and is a curious funnel-shaped structure, holding the many seeds securely, yet not concealing any. The latter become as large as hazelnuts, and are quite as palatable. And so,

here in New Jersey, one can be a lotuseater, can float in his canoe and pluck fruit from giant lilies. But be not too free to do so. It is not the fabled lotus, after all, and one's digestion may be more disturbed than his mind pleasantly affected.

In this isolated pond, seen by but few, and unknown to hundreds living near it, a bit of a far Eastern landscape is reproduced—a forest of graceful lotus, with its strange leaves, matchless blossoms, and wonderful seed-pods; and what has been here effected is being repeated in the mudhole of my pasture meadow.

Less than a year ago, when spring was well advanced. I placed a root in the mud. and left it to battle with the crowding native growths. Certainly the advantage was all upon one side, but it did not lose heart at being pitted against such heavy odds. Now it overshadows them all. For a time they are permitted to be co-occupants, but not for long. The lusty lotus is even now reaching out to a wide stretch of marshy meadow; and there too, I doubt not, it will flourish as at my neighbor's. It is a rightful ambition to be able to sit down beneath one's own vine and fig-tree. Let me add the lotus, for it has come to stay.

For how long have water-lilies been on sale in our streets and at our railway stations, auguring well for the love of aquatic plants? And that strange and scarcely known lily, alas! of almost mephitic odor, the xerophyllum, is hawked about Philadelphia streets in early June, loved for its beauty despite the unfragrance; and so too this famous flower of other lands must soon appear, but not to sink to the level of a mere pretty blossom: it is too suggestive a plant to meet with such a fate. What Margaret Fuller once wrote to Thoreau well bears repeating: "Seek the lotus, and take a draught of rapture."

