THE

GARDENERS' CHRONICLE

A Meekly kllustrated Iournal

OF

HORTICULTURE AND ALLIED SUBJECTS.

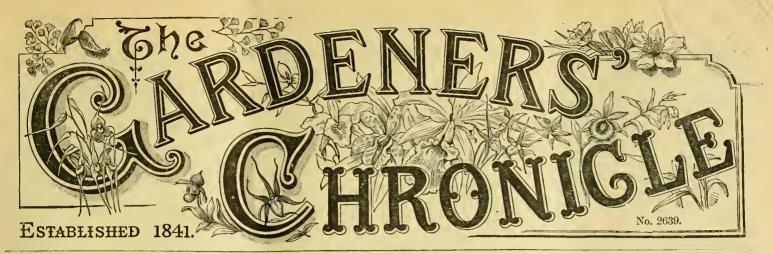
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It was during the years 1863-64, while engaged in Coffee planting in the district of Wynaad, in the province of Malabar, that I witnessed the phenomenon of the seeding of Bambusa arundinacea. The plantation I had charge of at the time was situated in the midst of an extensive Bamboo jungle within but a short distance of the frontier of Mysore, and on the main road from the Malabar coast to Seringapatam and Bangalore. At the time of my arrival in the district, the magnificent Bamboo forest, interspersed with such deciduous hardwooded trees as Teak, Kino, Rose, and Sandal woods, and others of an equally valuable description, was, although unknown to me at the time, upon the eve of a sudden and wonderful transformation. Hundreds of square miles thickly covered with the exquisitely graceful clumps of the Bamboo, giving to the landscape as far as the eye could reach a beauty difficult to describe, were to be changed in the brief period of a little over a year by fire into a charred and blackened wilderness, the myriads of nodding plumes that for half a century had graced the woodlands were, at the call of Nature to blossom, yield their seed, and disappear from the face of the earth as by the breath of a destroying angel.

The south-west monsoon rains of 1863 had ceased about the middle of September, leaving the jungle tracts of Malabar in the very heyday of their glorious greenery, the Bamboo plumes waving to and fro by the gentle breezes still prevailing from the westward, glistening in the light of a tropical sun, and, as yet, showing no trace of the change they were so soon to undergo. As the season advanced, hot parching winds from the east began to take the place of the more kindly breezes from the west, and by Christmas, the leaves of the Bamboo thickly covered the ground. Simultaneously with the disappearance of the leaves from the laterals, the inflorescence began to appear, and the aspect of the country in every direction changed as if by magic. No one was prepared for such an eventuality, and the English planters in the district were struck with something akin to alarm when the fact dawned upon them that, in the course of a very brief period, not a living Bamboo would be left in the forest. A few there were who refused to believe that the culms would perish after ripening their seeds, and were only persuaded by the actual realisation of the fact. As nearly as I can remember, the seed was matured by the middle of May, the panicles of grain weighing down the culms to a third of their length, and giving them withal a graceful as well as fruitful appearance. When the seed, which was about the size and had much the appearance of small Oats, had fully matured, it fell to the ground in showers by every passing breeze, and then came a happy season for both man and bird. Sea-fowl, spur-fowl, partridge, jungle-fowl, and quail, with which the jungles abounded, revelled in, and got fat upon, the plentiful supply of good food so suddenly bestowed upon them by the hand of Nature, and man himself was not slow to take advantage of the offering. The coolies from Mysore employed on the Coffee plantations could with difficulty be induced to remain steadily at work during this Bamboo harvest, and the jungle tribes could not be persuaded to work at all, but subsisted solely on the fallen grain of the Bambo, so long as any could be gathered from the ground. This seed they appeared to highly value, and, judging from appearances, it seemed to be very nutritious. The grain was ground into meal by the aid of small hand-mills, and two modes were employed in its cooking -- the one by

baking in the form of cakes, and the other in boiling it into a kind of thick porridge. I myself ate the cakes on several occasions, and found them fairly palatable. These jungle tribes, although perfectly aware of the value of the vast granary thus laid at their feet, were, notwithstanding, improvident to a degree. They ate abundantly of the fruit whilst it lay on the ground, but made no provision against the approaching destruction of the whole by jungle fires. So, after these had licked the ground, they had, perforce, to return to work on the Coffee plantations. At the height of the dry season, and when the earth was thickly covered with a coating of Bamboo leaves and seed, these fires began to do their work, and, apparently, so completely that it was hard to believe that a single Bamboo seed could have escaped destruction, and that in the course of a decade or so, another such magnificent Bamboo forest could be produced; but Nature, in some mysterious way, was equal to the occasion, and before I left India in 1877, the Bamboo zone of Malabar and Mysore was clothed with another jungle, consisting of clumps approaching in size and grandeur those that perished in 1863.

From the date of the seeding of the Bamboo, the clumps stood throughout the following monsoon leafless and dead, but intact; and it was not till nearly a year after that their complete destruction by fire began. When the dead and sapless clumps caught light, the whole country was filled with flame and smoke for weeks together; loud reports were heard night and day without intermission, resulting from the pent-up gases within the hollow culms, and the whole Bamboo zone so picturesque and beautiful but a twelvementh before was quickly reduced to a scene of desolation. The rotal destruction of the clumps, however, was not accomplished in one season, many escaping the fires till the second, and some till the third,

The young seedlings soon began to appear, but made but slow progress for several years. As time went on, the annual growth of culms waxed stouter and stouter, till at last a thick undergrowth of low Bamboo tufts covered the ground, which, in the fullness of time began to send up gigantic canes, till the forest was restored to its former strength and beauty.

With reference to the period of time required for the maturation of Bambusa arundinacea, I was at some little trouble, while in India, to ascertain from the native tribes inhabiting the jungles of the district the approximate duration of its existence, and was told by several men, apparently about sixty years of age, living widely apart, that they remembered a similar phenomenon of the seeding of the whole of the Bamboos of the district when they were boys. From this I concluded that about fifty years was the limit to the life of this giant species of Bambusa.

About three months before the flowering of the Bamboo, I had occasion to clear some 30 or 40 acres of land for the purpose of Coffee planting, the culms of the Bamboo being cut close to the ground. I waited patiently, curious to know the result of such an operation. When the monsoon rains began, the huge stools left in the ground began at once to send up numerous small culms of from 8 to 10 feet in height, and furnished with laterals. On the cessation of the rains these immediately flowered and seeded, after which the old stools perished absolutely, so that the act of cutting down the original culms had only the effect of delaying, not frustrating, Nature in her efforts at reproduction. J. Lowrie.

NEW OR NOTEWORTHY PLANTS.

CYPRIPEDIUM INSIGNE.*

This is a native of Nepal, so it was surprising to me to obtain from a native collector a large quantity of a species closely resembling it from so far south as Siam. It is very distinct as a variety, both in form and colouring. The leaves are shorter and more crowded; the scape shorter, the flower rather smaller than that of the typical form. The general colouring is similar to that of the Nepal plant, but the white margin of the standard is broader, and runs right down to the base; the purple spots are crowded into the middle of the bright apple-green centre. The petals and lip resemble much those of the Indian forms, but the lip is more yellow. The shield is different in shape: instead of being cordate, with a notch in the apex, it is almost ovate, with, at the most, a depression at the top.

It is decidedly a charming plant, of very neat habit, and appears to be very floriferons. It will, I think, be welcomed by the lovers of Cypripedia. A considerable quantity was brought into Singapore, and a number of plants have ere this found their way to England. H. Ridley, Singapore.

A New Hybrid Lily, Lilium Martagon X Hansoni.

Hybrid Lilies are so rare, that to get a new one is a matter of much interest. The only clear and undoubted instance known at present is Lilium testaceum, the Nankeen Lily, which is evidently a cross between candidum and chalcedonicum. I believe that some of the forms of the bulbiferum series (specially umbellatum and fulgens), will prove to be garden crosses, and very likely some of the forms between speciosum and auratum. The plant I am writing about at present has been raised by Mr. C. G. van Tubergen, of Haarlem, by fertilising Lilium Martsgon album with the pollen of L. Hansoni. The cross was made in 1886, and the plants have just flowered for the first time. The flower is so manifestly intermediate between the two dissimilar original types, that I cannot doubt that a real cross has been effected. Mr. van Tubergen has only a small stock of plants at present, but is multiplying them for distribution. The following description is made from his notes and the specimens of the leaf and flower he has kindly forwarded :-

Bulb like that of L. Hansoni, white, not yellow, like that of L. Martagon, globose, 2 inches in diameter. Stem 4 feet high, dark green, smooth. Leaves in whorls, two or four according to the strength of the plant, eight or twelve leaves in a whorl, oblong, acute, thin, bright green, 5 or 6 inches long. Flowers at present 5 to 8 on a plant; pedicels very cernuous. Perianth-segments spreading from the base, oblong, acute, 1½ inch long, ¾ inch broad at the middle, dull yellow in the lower half, with copious small brown spots, passing in the upper half into unspotted claret-brown, flushed a little with dull yellow, dull claret-brown on the outside. Stamens equally recurved, an inch long; filaments yellow; anthers linear, brownish, ½ inch long. Ovary cylindrical, green, ½ inch long; style curved, green,

^{*} Cypripedium insigne var. exul., Ridley nov. var.—Herba cæspitosa, folia linearia atroviridia rigida pauca, 5-6; 9 pollices longa, pallicem lata vel paullo minora, carina distincta, apice minute biloba, mucronulata. Scapus brevis circiter 6-8 nucias longus, purpureus pubescens vel viridis, pubescentia purpurea. Bractea 2 uncias longa, lanceolata viridis glabra. Ovarium triquetrum rostratum pubescens. Sepalum posticum dorso pubescens oblongum ovatum 1½ pollicem longum, ferme 1 pollicem latum; basi et ceutro læte viridi maculis purpureis margine et apice late albo. Sepala lateralia connata herbaceo viridia dorso pubescente oblonga ovata cymbiformia. Petala 1½ pollicem lata, 1½ uncia longa, lorata subobtusa flavovirentia linea mediana brunnescente ad basin, maculis paucis purpureis margine ciliato. Labellum 1¼ pollicem longum, flavescens venosum marginibus involutis extus politum, intus pubescena, pubescentia purpurea. Columna ¼ pollicis longa, subterea pubescens; clypeus ovatus politua ad basin pubescens, umbone medio ocreo paullo elevato, subtus carinatus omnino pubescens. Capsula purpurea pubescens rostrata, rostro curvulo 1½ uncias longa.—Siam, Tonka.