assured, would be especially distasteful to the leading foreign botanists.

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CHARLES C. BABINGTON, Professor of Botany, Cambridge.
M. A. LAWSON, Professor of Botany, Oxford.
J. H. BALFOUR, Professor of Botany, Edinburgh.
ALEXANDER DICKSON, Professor of Botany, Glasgow.
G. DICKIE, Professor of Botany, Aberdeen.
ED. PERCEVAL WRIGHT, Professor of Botany, Dublin.
ROBERT BENTLEY, F.L.S., Professor of Botany, King's College, and to the Pharmceutical Society of London.
W. T. THISELTON DYER, Professor of Botany, Royal Horticultural Society, London.
R. O. CUNNINGHAM, Professor of Botany and Zoology, Belfast.
W. R. MCNAB, Professor of Botany, Royal College of Science, Dublin.
GEORGE HENSLOW, M.A., F.L.S., Lecturer at St. Bartholomew's Hospital (London), and at the Royal Agricultural College, Cirencester.
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MAXWELL T. MASTERS, M.D., F.R.S.
JAMES BATEMAN, F.R.S.
R. TREVOR-CLARKE, F.R.H.S. [F.R.S.
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DANIEL HANBURY, F.R.S., F.L.S.
C. E. BROOME, M.A., F.L.S.
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HUGH CLEGHORN, M.D., F.L.S.
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A. G. MORE, M.R.I.A., F.L.S.
THOMAS MOORE, F.L.S., Floricultural Director to the Royal Horticultural Society.
THOMAS THOMSON, M.D., F.R.S., late Superintendent Royal Botanic Garden, Calcutta.
CHARLES DARWIN, M.A., F.R.S.
GEORGE BENTHAM, F.R.S.

ARADS.

(*Continued from p.* 1720, 1872).

ANOTHER and perhaps the most remarkable of the tuberous-rooted Arads is the Godwinia gigas, of which we have forborne to make specific mention till we could lay before our readers an accurate representation. The first notice of this plant was given in our columns in February 27, 1869, in the form of extract from a letter of the late Dr. Seemann. "I have just procured" (in the Chontales Mountains of Nicaragua), says the Doctor, "a truly wonderful Arad, which has, so far as my knowledge goes, the largest flowers, say rather spathe, known in the natural order to which it belongs. Just imagine a peduncle rising from a rhizome larger than a man's head, and being itself 4 feet high and 4 inches in diameter, bearing an upright spathe, which measures 2 feet in length and 1 foot 8 inches across, and enclosing a spadix 4 inches long and 9 lines across. Like my Sapranthus nicaraguensis, it emits a powerful carrion-like smell, and has on the outside the same dark purplish blue colour as the beautiful Anonacea just mentioned. The spathe is reddish brown, with the exception of the part surrounding the spadix, which is yellowish white. The plant has only one leaf, which also rises from the rhizome, and after fully developing dies off. The whole length of the leaf is 13 feet 8 inches, the petiole alone measures 10 feet." This paragraph went the rounds of the English, Continental, and American papers, and was noticed even by *Punch*, who suggested that the plant should be named after Gog and Magog, a suggestion which, however, the enterprising botanist did not adopt, preferring to honour Mr. George Godwin, the eminent architect, a man who has done so much, not only in his own immediate profession, but also in ameliorating the conditions of life for the working classes of our large towns. In the *Journal of Botany* for 1869, p. 313, at that time edited by Dr. Seemann, was published a fuller account, and a coloured illustration of the plant, together with detailed analyses by Dr. Trimen, thus completing its botanical history. This description we transferred to our columns in 1869, p. 1330. Dr. Seemann consigned living plants to Mr. Bull, who has exhibited the leaf on several occasions, and from which it was seen that the discoverer had rather underestimated than not the large dimensions of the plant. The leaf-stalk "looks like a huge snake, beautifully mottled, standing bolt upright at the command of some eastern charmer." The appearance of the blade of the leaf is sufficiently shown in our illustration. In December last Mr. Bull exhibited for the first time the spathe, which, however, was not then fully expanded, indeed it is only within the last few days that the expansion has become as far advanced as in the wild specimen figured in the *Journal of Botany*.

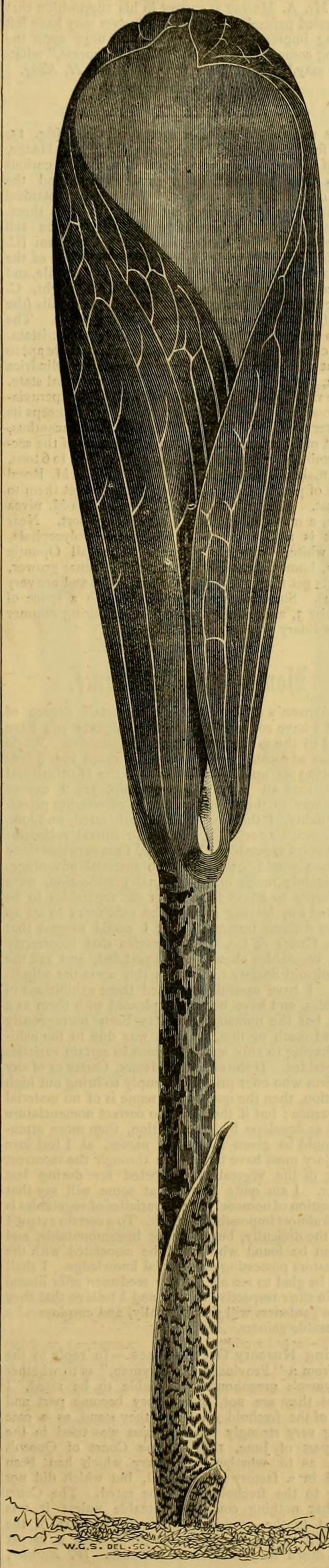

FIG. 14.—SPATHE OF GODWINIA (HEIGHT, 24 INCHES).

We have watched with much interest the growth of this spathe, and it may be interesting to record the measurements taken at different times. On December 4 the stalk supporting the spathe measured 18 inches in height, the spathe itself being 15 inches high and 9 inches in circumference at the broadest part. The stalk has not increased in length since it was first measured, but the spathe has increased as follows:—December 9, height 19 inches, circumference 16 inches; December 19, height 23 inches, circumference 18½ inches; December 24, height 24 inches, girth 19 inches. On January 8 the same dimensions were recorded, and it does not appear to have grown since that time.

As will be seen from the illustration (fig. 14), the spathe does not turn back and spread open, as in the Amorphophallus figured at p. 1720, 1872, but opens less widely, and only towards the top, thus giving the spathe the appearance of an elongated hood. We have not yet had the opportunity of examining the flowers, with which the spadix is densely covered, but the superficial view gained of them enables us to say that the cultivated plant to all appearance presents no great difference in organisation from that analysed by Dr. Trimen.

So far as we know at present, Godwinia, as a genus, comes nearest to Dracontium, from which it differs principally in the number and arrangement of the stamens, and in the form of the anthers. For garden purposes the plant will probably always retain the name Godwinia, just as it is vain to expect the Sequoia gigantea of botanists to be called in gardens by any other name than Wellingtonia; but we should not be surprised to find that some future monographer, with more complete evidence before him, will reduce it to a section of Dracontium.

We have only to add that there is some evidence to show that some forms of the West African Corynophallus Afzelii attain to even larger dimensions than the Godwinia, though the specimens that have hitherto flowered in this country have been considerably smaller. *M. T. M.*

THE YELLOW CYPRESS.

THE Yellow Cypress of Vancouver Island,* and the north-west coast generally, is certainly Cupressus nutkaensis, and not Thuja gigantea—a tree which, I have shown in a former note, is universally known in British Columbia and the northern tracts of North-west America generally, as "*the* Cedar." In Vancouver Island Thuja gigantea and Cupressus nutkaensis are the only two native Cupressineæ, and the latter is very little known to the general body of the colonists, or even to the lumbermen, whose knowledge of it is derived chiefly from its occurrence on the coast further to the north. Wherever I have seen it, either in Vancouver Island, British Columbia, Washington Territory, or Oregon, Newberry's description applied to it very well indeed. It is essentially a northern and not a southern tree. Towards the South, only a few stragglers are found, and generally, as in Vancouver Island and southern British Columbia, at considerable elevations. There it is always a ragged tree, in most cases little more than a large shrub, and agreeing, as I have said, excellently with Newberry's description. As you travel further to the northwards it attains its maximum of development—commencing to be a common tree just as Thuja gigantea begins to be a rare one. About Lynn's Canal (lat. 58° N.), the latter species ceases, while from about 53° or 54° N. lat. to north of Sitka Cupressus nutkaensis is a large, handsome, and abundant tree. Here it attains a size equalling that of Thuja gigantea, as seen towards the south, and how large that is may be guessed when I mention that in a rich river bottom I measured a Thuja which was 45 feet in circumference at the base, and nearly 250 feet in height. This was in the Nittinat River, in Vancouver Island (see my paper "Das Innere der Vancouver Insel," with map of our explorations, in Petermann's *Geographische Mittheilungen*, heft. I., u. iii., 1869, &c.); but I have notes from various friends of others which they had measured in the damp forests of Abies Douglasii, in the region to the west of the Cascade range in British Columbia, almost, if not quite, as large.

Thuja gigantea is, among the trees on the north-west coast, the Indian's best friend, for out of its wood and bark he manufactures endless articles of domestic, hunting, fishing, and warlike economy (see the paper on "Thuja, &c.," already mentioned, *Trans. Bot. Soc. Edin.*, vol ix., pp. 358-378). Most of their canoes are hollowed out of it, at least, in Vancouver Island; and the case quoted by Mr. Murray in the *Pinetum*, from one of my letters, where a canoe was made out of Cupressus nutkaensis, in Vancouver, was quite an exception, and indeed the canoe was probably traded from some of the northern tribes, and not of Vancouver manufacture at all. The Indian ropes are also very commonly twisted out of its bark. The tree which I took for Thuja plicata, and out of which I happened to see the Indians, just at the time I wrote the letter

* See Mr. Murray's communication in last number, p. 38.