ing commences the tree is useless for timber. The bark is chocolate-brown and flakes off in relatively thick, irregular pieces leaving behind deeply impressed scars. In youth the bark is smooth and gray on the exterior. The tree is plentifully provided with narrow, lance-shaped, rich green leaves and the fruit is globose, plum-like, orange-brown, somewhat bloomy when ripe and about ½ an inch in diameter. The wood is light, yellowish white, close grained, elastic, free from knots and not resinous. It saws easily, planes to a smooth surface and takes nails well. It is not durable for external work where exposed to the weather but for furniture, paneling, flooring, joinery, pattern making and interior construction generally it is a most useful and valuable wood. When air-dried planks have a tendency to warp but kiln-seasoning gives excellent results.

The species belongs to the Nagi section of the genus. It is a light demanding tree and flourishes best in cool rich forest soils. It enjoys the wind protection afforded by lesser trees and when out in the open or when fully exposed to the wind it is less tall and inclined to have an irregular, even scrawny, crown.

A superior wood is that of *P. latifolia* R. Br., the Real Yellow-wood or Regte Geelhout of the Dutch, which grows in forests along with *P. falcata* R. Br. The Real Yellow-wood has fibrous bark and belongs to the section of the genus that has the fruit seated on a very pronounced arillode and of which the Japanese *P. macrophylla* D. Don. is a known example. This is not so large neither is it so handsome a tree as *P. falcata* R. Br., but its wood is, perhaps, superior to that of any other African species.

TWO NEW BAMBOOS FROM NEW GUINEA

AIMÉE CAMUS

Schizostachyum Brassii, n. sp.

Culmi 3–4.5 cm. alti, fistulosi, glabri, recurvati. Foliorum lamina lanceolata, basi rotundata, apice setaceo-acuminata acumine scabro, pallida, glabra, basi puberula, 15–40 cm. longa, 4.5–5.8 cm. lata, margine scabra, superne scabrido-ciliata, nervis permultis parallelis bene striata, venulis transversis tessellata; petiolus crassus, 4–6 mm. longus; vagina striata, superne truncata, ore ciliato-setosa; ligula truncata, ciliata. Panicula depauperata, elongata, foliata; rami puberuli; bracteae ovatae, mucronatae; spiculae angustae, lineari-fusiformes, subteretes, 15 mm. longae, uniflorae; rachilla supra glumam floriferam producta et glumam sterilem cum palea procreans; glumae steriles 3, prima 4–6 mm. longa, ovato-lanceolata, mucronata vel subaristata, 7–9-nervia, margine pilosa; secunda 5–8 mm. longa, ovato-lanceolata, mucronata, subaristata, 7–9-nervia, superne pilosula, margine pilosa; tertia 8–9 mm. longa, ovato-lanceolata, subaristata, 7-nervia; gluma fertilis expansa ovata, mucronata, subaristata, 8 mm. longa, glabra, superne pilosa, 9–11-nervia; palea oblonga, 7–8 mm. longa,

truncatula, breviter bidentula; lodiculae lanceolatae, margine ciliatae; stamina 6, filamentis conjunctis sed cito separandis; antherae lineares, 2.5–3 mm. longae, luteolae, apice subacutae, glabrae; ovarium glabrum, stylo longo; stigmata 3, plumosa. Fructus elongatus, superne attenuatus, pilosus; flos superior: gluma ovata, mucronata, 7–8 mm. longa, margine ciliata, 5-nervia; palea 3–5 mm. longa, oblonga, subcarinata, apice bidentata, ciliata.

NEW GUINEA: Ihu, Vailala River, *L. J. Brass*, no. 1105, March 4, 1926.

This species is called BE-ERO by the natives.

The fertile flower is surmounted by a sterile flower situated at the end of an articulation of the rhachilla which is 2 mm. long, slender, glabrous, slightly dilated and ciliate at the apex. Above this flower at the end of a very short articulation of the rhachilla appears sometimes a second shorter and more rudimentary sterile flower.

Though the filaments in a young state have a tendency to unite, this species recedes from the genus *Neohouzeaua* by the presence of one or two upper sterile flowers and of a rudiment of a keel in the palea of the fertile flower and thus approaches *S. Blumei* Nees, the type species of the genus *Schizostachyum*. The tendency toward a union of the very young filaments is also found in *S. Hallieri* Gamble. By this character and by the ciliate apex of the sheaths with the setae about 6 mm. long *S. Brassii* approaches *S. Hallieri* but differs in the arrangement of the inflorescence, in the less congested spikelets, the shorter bracts, in the sterile and fertile glumes distinctly hairy on the margins and with a longer mucro, in the truncate and bidentate palea of the fertile flower and finally in the leaves being more rounded at the base. From *S. Blumei* it differs in the yellow anthers, in the arrangement of the inflorescence, the less hairy glumes with a shorter mucro. In its leaves *S. Brassii* somewhat recalls *S. latifolium* Gamble, but differs in its very loose inflorescence, which is a much-branched panicle, in the scarcely bidentate palea of the fertile flower and in the glabrous anthers. It resembles *S. chilianthum* Kurz in the slightly 2-keeled palea and in the presence of an upper sterile flower, but differs in the arrangement of the inflorescence, in the ciliate glumes and in the not bicuspidate palea.

Bambusa Brassii, n. sp.

Frutex scandens; culmi glabri, fistulosi. Foliorum lamina subelliptica, basi attenuata, petiolata, apice acuminata, 22–25 cm. longa, 5–6 cm. lata, glabra, versus apicem scabra, margine scaberula, nervis parallelis multis striata; petiolus 4–5 mm. longus; vagina glabra, striata; ligula truncata, glabra. Inflorescentia elongata, spicularum fasciculi alternantes satis distantes, densi, sed parvi; spiculae glabrae, 0.8–1 cm. longae, 3–4-florae; glumae steriles ovato-acutae, plurinerviae; glumae fertiles ovato-acutae, mucronatae, inferiores 5–5.2 mm. longae, glabrae, apice puberulae, 11-nerviae; palea glumam subaequans, ad carinas inflexa, dorso inter carinas parum concava, superne puberula; lodiculae ovatae vel oblongae, hyalinae;

stamina 6, libera; antherae 1.8–2 mm. longae, luteae, glabrae, apice mucronatae; ovarium oblongum, basi attenuatum, superne pilosum; stylus pilosus. Fructus?

NEW GUINEA: foothill forests, Borabere, alt. 360 m., *L. J. Brass*, no. 715, Nov. 30, 1925.

This species is called LINOO by the natives.

In the arrangement of its inflorescence this species recalls *B. Griffithiana* Munro, but differs in the more numerous flowers of the spikelets, in the mucronulate anthers, elongated style, the hairy apex of the ovary and finally in its sheaths and ligulae being glabrous at least in the fully developed leaves. It also resembles *B. Thorelii* G. Camus in the arrangement of the inflorescence, but the leaves are much larger, have 9–10 pairs of secondary veins with numerous intermediary veins, and are somewhat tessellate.

SOME NONDESCRIPT PIPERS FROM NEW GUINEA.

WILLIAM TRELEASE

THE following species form part of a collection of woody plants made in New Guinea in 1926–27 by Mr. L. J. Brass for the Arnold Arboretum. Ninety-three species of Pipers have been recorded for New Guinea and the adjacent Bismarck Archipelago and the eleven here described bring the number up to 104. It is not impossible that one or another of these may have been reported heretofore under the name of a non-endemic species; but as I have not seen these collections I am unable to indicate synonymy for any of the present list, though they cannot be reconciled with the characters on which such species rests.

The favorable location of New Guinea, with a diversified area of some 200,000 square miles (twice that of the West Indies and nearly equaling that of Central America) makes it probable that a much larger number of Piperaceae (*Piper* 104; *Peperomia* 22; *Macropiper* 2) may be expected than is now known; and except for the few that have been cultivated, they may be expected to be endemic.

Piper (Eupiper) arbuscula, n. sp.

An essentially glabrous compact small tree, 10–12 ft. tall; flowering internodes slender and somewhat elongated; leaves round-ovate, abruptly sharp-acuminate, slightly obliquely cordate, 12–14 × 15–16 cm., multiple-nerved, with about 6 lateral nerves from the base and the midrib with 2 alternate branches from its lower fifth, papery, minutely dark-punctulate beneath; petiole 15–20 mm. long, approximately equaling the open sinus, exceptionally somewhat hirtellous, not winged; pistillate spikes opposite the leaves, curved, 4 × 60 mm., closely flowered; peduncle 5 mm. long, bracts round-peltate; berries orange, ovoid, pointed; stigmas 3, small, sessile.

TYPE LOCALITY: young forest, U-uma river, *L. J. Brass*, no. 1449, May 18, 1926. — Called Boni.