



164. *BACTRIS BROADWAYI*; petiole (lower left), foliage, spathe, spadix with rounded fresh nuts, all  $\times \frac{1}{3}$ , dried nut at bottom.

6-7 dm. long and 4 to about 6 cm. broad, many-ribbed, acuminate, margins now and then bearing a brief very slender prickle as also the midrib underneath, rachis bearing deflexed black prickles 1-4 or 5 cm. long: spathe long, to 10 dm. and narrow, densely covered with glossy black spines 1-3 cm. long, not narrowed at base into a different manubrium or peduncle-like handle; spadix 6-8 dm. long, downwardly curved with a black-spiny peduncle, axis continuous and bearing a few stray hairs, branches 6-15 cm. long and divaricate but becoming ascending toward apex: fruit top-shaped, about 18 mm. long and broad, truncate at top with a central point, tapered to base; calyx about 4 mm. deep, strongly veined, margin closely applied and practically entire.

Tobago: in woods at Caledonia, *Broadway 4014* (type), *Bailey 146*; Roxborough-Parlatuvier Road, *J. S. Beard 98*; near Roxborough, *Bailey 130*.

†5. *Bactris circularis*, spec. nov. Fig. 163.

Erecta ad 10 m., truncus unicus vel interdum etiam quintuplex, circa 5-10 cm. diam., circularibus albidis nudis fasciis 2-3 cm. latis et mediis liris spinarum nigrarum 2-3 cm. longarum: folia 1 m. vel plus longa; pinnæ suboppositæ et nonnullæ partes rachis vacuæ, 6-8 dm. longæ et 4-5 cm. latæ, multinervatæ subter, margines spiculis, rachis petiolusque debilibus spinis nigris 1-2 cm. longis: spatha 30 cm. longa, obsita aculeis 2-3 cm. longis; spadix laxa, sæpe duplex, 25-30 cm. longa cum matura: fructus globulares, 15 mm. diam.; calyx parvus, appressus, non profunde lobatus.

Erect to 10 m., trunks four to five or sometimes one in a single stand, 5-10 cm. diam., the nodes or rings separated 2-3 cm. and bearing divaricate and deflexed black spines 2-3 cm. long (whence the name *circularis*): leaves 1 m. more or less long; pinnæ alternate or subopposite with blank spaces on the rachis, 6-8 dm. long, 4-5 cm. broad at middle of leaf, not slenderly tapered to apex, strongly many-nerved on under surface, margins rough with little points but hardly armed, rachis and petiole bearing scattered thin weak black spines 1-2 cm. long: spathe about 30 cm. long, narrow, closely covered with black prickles 2-3 cm. long, constricted toward base into a handle-like portion; spadix loose and open, perhaps double or twin, hanging in fruit and then 25-30 cm. long: fruit globular, about 15 mm. diam.; calyx small, appressed, margin shallowly lobed.

Trinidad: Melajo, St. Andrews, *Bailey 158*. A striking looking bac-trid with its ridged rings of black spines and intervening whitish naked bands.

†6. *Bactris Broadwayi*, spec. nov. Figs. 164, 165.

Valde foliosa, erecta, 8-10 m. alta, trunci pauci vel unici, 5-8 cm. diam., uniformiter sed non dense aculeati: folia pendentia, 1 m. vel plus longa, æque pinnata, glauca vel albida subter; pinnæ circa 1 m. longæ, 2-3 cm. latæ, tenuiter multinervatæ, margines setiferi, rachis spinis 1-4 cm. longis: spatha 25-30 cm. longa, dense spinosa; spadix simplex, brevis, axis non continuus, rami 12-13 cm. longi: fructus pauci, pæne globosi, 4 cm. longi, 3 cm. lati, rostrum valde breve; calyx strictè appressus, in duabus continuationibus, margines obtuse lobati.

Erect, 8-10 m. tall, very leafy, few trunks in a single stand, boles 5-8 cm. thick, uniformly but not closely prickly; leaves evenly and equally pinnate, 1 m. and more long, gracefully drooping, lighter colored or somewhat glaucous underneath; pinnæ about 1 m. long, 2-3 cm. broad, long-acuminate, lightly many-nerved, margins closely beset with small sharp forward-pointing setæ; rachis bearing scattered black spines 1-4 cm. long; petiole heavily prickly with an under layer of short depressed prickles and also protruding spines to 4 cm. long: spathe 25-30 cm. long and 4-6 cm. thick, densely covered with brown-black prickles 1-2 cm. long; spadix simple and short, flat curved peduncle brown-woolly but not aculeate, axis not continuous and the few short branches forward-looking, about 12-13 cm. long: fruits relatively few, nearly globular, 4 cm. long, 3 cm. thick when dried, beak very short but evident; calyx tightly appressed in two series, margin obtusely lobed.

Trinidad: Mac Nair, *Bailey 112*. Species dedicated to the memory of W. E. Broadway, 1863-1935, Fig. 166, connected with the Department of Agriculture, Trinidad, from 1914 to 1923, with whom I had many satisfactory collecting trips on the island.

†7. *Bactris ellipsoidalis*, spec. nov.  
Fig. 167.

Valde gracilis, 6-7 m. alta, trunci pauci vel unici: folia æque pinnata,



165. GRACEFUL HABIT of *Bactris Broadwayi* in forests of Trinidad.