



MISSOURI BOTANICAL GARDEN  
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GEORGE ENGELMANN  
BOTANICAL NOTEBOOKS

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No 18 sine nom.

H. Nees. Jan 1 1868

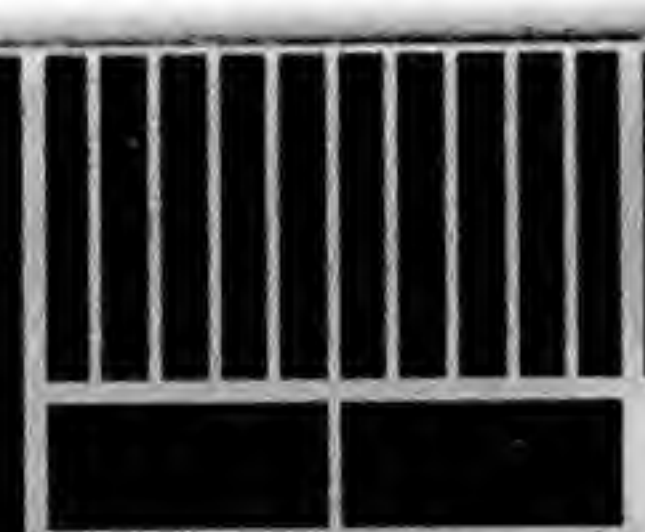
*O. leucotricha*

Plant 7 feet high  
larger joints 12 inches long, 7-8" wide,  
areolae crowded,  $\frac{3}{4}$  - 1 inch apart,  
nearly orbicular, bristles few and short, on  
upper edge of areole;  
spines in this specimen twisted and elongated  
already in the 2<sup>d</sup> year; otherwise exactly  
like No 9.

No 19 exactly like last, 6 feet high.

No 59 same -

70 - also same



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3. "Opuntia elongata"

H. B. Meap. (Sciola)  
 Dec 14 1868.

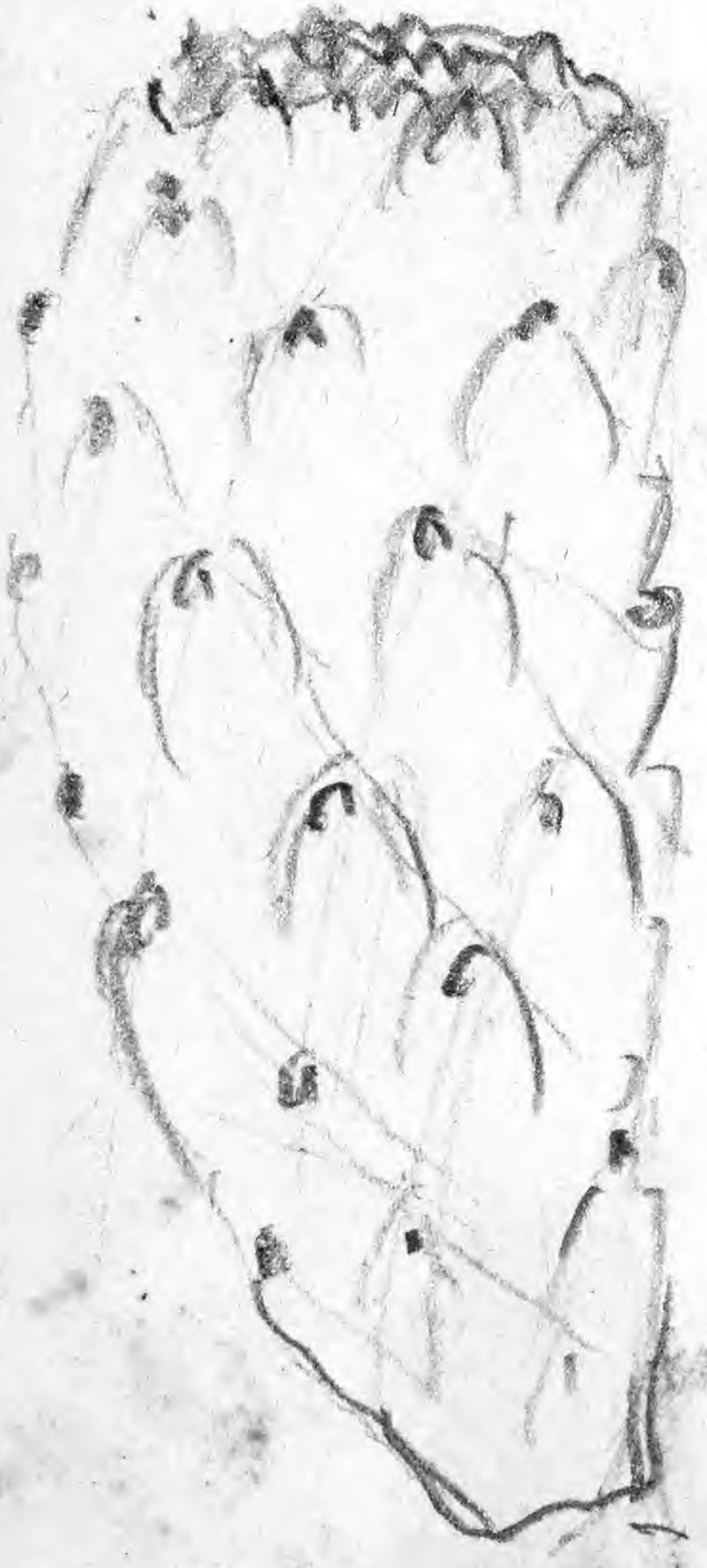


7/18

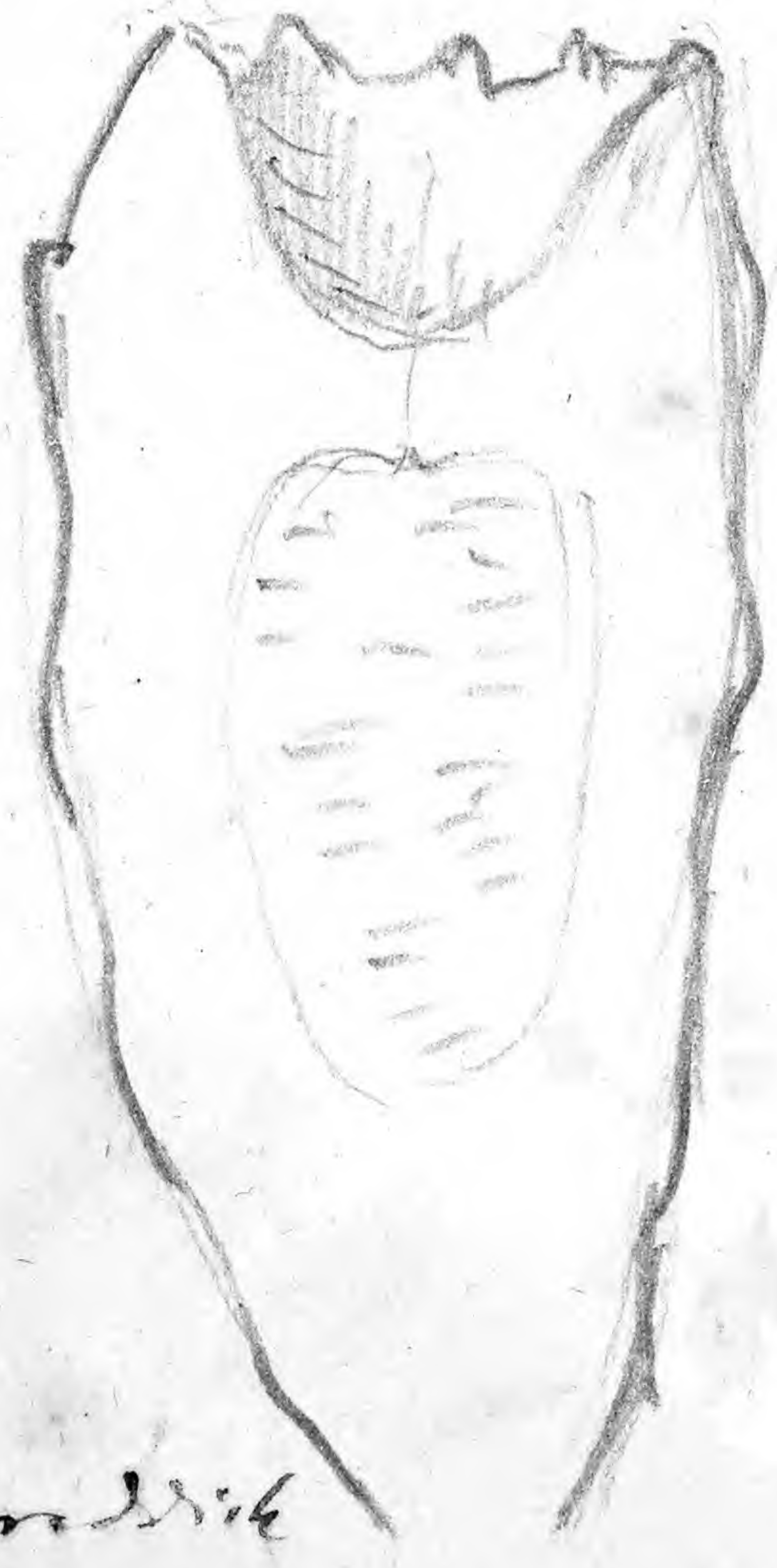


green  
 scarcely tubercled  
 fertile seeds  
 - yellowish green pulp

green green (or in abortive  
 fruits with red) pulp yellowish  
 slightly tubercled, clavate  
 with elongated base  
 with about 50 areolae  
 (upper ones quite bristly)  
 in 8/1 or more - 7/18  
 arranged -  
 umbeliform deeply  
 hemispherically immersed  
 or somewhat funnel-shaped  
 seeds small, numerous  
 cavity of fruit oblong



8/21



green with reddish  
 pulp yellowish green  
 seeds abortive



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Plant 6-7' high, trunk spineless, much  
branched from the base <sup>8" diam</sup> - 6 <sup>not that</sup>  
Joints narrowly oblanceolate, 12-20 inches long  
3-6 <sup>ar. wide</sup> <sup>scarcely tuberculate</sup>, with dark spot <sup>around</sup> <sup>ar. wide</sup>  
Ar. naked or with single or rarely  
2-3 <sup>at last</sup> <sup>deciduous</sup> short weak  
spines, 3-6 lines in length  
ar. very small, oval, bristles very short,  
1 + 1/4 inches apart

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43.

Quantia "vulgaris"

Jan 5 1869

Ficus India

A very large jointed (entirely spineless) form  
5 feet high, bushy,

Joints 16-18 by 3-9 inches, thin, elongate-  
obovate - young ones sometimes with a few  
short deciduous joints.



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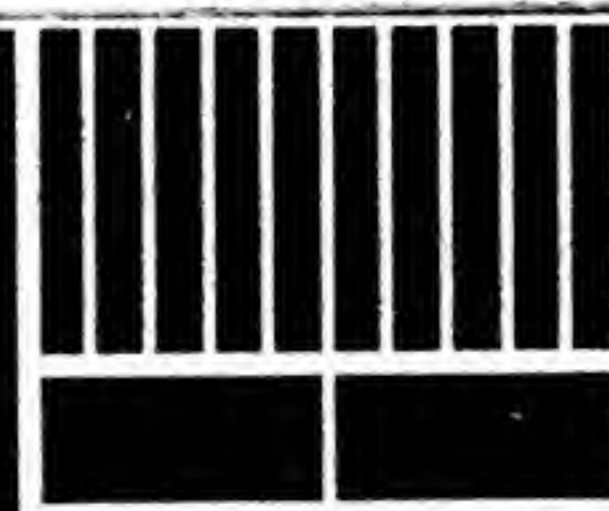
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Hb. Nees Jan 6 1869

67 *Opuntia Vulgaris*  
var *bifora*

might be a form of *Pisonis Feltia*, but has  
strange bristles

Plant 4' high, 3 wide, somewhat spreading  
Joints 10-14" x 6-7" green not glaucous  
areolae small, oval bear often spinules  
and sometimes long pendulous yellow bristles  
3" long — areolae  $1\frac{1}{4}$  -  $1\frac{1}{2}$  inches apart



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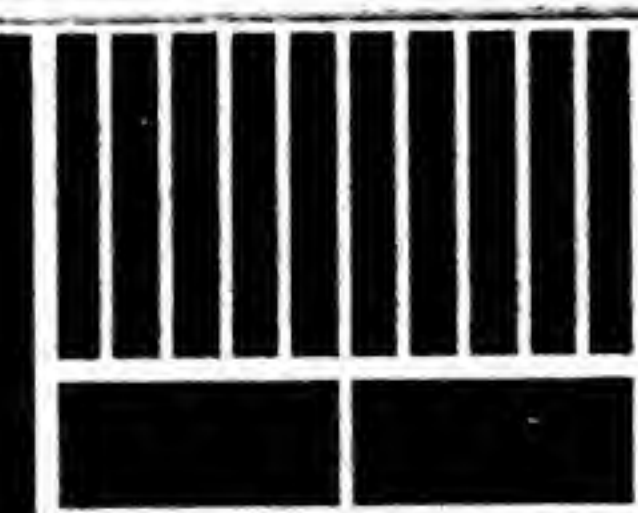


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Jan 5 1869

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*Opuntia zinc nomine*

small young plant, 1 foot high  $3\frac{1}{2}$  spreading joints.

areolae 2 inches apart, oval to orbicular, with short pendulate bristles, which are elongated ~~but~~ on old joints, but remain

pendulate;

spines single, rarely 2, yellow, often <sup>now</sup> none.



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24 Opuntia "vulgaris asyrena" K.B. Neesol  
Jan 1 1869

Large plant, 7 feet high; somewhat glaucous  
joints 13-18 inches long, 6-7 wide, very  
slightly tubercled.

Arcules very small, oval, scarcely  
any bristles;  
spines 1-2, small, <sup>2-4 lines long</sup> weak, deciduous,  
white, or mostly none at all



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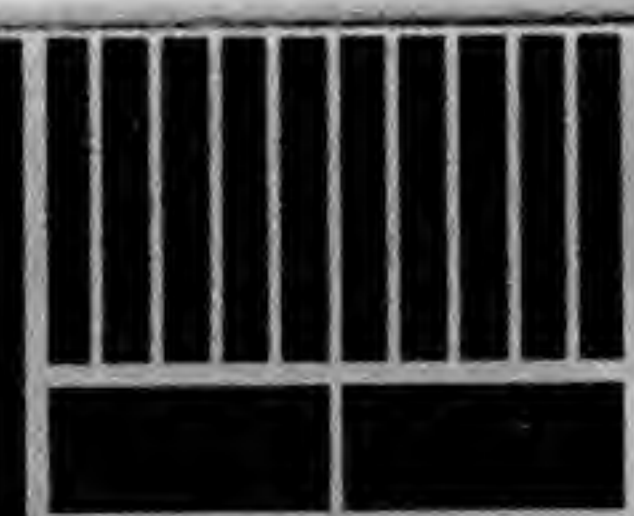
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21. *Opuntia vulgaris* [meaning *Ficus Indica*]  
var *media* HB Napol. Jan 1<sup>st</sup> 1868

Stems - erect - 4 feet high  
joints about 7-10 inches long,  $5\frac{1}{2}$  -  $6\frac{1}{2}$  wide  
thin, not tubercled.

Areolae small oval,  $1 - 1\frac{1}{4}$  inches apart,  
bristles almost none, or soon obliterated  
spines on all areolae, but weak, short,  
1-2 or 3, increasing in number on old trunk

Probably not belonging to *Ficus Indica*,  
as the joints are much thinner.



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6. Op. Amyclaea

Hort bot Neapol  
(Socola)  
Dec-25-1868

A tall stout specimen 7' high, trunk  
at least <sup>almost</sup> naked <sup>or more or less</sup> ~~and~~ spinyless. at least naked.

Joints obovate, thickish, 12-16 inches long  
and 7-9 inches wide ~~scarcely tuberculat~~  
<sup>oval or almost rounded.</sup>

Arcolae slightly immersed  $\frac{1}{4}$  -  $1\frac{3}{4}$   
or 2 inches apart, all spiny - ~~bristles very~~

Spines white ivorylike, angular  $\frac{1}{2}$  - <sup>1 foot</sup>  
inch long, 3-5 in number; in older  
joints they increase to 5-7 or even 9  
but are of length deciduous.

trunk not quite spinyless  
but sp appall. in increasing number

48 seems to be the same, a bushy plant  
3 feet high and in diameter the same.



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3. elutriate, with fine, narrow amygdal  
but appears on 20 parts & then increases  
- now, rather more, than  
before - but to be compared with  
heretofore, 6' 1/2

parts 10-13 X 5-6 1/2 (half) narrow  
about

about 1 1/2 distal - all spring  
slightly increased

No 2-3 ~~old parts~~ bright white  
1/2 - 3/4 or 1 distal

increases - 1 1/2 & more to 10-18 or 20  
longer on one side by - that is all  
flat or rough

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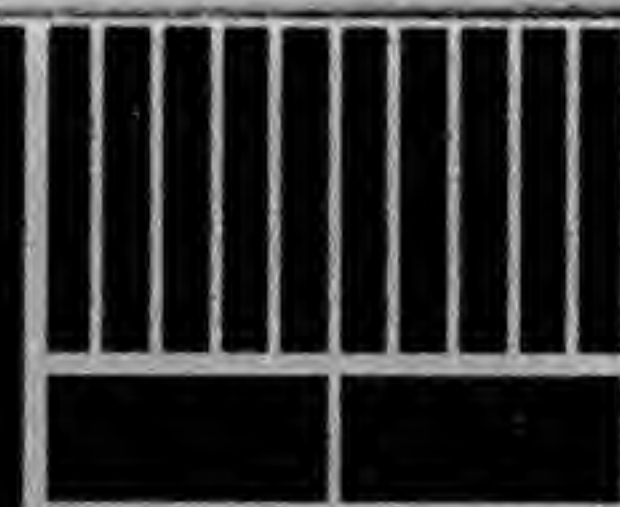
15. Opuntia without name, Hort Bot Neap Jan 1849  
near O. amygdala?

plant patulous, 4 feet high, somewhat glaucous  
joints 13-19 inches long, 5-6 wide, very  
slightly tubercled.

areolae oval, with very short, deciduous bristles  
all bearing 2-3 white terete spines long,  
increasing with age to 5 and more

20, seems to be same plant, 7-8 feet high,  
joints 10-17 inches long 7-9 wide, rather  
thick, very slightly tubercled, much broader than in  
No. 15.

areolae about  $1\frac{1}{2}$  inches apart, oval, bristles  
very short or obliterated, soon deciduous  
spines large, 2-3-5 in number; larger ones  
flat, sometimes twisted,  $1\frac{1}{2}$  inches long



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7. Op. "latior"

Herb bot Nepal (Souda)

Dec 25 1868

Erect, 6 feet high; spikes in old joints increase in number ~~somewhat~~, but at least ~~are deciduous~~, so that <sup>old</sup> trunk becomes very <sup>springy</sup> ~~spindly or naked~~; and this constitutes its principal difference from O. Amygdala <sup>which is none, see notes to No 6</sup>

Joints narrowly obovate, half as wide as they are long (10-13 x 5-6 1/2")

Arcole about 1/4 inch apart, slightly immersed, all bearing spikes; <sup>rounded or somewhat oval, bristles very short.</sup>

Spines 2-3 <sup>white, shining</sup>, increasing in number to 10-18 or 20; 1/2 - 3/4 or 1 inch long, older ones sometimes longer; stouter ones flat or angular. <sup>why not = amygdala?</sup>

<sup>arcule round or somewhat oval, bristles short</sup>

63. Under same name appears to be same plant

Bushy, 5 feet high, covered conspicuously with the white ~~wooly~~ like spines

Joints 10-14" by 5-7, elongated obovate, 1 inch thick not tuberculate.

Arcole 1 inch apart circular, bristles very short.

Spines on all arcules 2-3, spreading soon increasing in number to 5 and at last to 12-16, many of the stouter ones are flat and some twisted.

69 is a young plant of the same.



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No. 6 *Op. Myrica* probably *carolinensis*?  
tall stout 7' high at last water  
points 12-16 x 7-9 ~~the~~ ~~is~~ about  
~~at least~~ ~~slightly~~ ~~immersed~~ ~~in~~ ~~1-2~~  
or 2" distant all spines ~~3-5~~ ~~angular~~ ~~white~~ ~~spines~~  
in older part 5-7 or 9 at last water

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