Recd Feb. 26th
Ans March 1st

Jefferson Barracks Mo
Feby 23d 1844

Dear Sir

I send you to-day some seed of the Silphium laciniatum or "Polar Plant of the Prairies". The common people sometimes call it Compass Plant, or Pilot Plant, or Indian Guide, or rosin weed ... The latter is the common name Dr. Torrey mentions in his description ... It was in the fall of 1842 that I sent Dr. Torrey a dried specimen of the Plant mentioning its curious properties, which was after his notice of the Silphium laciniatum came out —

I also enclose herewith copies of my communications to the National Institute on the subject .. ~~Being~~ The copy of my first letter you can return if you choose the other please return as I have not duplicates. A note addressed to me through the Planters House would reach me

You will perceive that my botanical surmises about the plant were very crude, owing to my avowed ignorance of botany ... Its interest to the science of Magnetism not attracted my attention ..

My further observations last summer are worthy them — I am persuaded that the leaves of the plant when grown up to the blossoming plant, also endeavour to point North, and take the medium position

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

between the north & south & that direction due to its striving to arrange itself symmetrically to the stalk .. Or as would be said, in the language of the science of mechanics, it takes the resultant position due to the action of the two forces, the one the attraction towards the North pole, the other the disposition in a leaf to arrange itself symmetrically around the stalk —

As to the cause of this phenomenon I still think it is due to electrical currents — There are many arrangements of currents of electricity in the same plane, which if they turn on a vertical axis, will make the frame work of currents assume a north & south position — This is shown in electro magnetism — I believe that currents must permeate the frame work of the leaf so as to cause this result —

With high regard & esteem
I am yours obt servt

B. Alwood
Lieut 4th Infantry

George Engelmann M D.
St Louis

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

P.S.

I also enclose for your perusal Dr. Torrey's last letter to me & a copy of Mr S. B Smith's Com. p Nat Hist of 30 Aug '42

Mr. Smith says that he raised from the seed quite a different Silphium, the Silphium terebinthinaceum, of which he says "the leaves ~~planted~~ pointed, contains "North & South, & some East & West" — Certainly the latter fact is just as remarkable as the first — The North pole is as well indicated by a plane East & West as by one North & South —

To explain all this some general law must lie hidden from us, which experiment study & observation can alone bring to view

I should be gratified if you or any other scientist could develop it —

B. C.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

1844
Febr 23d — Lieut. B. Alvord
" 26 " Jefferson
March 1st Barracks

Dr. Gray.

Sent Engelmann.

Missouri Botanical Garden
0 1 2 3 4 5 6 7 8 9 10 cm
copyright reserved

Rec'd Jan 23d
Ans March 3d

Boston Mass

Dec 30th 1846

Dear Doct.

Since I parted with you in the spring of 1844 I have had no opportunity of observing the "Polar Plant" or *Silphium laciniatum* × On the prairies of South western Texas from Corpus Christi to Matamoras I saw no traces of it..

I am desirous to know if you have had any opportunity to observe or experiment with it.... I mentioned to you the result of my last observations at Jefferson Barracks that in the blossoming plant, when the leaves put out from the stalk, they also possess the property of polarity.. But in this case they assume a medium position between that of north & south & a symmetrical position in reference to the stalk × ... It was in the plant on its first year growth on single leaf putting out from the ground, that the polarity became well known to prairie people, hunters trappers &c —

Will you do me the favor to write me ... I am stationed here now, after much wandering since I saw you -

Very truly & respectfully
Your friend
B. Alvord
Capt. U. S. Army

George. Engelmann M.D.
St. Louis
Mo.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI
BOTANICAL
GARDEN

Recd June 27
Ans Nov 5

Fort Gratiot Michigan
19th June 1849

My dear Doct

I heard from you last in March '47 when I was at Boston. You then were kind enough to say that you would let me know of the result of any further observations on the "Silphium laciniatum" or Polar plant. I told you that I was particular desirous of knowing what you noticed of the leaves of the flowering plant, or 2d years growth & subsequent. -- I am satisfied that the vertical leaf of the young plant during June, July & perhaps August, when the plant thrives, does point north and south... I was led to believe that the leaves of the flowering plant also took a medium position between that of north & south & one symmetrical around the stalk ..... If you have had any further opportunities of observation will you please let me know the result -- I am permanently stationed here & have been since November last.

I have not yet seen the plant in this state, but believe it is found on prairies in southern portion of the State -... Some of my friends who went across the prairies to California & Santa Fe say that they had renewed evidence of its polarity, & also add which is interesting that they could not find it west of the rich prairies within say

3 or 4 00 miles of Missouri

I remain very truly yours
B. Alvord
Brt. Major U.S.A.

George Engelmann M.D.
St Louis
Mo

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Ed. Alard

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Rec'd Cambridge Sept 20
Ans

WAR DEPARTMENT.

Paymaster General's Office,

Washington, 10 Sept 1879

My dear Sir

I have had the misfortune to lose your interesting reply to my note concerning the Compass Plants, other than Silphium laciniatum, found by you.

Please be kind enough to give me the name of the one you wrote before, & say if you find it on the prairies.

In truth your note of Natural Healing was lost in an "Encyclopedia" in which I was about to study your plant; — and it is often long before, not found! —

With high respect
Yours faithfully
B. F. Alvord

Dr. Geo. Engelmann
St Louis
Mo.

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Rec — Aug 23
Ans — 23

Cambridge
Skaneateles N.Y.
Aug. 15th 1879

My dear Doctor

In the Vol of the Proceedings of the "Am Ass'n for Advancement of Science" at St Louis p. 338 I see that you read a paper "On the Compass Plants" —

As it is not printed will you be good enough to inform me where it appears if published, or to be published, — But if not, will you give me (as concisely or as fully as you find convenient) the substance of it —

You use the word "Plants", plural, so I suppose you have found other Compass Plants than the "Silphium Laciniatum" — I always believed they ought to be found, as the property is due to the action of light — And an correspondent in Illinois in 1843 wrote me that he had found one, but did not say what —

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

I shall attend the
meeting of the Am. Ass. in
Saratoga on the 27th Aug.
I hope I will meet you there —
It would give me much pleasure
Please reply to
care of Judge William Marvin
Skaneateles N.Y.
I am visiting him. But my station
is now Washington, Paymaster General
of the Army. I return there 11th Sept.
With high respect
faithfully Yours
B F Alvord

Dr. Geo. Engelmann
St Louis
Mo.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Ans Feb 28
Ans — — 1207(Q) R.

Washington D.C.
Feb 26 1882

Dear Doct.

In number of "American Journal of Science" for Feb 1882, I notice an extract from a German Journal by Prof. E. Stahl claiming to have first noticed the meridional position of the leaves of the "Lactuca Scariola".

How is this? — I have never had proceeded him — you announced it in August 1878 at St Louis at meeting of "Am Ass for Adv of Science".

I have also noticed your allusion to ~~the~~ at — your article in "The Gardeners' Chronicle" for Feb 26 1881 —

I was pleased to see in "Linnean Botanical Magazine" for January 1881, an article by Sir Joseph D. Hooker quoting Dr. Asa Gray doing full justice to me —

It was a little hard to see in "Johnston's Cyclopedia" under head of "Compass plant" no allusion to my name.

Yours faithfully
B. F. Atwood

Dr. Geo Engelmann
St Louis

I was about to explain that I had copied from a German Journal

MISSOURI B...
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN