Hastings, Sept. 30th, 1850

Sirs: Handshakes &c.

Commissioners of the Boundary Survey,

[Signature]

Having been

appointed by you, as the head of the State of Iowa & Nebraska, orally, to locate & survey the boundary between those States, under the decree of the Supreme Court of the U.S. we met, according to your appointment, on the 25th of April last, near the supposed site of the old S. W. Corner, for the purpose of commencing operations in the field.

We proceeded to search for the old corner, which was to be the basis of our future operations. Having a careful copy of Sullivan's description from the Surveyor General's Office at St. Louis, we knew that the corner had been originally located in timber, and designated by two cotton trees. Added to this was the topography of the locality, as indicated in the survey, and especially by the reference in which Sullivan's work lies west of the Pecos river, near it being, we were able to determine the locality of the corner approximately, and an inspection of the ground satisfied us that every evidence of its exact position had long since disappeared.

From the face that annually spread over the prairie had destroyed the cotton, thus every trace of both lines was gone.

This point, known provisionally as the "old S.W. corner," was the termination of the line surveyed by Sullivan in 1816 from the mouth of the Kansas river north one hundred miles, & was the point at which he turned east in meeting to the Des Moines river, & miles being measured north from the Kansas, I east corner running again at the corner.

Having no direct evidence of the exact site of the reputed point, it became necessary to find distinctive points in the two lines as near the corner as possible. Proceeding the lines severally from such points, their intersection would be the point & the assumed
the assumed locality of the 99° mile course on the eighth line we found a cleared tree 1 a thump, which corresponded in course, distance, & direction with the suicidal trees 5 that course; 1 casting into the tree we knew that we supposed 8 be the remains of an old block upon which was preserved a post apparently of the blue flue. This supposition was confirmed by measuring with two miles & a point which we found 8 be Sullivan's 99° mile course from our cutting line which was properly sound. The marking upon lines there were underneath the back were plain & visible.

On the 99° line we found the cutting line to the 5° mile course. The overgrown which the marks had been inserted were danger, but the northern impression upon the new growth which covered the old block, which was cut out in a solid block.

Belonging the heis sails ears from the points thus determined, the situation was assumed as the ignored course, but that point we planted the monument specified in the course. My measurements made from the surveying line we found the course to be north west square of action to Wolf Ship by north. Today 38 feet. The exact position in reference to these lines can be seen in the diagram printed at the side note or

The latitude of the course, determined by a series of observations taken on the ground, we found to be 40° 34’ 40” north. While employed upon these observations, we were delayed by unfavourable weather, & it was not till the 15th of May that we were in readiness to commence the survey of the west line from the course to the N.W. corner in readiness.

This portion of the survey was required to be a parallel of latitude, and

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But’s solar compass, the tilt of which requires the longitude of the plane. But’s solar compass, the tilt of which requires the longitude of the plane

The instrument used being an adjusted one, was used for this purpose. The instrument used being an adjusted one, was used for this purpose.

The principles upon which this line was done involved a mathematical in its adjustment. To ensure accuracy in the work a telescope was attached-in its adjustment. To ensure accuracy in the work a telescope was attached.
prolonged in the plane of the plane vertical projected through its beginning.

The deviation from the instrument stationed at the beginning of a side is in the plane of the plane vertical projected through that point. It that deviation was continued through the side by means of fire & lack right. At the end of the side, an offset north was made to compensate for the offset of the earth. This offset, if it will be from the noth, is by 1,855 inches for 1 mile. To continue 100 fire numbers at the end of each side, the proper distance earth, of a near direction from a continued as before the perpendicular projected through the initial point was continued throughout the line. However, in instances known as the movements when the action of the prairie subdues it, it continues the same direction through several miles, instead of offsetting at the end of each. It will be from the earth that the offsets increase as the length of the distance, being for one mile, 6,895 inches; for two miles, four times that distance &c. This it appears, that the offsets rapidly increase with the distance &c. so that by continuing the direction of the plane vertical from the Cape to the township on the Railroad near, the southerly would have been over 200 feet.

At the western terminus of the line, the observations for latitude were repeated. Having established that point, we returned to the N.W. corner, it commenced returning Sullivan's last line on the 19th of August.

It is thirty-four years since this line was run, very vestige of the grounds, it facts established in the prairie has disappeared. Much of the country through which it passes, consists of brushy bosons, or high rolling prairies, dotted with detached groves, or woods with a thin growth of dwarf timber. Much of this description of timber has been destroyed by fire, forming in some instances prairies. To others brushy bosons constitute of thin, while in some places an entirely new growth of young timber, particularly hickory, has opened up. In all such cases the extent times both months mentioned in Sullivan's field notes were gone, it then occurred that on frequently seen several miles, without finding any traces of the line.

But in heavy bodies of timber as difficulty was experienced in discovering evidence of the precise location of the line, not only by horses, but by line of degrees, many of which are found at the breaks in post-prevention.
The general topography of the Country, I especially the meandering of the streams, greatly facilitates us, in following the line of a true ancient plan confirmed by the old Notes, calculated to establish it with sufficient authority.

In the absence of any traces of the line between two known points, distant from each other more than one mile, we assumed the line to be straight between such points. I established our posts accordingly. This was done by tracing a new line from the last point Ozena, in a course as near that pursued by Sullivan as we could determine, until another point was found the connecting back. No certain known in toma of these contours line in the field notes, which clot B the true line only.

We were satisfied ourselves that the line over Sullivan was not only not cut and bush, but that it was not straight. That course of writing should have been made in the old line, not to have been requisite from the fact that Sullivan can the whole line with one variation of the whole; the variation of the whole was too great. This would account for the fact that the writing becomes as he projected said. But there is great irregularity in the line, for which it is difficult to find a cause. Sudden elevations, surmounting to form one to three degrees, frequently occur, if it can be happen that any two

Conductions write pursue the same direction.

An opinion of the line between the Gret & 1847 mile was made in the year 1845. I found the surveying lines in that part of the line above.

In other places the broken known in identifying Sullivan's line, it is necessary to refer the survey in the notes.

Accompanying this report on the field notes 1 mile of the boundary. The former of which are insufficient explained by the note prepared thereon. On the east line the 10 mile monuments were deemed sufficient. On the east line each post on established marked & wired as shown in the field notes.
Trend to perceive that the measurement of this line is very
2,000 feet which by 16 3/4 chains, is that this
area, although gradual, is not regular. Some portions of the old
line are very nearly with our measurement, while others differ widely.

The greatest difference is found in eastern Florida bound.
For the convenience of estimating distances, I find that the length of the
line might be divided by the mile posts they were established
by our measurement, taking care in every instance to divide the distance
of the posts set by us, from the corresponding course on the old
line wherever found. The different courses being extended from
our known points to another, the line must not attach at those points,
being made to pass through thers, but only its length
connected.

The length of the entire line is 214 miles + 52 3/4 chains, containing
40° 1' 7.29 of longitude. The length of a degree of
longitude is calculated in 00° 00' 0.51 and the longitude of
any point of the line being known that of any other
point can be easily deduced.

The map is plotted from the field notes on a scale
of half an inch to the mile, it is intended to represent
only the general features in the topography of the
line. The labor upon which it is made is much too
small to show the angles in the east line, to do
which would require it to be extended to a length that
would render it inconvenient. All the purposes for
which it can be used, will be attained by its present
form.


W. H. Story
Surveyor on the part of Gov.

R. Walker

in the part of