

An Interesting Letter On the Drainage Question

Salem, Neb., April 28, 1905.—
The Tribune Publishing Co.,
Falls City, Neb.—Gentlemen:
After having discussed the en-
closed letter of John W. Towle
at considerable length in a letter
directed to me, it has occurred to
me that possibly the same might
not be uninteresting to your read-
ers, and I submit the same to you
for publications for the two fol-
lowing reasons: First, many are
asking questions along the same
line indicated by Mr. Towle's
letters, and second, you are more
familiar with my hand writing
than John Towle and the other
fellows, that is all. Yours truly
R. E. Grinstead.

Towle's Letter.

Omaha, Neb., April 27, 1905.—
Mr. R. E. Grinstead, Salem, Neb.,
—Dear Sir:—As you know, I am
very much interested in that
drainage matter. It is my
opinion, as I have written to my
father several times, that it will
be necessary to run one ditch
from the North Fork straight
down the north bottom through
the low place until you get about
to Pearson's Point, before you
will have to run back into the
channel. The waters of the
old channel of the river should
then be straightened, so as to
take the waters of the South
Fork; it is possible that you will
find it advantageous to leave the
old channel at or near Pearson's
Point, so as to maintain at all
times at least two channels down
the valley.

I also very much favor the idea
that when this work is done it
should be done right, that is, dig
it wide enough and deep enough
to do the business from the start.
There would be enough crops
wasted waiting for this channel
to cut itself out, to pay for the
extra digging in the first place.
I would be pleased, indeed, to
have a long letter from you tell-
ing me how you are getting along
with your work and what you
think is the best way to handle
the matter.

I am also anxious that a pet-
ition be drawn up as soon as pos-
sible and a meeting had, with the
idea of letting an early contract
and starting the work. Respect-
fully yours John W. Towle.

Grinstead's Reply.

Salem, Neb., April 28, 1905.—
Mr. John Towle, Omaha, Neb.—
Dear Sir:—Replying to your fav-
or of April 27, I will say that
we are hurrying along as rapidly
as possible. We must get into
District Court, and must be care-
ful that no mistakes are made.
We must file a petition, stating
the names of all resident land
owners who are willing and also

those who are unwilling, to join
in the matter, and also those, if
any there be, whose names are
unknown who will be benefited,
and a full description of all the
lands that will be benefited there-
by. It is also necessary to file a
map of the stream and its sinuosi-
ties, and showing a contour
line of the drainage district. In
order to do this, it is necessary
to have the meanders of the
North Fork above Salem, and
South Fork above the mouth of
Honey Creek; as you know these
meanderings had never been
made. This has recently been
done, and a proper map of the
same is being prepared. Our
county map makers originally
guessed at the topography and
had it all wrong, excepting as to
the places where the section lines
crossed the streams. Each map
maker reproduced the errors of
his predecessor. The other parts
of the maps are approximately
correct, and may be reproduced.

This is being done now. We
shall make it a point very soon
to canvass the contemplated
drainage district for the neces-
sary statistics with which to pro-
perly place us before the court.
Don't think for a minute that
this is a little Holiday job. I
agree with you most cordially in
your suggestion that we should do
the right work.

I know that you and I, if we
could meet and discuss all the
features of this drainage propo-
sition, would agree. In order to
do so, however, I perceive that
some of your present opinions
might need a little modification,
but not very much. In the main
your ideas are right; there should
evidently be a new channel made
for the North Fork surface water
and minor tributary streams com-
ing in from the north. This
minor channel should come into
the Nemaha one mile below the
the depot at Salem.

This should not be what has
been called an "overflow ditch"
for the Nemaha. Both North
and South Fork, above and below
the junction at Salem, should
have the short crooks all taken
out and made approximately
straight, excepting only that the
long bends that the river will
properly make, and which it
makes now, when this is done
should be maintained as the one
essential and all important fea-
ture of this, or any other drainage
problem in which the stream has
the excessive fall of the Nemaha
river. This of itself, when prop-
erly done, will place the flood
line down not less than six feet
at any point in the valley. In
many places it will be lowered

ten feet, by means of the surface
water ditch, of which you speak,
which should start again just be-
low the Boyd school house above
the township line and not very
far south of the Burlington rail-
road and it should continue in
the direction of Pearson's point,
emptying into the main channel
somewhere in that vicinity, as
you suggest. These surface
channels should continue at vari-
ous places, properly located, down
the valley. They should be pre-
vented from becoming overflow
ditches.

The Nemaha, with the im-
provements suggested, would
never need an overflow ditch.
The lower laying lands, however,
next to the uplands along the
line of their conjunction with
each other are attended with a
series of anticlines and sinclines,
in stratified rock and clay forma-
tions, so that we see the dry
spots and wet places all along
that line alternating with each
other. The smaller ditch which
we are discussing, not only in
the place you suggest, but
throughout the entire valley to
the mouth of the Nemaha, is the
one indispensable feature of our
proposed drainage improvements.
In making this work there should
never be a lateral ditch running
into the main channel, excepting
as you have indicated; all lateral
ditches should be in the direction
of the final destiny of the water
carried, and all ditches or tribu-
taries not running that way
should be made to do so, if neces-
sary, by levying. The artificial
ditch running along the township
line south from Geo. Coon's into
the Nemaha above the bridge,
should not be there. It should
be levied over at its mouth and
the water carried by it should go
into the ditch formerly men-
tioned and enter into the Nemaha
at or near Pearson's point, to-
gether with all other surface
water collected along that route.
These smaller ditches need not
be made at first to exceed five or
six feet in depth.

Now, as to the size that any
ditch should be made, that de-
pends very materially on the fall
per mile a given stream may
have. Mr. C. G. Elliot, expert
engineer for Mr. Wilson, secre-
tary of agriculture at Washing-
ton, D. C., was here last fall and
looked our situation over. He
put in several days with us, and
was very enthusiastic over our
prospects, saying that he never
saw a stream where drainage was
at all practical that had a more
favorable gradient for good re-
sults than the Nemaha river.
Mr. Elliott has in his work al-
ways had either a state or Uncle
Sam's treasury behind him, and
therefore counts nothing for ero-
sion, but believes in making the
excavations sufficiently large at
the start to take care of all prob-

ably flood waters. Seth Dean, of
Iowa, who is another engineer of
national reputation also, some-
what takes issue with Mr. Elliot
on our drainage proposition and
would, in the case of the Ne-
maha river, make excavations
costing about one-fourth as much
as those recommended by Mr.
Elliott, saying that by erosion, in
seven years the new channel
would be grown and the old one
which is to be left open at first,
will be filled up; and that during
that time the new channel to-
gether with the old one will prob-
ably take care of all reasonable
flood waters, and that the ex-
traordinary would happen if a
crop would be lost.

If I can know in advance of
the time when you will be in
Falls City, I should be very much
pleased to meet you there and
discuss these matters more fully
with you. I am, very truly
yours, R. E. GRINSTEAD.

Missouri Pacific Railway Time Table, Falls City, Neb.

NORTH	
No. 51 Omaha and Lincoln	
Express	A 2:25 a m
No. 53 Omaha and Lincoln	
passenger	A 2:00 p m
No. 233 Local Freight, Au- burn	A 1:00 p m
SOUTH	
No. 52 Kansas City and St.	
Louis and Denver	A 3:10 a m
No. 58 Kansas City and St.	
Louis and Denver	A 1:40 p m
No. 232 Local, Atchison..	10:30 a m
No. 220 Stock Freight, Hi- awatha	A 9:20 p m
A. Daily. B. Daily except Sunday.	
J. B. VARNER, Agent.	

NEW GOODS

New Goods at Wilson's

IN FANCY
CHINA DECORATED
DINNER WARE AND
GLASSWARE : : :

See our stock in these
lines, the finest in the
city. Special attention
given to

GROCERY and FLOUR

and all Goods promptly
delivered at : : :

C. M. WILSON

REFRACTIONIST
R.L. Baumont, M. D.,
Sixth & Felix, St. Joseph
Formerly eye and ear special-
ist now limited practice to
Eye Glasses