Rectangular System

IN

Mineral Surveying
The law as it now exists for taking up mining claims allows the miner to locate his claim in any irregular shape he sees fit, provided the claim does not exceed six hundred feet in width by fifteen hundred feet in length and that the end lines be parallel.

That law we believe very defective and liable to serious objections. That it should be so amended as to compel the miner to locate his claim in rectangular shape is the object of this thesis to show.

I have reference here to full claims. Fractions would occur but even in those the number of corners and corners would be less.

The old system of dividing
The public domain in any manner to suit the whimsical
notions of the settler was considered very improper after
the adoption of the present rectangular system but not
more so than would the present mining system if the law
was changed compelling the miner to locate his claim
in rectangular form

I shall endeavor to show that not only the locator
but the government, the purchaser and in short all
interested would be benefited by the change.

The question might arise why does
not the miner so locate his claim if it is to his
advantage and the advantage of all interested,
but the same question could be asked why did
not men make their farms rectangular before the
adoption of the present rectangular system of
dividing up the public domain

Under the old system of public
Surveying we find men locating their farms in every conceivable shape and form as in fig.

And as litigation concerning the boundaries is always in proportion to the number of courses and corners it follows that under the old system there would be more litigation. And the surveying and platting would cost the government more.

Now in fig. A took his farm to be bounded by a certain creek and ridge and to take in a certain strip of timber. B. took his farm accordingly. C. took his farm joining A. and B. leaving a small fraction out to the creek to be taken by D. in after years when land became more valuable. The roads between A, B. and C must be long and crooked or else more land taken for road purpose from A or B. Than is desirable under the present rectangular.
System section lines are taken for roads, see Fig. 2.
The roads are straight and no injustice done to any party.
The courses and corners for every farm are few, and the course of the claim is quickly and easily determined and described with but few words.

To add more is unnecessary. The beauty and utility of the present rectangular system is evident at first sight.

And I cannot see why our legislators should have made the grievous blunder they have in the present mining law of allowing the miner to locate his claim as he does at the present time in any conceivable shape. Fig. 3, which is drawn to scale from actual surveys made by myself of mining claims, will show somewhat the irregular shapes in which miners take their claims.

When asked the question, do you think you lead runs as crooked as your side...
Ida Gray Mining District
Lawrence Co Dak T.
Scale 400 ft to the inch
Some would indicate the answer by the minor mine times out of ten is no. I think the lead runs straight or I believe the ore body to lay in a flat formation. Then what induced you to lay off your claim so crooked? Why did you not make your side lines straight and parallel?

John took no claim thus and I took mine to join his as I wanted to be as close to the discovery as possible and allow as fraction between us. Sometimes several claims are taken on each side of discovery with side lines corresponding as shown in Fig. 8. But why did John locate his claim so ill-shapped to take in a supposed spur of the lead and have it included in the same location thereby obviating the necessity of taking it as a new claim with the additional cost of recording and representation work. Or the lay of the ground would thus be.
More favorable for starting a tunnel and various other similar reasons are assigned.
But the assumed spur of the ledge did not extend as far as anticipated and the tunnel could have been made in another place with very little additional cost and John now thinks he was foolish in taking his claim thus. For he now has only eight acres instead of ten and one third acres. The local law in this territory and some others limit a mining claim to three hundred feet in width by fifteen hundred feet in length which makes the claim when taken rectangular contain about ten and one third acre. He had supposed when he located his claim from the surface indications and the rich ore he had found cropping out that he was body lay in a valuable lead running in a certain direction and now after months of digging and prospecting he has come to the same conclusion.
That those who located on each side of him did (?)
that the area body lies in a flat formation and his claim
is now worth only eight tenths of what it would have
been had he been compelled to locate rectangular.

It costs the government more
time and money to make out the field notes and plots
Dobs he where the claims are located in irregular stripes
as in Fig 8 become more work, words, and marks
are necessary to fit and describe the locus of a claim
And as litigation in regard to the locus
of a claim is in direct proportion to the number
of courses and corners it follows there is more litigation

The prospector and locator
of a claim as a general rule sells his claim to
a company or corporation who have the capital
for putting up the necessary machinery for treating
The ore. Several adjoining claims being purchased
By the same company the law compels them to place on each claim every year one hundred dollars worth of work until they shall patent the same, and they are compelled to place five hundred dollars worth of work on each claim before they can procure a patent, and it is the same whether the claim contain six acres or ten acres. The fees at the Surveyor General's office at the Register and Recorder office, and the fees for publication are the same whether the claim contain six or ten acres. The Deputy Surveyor charges according to the number of corners and corners which are usually more on the smaller claim which was not filled on account of the irregular shape in which it was taken.

The cost of procuring a patent from government after placing five hundred dollars worth of work on a mining claim is usually about two hundred dollars.
Whether the claim contains six or ten acres
A company buying five claims that average eight acres to
The claim should have had that land included in four
Claims under the rectangular system and thereby saved
The needless expenditure of five hundred dollars assessment
work and two hundred dollars procuring a patent
The clarks in the different departments blame
The miner for locating his claim in such a way as to
cause so much needless work
The capitalists blame the miner for the extra
Expense he is putting to
And the miner frequently blames himself for having
been so foolish as to locate his claim in the irregular
shape he has under speculation hurriedly done
About one half of the claims I have
Surveyed have been located rectangular as shown in
fig. 4 and had the legislators who framed
Fig 4

Mammoth No. 1 4 Lode

Mammoth No. 2 4 Lode

O. B. Faction 4 Lode

Minnesota 4 Lode

Rawhines Mining District Dak. T

Scale 400 ft. to the inch
The mining laws, our engineers or Dept. Mine Surveys of the miner would have been compelled to locate all their claims rectangular as far as possible and we should have had the rectangular system in mineral surveying in all its beauty and utility.

We admit that in some few cases miners have bettered their claims by taking them irregular but believe that where one has been bettered thereby a donor have been injured.

I think I have clearly shown in the above that the present law is very defective and should be changed so as to compel the miner to locate his claim rectangular and most of the miners with whom I have conversed who have given the subject careful attention agree with me.

Alphonso S. Bates
U.S. Dept. Minl. Surveyor