

copper, zinc and iron. As iron is cheaper than copper it seems probable that an additional quantity in the brass has made it more magnetic than it was formerly. Every person who wishes to purchase a compass should know how to discover this fault, or he may throw away his money for an article worse than nothing. Take out the needle and suspend it upon a pin stuck into a board. When it ceases to vibrate, bring, first one, and then the other end of the bars of the compass near it; if they attract it, the compass should be condemned. If our hardware merchants would always, when ordering compasses, stipulate that they should be free from magnetism, and when they arrived, immediately try them, and refuse either to accept, or sell those that were made of magnetic brass, we should in time get rid of these nuisances.] The Surveyor measures with a chain 4 rods in length, divided into a hundred links. A square chain therefore, or piece of ground four rods square, contains 16 rods, exactly the tenth part of an acre; consequently when chains are multiplied by chains, if the right hand figure is struck off, the remainder will be acres; and as links are hundredths of chains, they are with equal ease reduced to other measures by any person acquainted with decimal arithmetic. The Surveyor most frequently works with a half chain on rough land, but always marks the true number of full chains on his plan. It is customary when five chains are measured to make a mark upon paper, a knot on a leather string, or a notch on a stick, called a tally, and it has sometimes happened that a tally has been lost, or marked twice by mistake.

We have thus hastily thrown together the principal causes of the irregularity of the division lines of land. A very considerable portion of the large lots of land will be found to differ more or less from the recorded description. Neither the courses, nor the lengths of the lines will be found exactly what they should have been: a few lots will be found too small, a much greater number too large, and very rarely indeed, an instance of intentional fraud may be met with.

The inference we would draw from these facts is, that the old lines should be preserved if possible. That it would now be most mischievous to re-survey all the lands as they ought to have been at first, being one of those cases to which the ancient quibbling adage that "strict justice is the greatest injustice" would apply. Buildings and fences have been erected, and improvements made, some single acres are now worth fifty times as much as they were originally, and it will besides, be found generally the case, that old lines are more respected than those lately run. "The old line" and "the true line," are synonymous terms in the opinions of most people. Even honest men show a peculiar aversion to giving up land which they have long accounted their own. We hardly recollect once in a month that some time or other we shall die, and feel remarkably attached to a kind of property which appears to be imperishable. Every person feels pleasure in thinking he is standing on his own land, however small its value, and this feeling is connected with a love for the country in which his land lies, and a wish to promote its prosperity. The titles to landed property should be secure, and not liable to be easily shaken, for on their security depends in some measure, the security of the country.

It frequently happens that a person who has just purchased a lot of land which has most of the marks made at the time of the original survey obliterated, will send for a Surveyor, show him the beginning boundary, and desire him to run it out exactly according to the description in the grant. Reasonable as this demand appears to be, the Surveyor in many cases ought not to comply with it. He should first ascertain the date of the grant, and, if possible, what is of more consequence, the time when the old lines were

that he may know what to allow for increase of variation; he should inquire if any part of the old line can be found besides the beginning boundary, and if that is unknown, if the lines of any adjoining lots, which were run at the same time, can be found, that he may try their course. Should there be a known boundary at each end of the line, or a known mark between them upon the line, he should make his line agree with them, although differing somewhat from the recorded course. This may be effected by running a line upon what is supposed to be the right course from one boundary to the other, or to the known mark, without blazing; then by measuring from the termination of this line to the marked boundary the course may be readily calculated, and the line run again and blazed. Upon magnetic ground where it is a slow and tedious process to run correct lines by the compass, we have practised the following method, which will be best explained by an example. A lot a mile long had the ancient boundaries preserved at each end, but no trace of the line between them could be found, the original growth of timber having been all destroyed and replaced by a young growth. It was known the boundary in the rear was far from where it ought to have been placed (the consequence of the local magnetism having been overlooked by the Surveyor who laid out the lot) but it could not be altered, because there was abundant proof that it had been held as the boundary for more than fifty years. The line was run westerly without blazing, (leaving a small stake at the end of every two chains,) and the last stake at the termination of the line was found to be two chains northward from the old boundary. There were of course 40 stakes upon the line. The whole error was two chains or 200 links, which divided by 40, gives 5 as the error at each stake. We then returned, removing the stakes into the line and blazing between them, the last stake being moved southerly to the old boundary the whole 200 link, the next 195, then 190, 185, &c. back to the first, which was moved only five links.

In some places two lines will be found running from the same boundary but diverging from each other, and the Surveyor will be puzzled with witnesses for each who will be equally positive that their favorite line is the oldest. In this and similar cases the variation of the compass will generally be found the most trustworthy evidence, for the memory of witnesses concerning events that happened forty years ago will often be treacherous. We have known a long line in dispute, which certainly did not agree with the original plan, or was it possible in that place to run one that should, because the plan differed greatly from the real form of the land and adjoining water. One party maintained that this line was run for the first time about 25 years ago when the disputes commenced, and that it had never been acknowledged as the division line. The other asserted that at that time the Surveyor only retraced the old line at a time when part of the old marked trees were to be seen. There were several witnesses in favor of each party, who were equally positive. But upon retracing this line we found the variation had increased three degrees since it was first run, which must therefore have been about 50 years ago.

We would advise all persons to be very cautious of introducing disputes concerning lines of land into courts of law; they will rarely be decided wrong, because that very often the evidence necessary to make the case intelligible will not be brought forward, and often the decision of the court will only serve to lay a foundation for another. We have known a case in which the court decided between two boundaries, very fairly according to the evidence, but we have no doubt that the decision would have been in favor of the other had all the proper evidence been brought forward, for the plan fixed the boundary near a remarkable bend of the adjoining