

and operate a grist mill on this river, and fixes the position of said mill at a point just below the point at which the old boundary line strikes the stream. The fact alone of the record of such a mill in the Gen'l Statutes of the State, affirmed by surveys in 1829, clearly proves that such a mill was operated on the Emonee river by a man of that name, about that date. Such being the case it is highly probable that in the construction and operation of the mill upon land belonging to other parties, the right was conveyed by lease, by special privileges, or by part ownership in the mill by parties holding the land, the mill still being named after the man who built and operated it. Such cases are not uncommon all over the State, and several well known instances can be named in this section at the present date.

In the close and accurate survey of this line from the No. Ca. State line to the Emonee river, there was found at two or three points slight deflections to the west. These deflections though so slight as hardly to mar the general course, were due probably to magnetic disturbances or possibly to the crude instruments in use at that time. It is a well known fact that the old Indian boundary line, as well as the resurvey by Geo. Salmon in 1829, was run by magnetic bearing, or in other words, by the needle of an ordinary surveyor's compass, as the finer instruments of the present day made to guard against any magnetic deflections were not in use at that time.

The variations of the magnetic needle are shown in three distinct forms: namely; the irregular, the diurnal, and the annual. The irregular variation occurs at different and irregular periods, and the needle is often forced several degrees from the true bearing. No cause has been found for this variation. The diurnal variation occurs daily. The needle commences its deflection about 8 o'clock in the morning, reaches the maximum about 10 o'clock, then returns to its normal position in the evening. It sometimes reaches a deflection of 30 minutes. The annual variation has