

Line with the Transit Instrument. With a Copy of the Surveyors Minutes to the time they left off the 30th of August last & a Copy of the Minutes of the Commissioners proceedings at their two last Meetings I shall now send you a neat Draft or Platt made out by our Surveyors to shew how the Lines last run cross several of our Rivers, but it was not possible for them in so small a Draft to shew how the Offsets from the two Lines last run interlock or over reach each others Extremities. You will see by the Instructions given by the Commissioners to Mess^{rs} Mason & Dixon that those Gentlemen are now employed in taking Observations at Philadelphia in order to ascertain the true Latitude of the southernmost part of that City which probably they will do by the middle of January & I suppose it will be a month longer before they will ascertain to their satisfaction the true Latitude of the Point where they are to make their next Observations. I perceive by the Instructions that in directing the fifteen miles South to be actually measured from the point last mentioned the Commissioners have varied from the Hints, but it seems Mess^{rs} Mason & Dixon were of Opinion that as a Degree was never yet measured in this Latitude it would be adviseable to measure the said fifteen miles, & when they have done so the Commissioners are to meet in order to judge of their Work & to give them Instructions relative to their running the West Line, which it seems after all that has been said of the Transit Instrument cannot be thereby truly or precisely described there being no Movement that Mess^{rs} Mason & Dixon could shew or the Commissioners discover to bring & keep its Telescope in the plane of a Parallel of Latitude: It was however delivered by our Commissioners to the two Gentlemen to be used as they should see occasion, tho they seemed to think a less complex & more portable Transit Instrument which they brought with them from M^r Penn would be of more general use to them in running the several Lines required. The Transit Instrument not being contrived as I have already intimated so as to describe a Parallel of Latitude it will perhaps be a question at our next meeting whether in running the West Line they shall set off at Right Angles with the Meridian in which Case they would always incline to the Southward since the Line described would be the Arch of a Great Circle, or whether they shall set off at such an Angle Northward with the true Parallel as will after running a certain Distance bring them again into the true Parallel, the Difference is that in the former Case the Visto will be for the most part if not altogether within this Province for which Reason we would prefer the other Method, & in the other Case it will be always except just at the