

which might be extended to 36 degrees. At this degree we should have an augmentation of heat, thirty-six times greater than that of the first, eighteen times greater than that of the second, twelve times greater than that of the third, nine times greater than that of the fourth, and so on; this augmentation of thirty-six of heat above that of ice would be sufficient to melt lead; and there is every appearance to think that mercury, which volatilizes by a much less heat, would by its vapour break the thermometer. We cannot therefore, at most, extend the division farther than twelve, and perhaps not farther than nine degrees, if mercury be used for these thermometers, and by these means we shall have only nine degrees of the augmentation of heat. This is one of the reasons which induced Newton to make use of linseed oil instead of quicksilver; and, in fact, by making use of this liquor, we can extend the division not only to twelve degrees, but as far as to make this oil boil. I do not propose spirits of wine, because that liquor decomposes in a very short time, and cannot be used for experiments of a strong heat.\*

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\* Many travellers have told and written to me, that Reaumur's thermometers of spirit of wine, became quite useless to them, because this liquid lost its colour, and became charged with a sort of mud in a very short time.