

(p. 34) it may be said that the data are not sufficient to draw conclusions of a very definitive character, beyond the fact that the method gives results of very satisfactory accuracy. The azimuth constants for the evening (two in number) and the collimation constant have been derived from the fifteen observations themselves. Their values are stated to be the "most probable" ones. If they have been obtained by a least-square reduction in which the clock-rate was ignored, it is not remarkable that the final residuals show no evidence of a clock-rate (p. 35).

In conclusion, we may accord to the authors of this book the credit of having invented and made public a photographic method by which meridian transits may be observed with high accuracy, and with a complete freedom from personal equation. If there is a weak point, it will be found in the determination of the instrumental constants. The many other important purposes for which the photochronograph is very well adapted we shall not touch upon in this place. Some of them have already been described in print, and many others will doubtless shortly come into prominence.

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NOMENCLATURE OF MECHANICS.

BY T. W. WRIGHT, PH.D.

THE nomenclature of mechanics is in a somewhat confused condition. There is some excuse for this because the science is one of the oldest, and at the same time one of the most progressive, as it certainly is the most comprehensive. New terms are being introduced, others are being suggested to take the place of old ones; but the naturally conservative cling to the old, and hence we have a duplication, and in some cases a triplication of names for the same thing. At the threshold we are met by a difficulty. How shall we define mechanics? Originally the science of machines, it is by some defined as the science of matter and motion. By others the term dynamics is applied to the science of matter and motion, and the term mechanics is discarded. The tendency at present seems to be in the direction of the latter method. The science is founded on three principles or laws laid down by Newton. These laws were originally enunciated in Latin, and the number of translations is very great. Here is a source