If the monthly values of the magnetic declination, as given at the bottom of Table I, be corrected for the secular change in the course of the year, they likewise exhibit a slight variation, having the year as the period. This is termed *the annual variation of the magnetic declination.* This is not to be confounded with the *annual change* of the declination, which means the change in one year due to the secular variation. The latter is a *progressive* change, so that the needle at the end of the year does not point the same way as it did at the beginning, while the annual variation is a *cyclical* change, that is, as far as the annual variation is concerned, the needle returns to the same position virtually at the end of the year that it had at the beginning. The next table shows how minute a quantity this annual variation is and that it can be neglected for all practical purposes.

TABLE V.

Annual variation of the magnetic declination at several places in the northern magnetic hemisphere.[1]

[A + sign denotes a deflection of the north end of the magnet to the *eastward*, a — sign, the contrary direction.]

Month.	Los Angeles, Cal. 1882–'89.	Key West, Fla. 1862–'65.	Washington, D. C. 1840–'42. 1867–'68.	Philadelphia, Pa. 1840–'45.	Toronto, Canada. 1845–'51. 1856–'64. 1865–'71.	Dublin, Ireland. 1841–'50.	Kew, England. 1858–'62.
January	+0′.6	—0′.6	+0′.6	—0′.5	0′.0	+0′.4	0′.0
February....	+0.2	—0.6	+0.3	—0.4	+0.2	+1.6	—0.6
March.....	—0.4	+0.1	+0.2	+0.1	+0.1	+1.7	—0.5
April.....	—0.4	+0.3	—0.1	+0.1	0.0	+1.9	0.0
May.....	—0.4	+0.3	—0.4	—0.2	+0.3	+1.3	+0.7
June.....	—0.4	+0.2	—0.1	+0.6	+0.5	0.0	+0.8
July.....	—0.4	+0.3	+0.2	+1.0	+0.4	—1.2	+1.2
August.....	—0.1	+0.8	+0.7	+0.9	0.0	—2.2	+0.3
September..	+0.2	+0.7	—0.4	0.0	—0.4	—2.1	—0.2
October.....	+0.4	—0.5	—0.2	+0.2	—0.6	—1.4	—0.8
November ..	+0.5	—0.5	—0.2	—0.9	—0.4	—0.3	—0.6
December...	+0.6	—0.3	—0.3	—0.7	—0.1	+0.2	—0.7

It is seen that the total range of the annual variation is a very small quantity, about 1′ for the North American stations. The character of the variation appears to be different for each station. This

[1] From Coast and Geodetic Report for 1890, p. 249. The matter contained in Tables III and IV was taken from the same source.