meridian during a given interval of time is generally of greater concern to him than the knowledge of the *absolute* value of the magnetic declination. Unfortunately the problem of proper allowance of change of declination is frequently complicated by other questions, such as, for example, the date of the early survey or the error of the compass used in the original survey; or, again, whether the bearings as recorded are those taken from some previous survey without allowing for secular variation; or, again, whether they are true bearings or magnetic ones. The early land records are frequently faulty in all the details that are absolutely necessary for the proper allowance of the secular change. No rules can, of course, be given for supplying such omissions. The surveyor must be guided entirely by the experience gained in the treatment of analogous cases. My purpose is simply to give tables enabling the surveyor to determine the change in the compass direction between any two years during the eighteenth and nineteenth centuries.

Whether the secular variation is of a strictly periodic character, that is, whether the needle will at some future time return to the very same position from which it started out, has not as yet been definitely settled, for the reason that we do not possess at any one station records of a complete swing of the needle. The researches thus far made would seem to indicate that after the lapse of many centuries the needle may return *approximately* to its original position, but that it ever again reaches the *identical* position does not seem probable.

At a number of stations we possess records of the magnetic declination for over three centuries. The table below will show how the declination has changed at some of these stations during this interval.

Thus at London, for example, we find that the needle pointed east of north during the interval 1540 to 1658, the easterly declination reaching its maximum value of 11° in 1580. About 1658 the needle bore due north, and thereafter westward of due north, the westerly declination reaching its maximum value of 24° 12′ in about 1812. Beginning with 1812, the westerly declination has been steadily diminishing, amounting in 1890 to 17°.57 or 17° 34′. Consequently,