



FIG. 3.—The diurnal variation of the magnetic declination at Washington, D. C., for the years 1888, 1889 and 1890. The curves represent the mean diurnal variation for the year.

westerly extreme position has been reached. At this time the westerly declination will have reached its *highest* value. And now the needle turns once more to the eastward, re-crosses the mean position about sunset and gradually returns with occasional interruptions or reversals approximately to the position it started out from in the morning.

We can follow with our eyes the sun in its apparent motion around the earth and can behold many of the manifold changes ever taking place in our starry firmament, but here is a something in the earth, invisible to us, that we call magnetism, which day by day, year in, year out, passes through *its* cycle of changes — a force powerful enough to bend every bit of magnetized steel out of the regular course and to compel the needle to march in perfect obedience to its will!