

INTERESTING EXPERIMENTS—If a wafer be laid on a surface of polished steel, which is then breathed upon, and if, when the moisture of the breath has evaporated, the wafer be shaken off, we shall find that the whole polished surface is not as it was before, although our senses can detect no difference: for, if we breathe again upon it, the surface will be moist everywhere except on the spot previously sheltered by the wafer, which will now appear as a spectral image on the surface. Again and again we breathe, and the moisture evaporates, but still the spectral wafer re-appears. This experiment succeeds after a lapse of many months, if the metal be carefully put aside where the surface cannot be disturbed. If a sheet of paper on which a key has been laid be exposed for some minutes to the sunshine, and then instantaneously viewed in the dark, the key being removed, a fading spectre of the key will be visible. Let this paper be put aside for many months where nothing can disturb it, and then in darkness be laid on a plate of hot metal, the spectre of the key will again appear. In the case of bodies more highly phosphorescent than paper, the spectres of many different objects which may have been laid on in succession, will, on warming, emerge in their proper order.—*Lewes' Studies in Animal Life.*

SPIRAL TENDENCY OF ORGANIC BODIES.—The most superficial glance reveals a spiral tendency as a general characteristic both of the vegetable and animal creation; but a minute examination traces it in every detail. An essentially spiral construction is manifested from the lowest rudiments of life upwards throughout every organ of the highest and most complex animal. The beautifully spiral form of the branches of many trees, and of the shells which adorn the coast, are striking examples only of a universal law. But the spiral is the direction which a body moving under resistance ever tends to take, as may be well seen by watching a bubble rising in water, or a moderately heavy body sinking through it. They will rise or sink in manifestly spiral curves. Growth under resistance is the chief cause of the spiral form assumed by living things. Parts which grow freely show it well:—the horns of animals, or the roots of seeds when made to germinate in water. The expanding tissue, compressed by its own resisting external coat, weathers itself into spiral curves. A similar result may be attained artificially by winding a thread around a leaf bud on a tree, so as to impede its expansion; it will curve itself into a spiral as it grows. The formation of the heart is an interesting illustration of the law of spiral growth. The organ originates in a mass of pulsating cells, which, gradually becoming hollow, gives the first form of the heart in a straight tube, more or less subdivided, and terminating at each extremity in blood-vessels.—*Cornhill Magazine.*

PENNYROYAL AND PEPPERMINT.—In answer to the query of your correspondent 'Fragaria,' I would say that pennyroyal is not abundant enough in this State, or in the northwest generally, to make its collection an object particularly

as it grows more abundantly in some of the old states. With reference to peppermint, I have no doubt, but that it can be cultivated successfully and with profit. It has been cultivated for many years, and in 1835 its cultivation was first attempted in Michigan. So successful has been here, that for the last twelve years, much oil has been obtained from the peppermint plantations of St. Joseph county, than from all the rest of the United States. The oak-openings are generally speaking well adapted to the growth of the peppermint. The chief difficulty in the way of cultivating it on the prairie, and in certain parts of the north-west, is the fact of the root being winter-killed. Where there is snow upon the ground as in parts of Wisconsin, Minnesota, this difficulty would be removed, provided the season is long enough, but in the central and southern parts of this State, this objection would no doubt be obviated. In the northern part of the State the ground would have been specially selected on account of its warmth. I have seen it grow well in different parts of the north-west in gardens. For further information upon the subject, we are indebted to an excellent paper read before the American Pharmaceutical Association in 1838 on the Peppermint Plantations of Michigan, by Frederick Stearns, of Detroit. J. H. R.—*Illinois Prairie Farmer*

UNADDRESS'D LETTERS.—Collectively speaking persons remember and forget certain things with as much regularity as if memory and attention were the result of wheel work. A very common instance of forgetfulness is presented by persons posting letters without any address upon them. The number of times this act of obliviousness annually happens is known with the greatest precision, inasmuch as such letters are transferred to, and recorded in a bureau especially devoted to the purpose in each post-office. Now, it is found by the post-office returns in England and France, that the number of these unaddressed letters in each country is almost the same every year. In London the number of such letters is about 2,000, being at the rate of six per day. But connected with this is another circumstance equally remarkable. A certain proportion of these letters is found to contain money and other valuable enclosures; and, like the whole number, this portion is also invariable.—*Dr. Lardner.*

GRAIN GOING FORWARD.—The *Express* states that Buffalo has received and handled thus far the present season, the enormous amount of 31,179,815 bushels of wheat, corn, oats, barley, a, rye, and 1,172,107 barrels of flour. Adding the wheat its equivalent of flour, according to the ordinary rule of five bushels to the barrel, the gross grain receipts at that port from the opening of navigation to the first day of December in the year 1860, were 37,040,392 bushels—nearly double the average receipts of the past dozen years, and almost ten million bushels greater than the greatest amount ever before received in any one season.—*Detroit Tribune.*