## Nature Study for February

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## THE HEN'S EGG

1. **Introduction.**—The purpose of this lesson is to combine a nature study lesson with one in agriculture. It is intended particularly as a type lesson for a rural school.

2. Study of the Hen's Egg in the Class.—For this purpose it will be necessary for each pupil to bring to school an egg; let the boys bring theirs raw, some new laid, others two weeks old; each girl should bring one that has been boiled for one-half hour. If the class is small a few eggs supplied will do, but nothing is so good as to have a specimen in the hands of each pupil.

(a) Observations to be made by the pupils.—What are the different colours of the eggs? What are their shapes? Measure the lengths, greatest width; find the weight of half-a-dozen and calculate how many weigh a pound, also how much a dozen weighs. (In the arithmetic class let them calculate how much a pound of eggs is worth at the current rate per dozen). Roll one on a flat surface and notice the direction it takes. Make an elliptical ball of plasticine or putty, roll it and notice its direction. Roll both in a concave vessel the shape of a nest and notice how differently they move. Which shape would make the egg least likely to roll out of the nest? Hence what value has such a shape to the bird? Draw six elliptical figures on a paper and six eggshaped figures as compactly as they can be arranged. Which have the larger spaces between them? What value has the shape for arrangement in the nest while the hen is setting? Examine the surface very carefully with a lens and see whether it has little pores in the shell. Can you suggest a use of these pores to the chick in the egg? Do you see how these pores might have something to do with an egg going bad? How could this be prevented? Place half-a-dozen fresh eggs on a pair of scales and weigh them accurately. Leave them for several days in the school, then weigh again. Have they lost weight? Explain this and show what the pores had to do with it. Carefully peel the shell off the egg beginning at the big end. Did the egg completely fill the shell? At which end was the empty part, or air space, as it is called ? Which had the largest air-space, the egg newly laid or the ones laid two weks ago-Explain the difference by the experiment on weighing performed above.