

## THE STORY OF AN EGG.

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Everyone is familiar with the size and shape of an egg; but very few of us stop to think how wonderfully it is made. We all know that the contents of the egg are enclosed in a shell. This shell appears to be hard and solid, but this is not the case. True, it has much strength; but we find upon examination, that it is full of little holes. These small holes allow the air next to the shell to get into the egg. Thus it will be seen that we should keep the egg in a clean place, away from dirty straw, such as we often see in the nest; also away from strong-smelling substances, such as onions; otherwise, these strong odors, passing through the shell, will affect the taste of the egg more or less.

Next to the shell is a thin tissue. This tissue is made of two layers all over the egg, except at the large end, where they separate, forming a small open space, called the air-space. This air-space increases in size as the egg evaporates or dries. The longer the egg is allowed to remain in the air, the more air will pass through the shell; and each little particle of air carries away with it some of the moisture of the egg, and thus the contents dry up and the air-space increases in size. Sometimes eggs that have been left exposed to the air in a nice clean place for a year, are found to have very little content;

and that which is left is dry and almost hard. These tissues may be pulled off the shell, especially in the case of a hard boiled egg.

Now we come to the white of the eggs, or what is called the albumen. This is said by doctors to be a very good food; but we are particularly interested in its appearance. So let us break an egg in a saucer. Notice that the white on the outside is thin and watery; in a little farther, we see a grey or whitish streak that extends all the way around the yolk, or yellow portion, but does not touch it. You will also notice that at each end of the yolk and extending from this whitish portion is a knotted portion, like a little piece of white string. We wonder what these are for, and observe that they are simply an extended

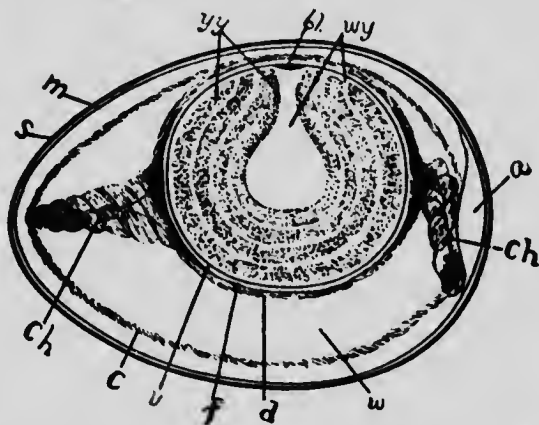


Fig. 86. Diagrammatic section of an unincubated fowl's egg: *bl* germ-spot; *wy*, white yolk, consisting of a central flask-shaped mass, and a number of layers concentrically arranged around it, the outer layer of white yolk lying immediately beneath the vitelline membrane, and connected with the central mass beneath the blastoderm; *yy*, yellow yolk; *v*, vitelline membrane; *f*, layer of more fluid albumen surrounding the yolk; *ch*, chalazae; *a*, air chamber between the two layers of the shell membrane; *m*, shell membranes, where they lie in contact over the greater portion of the egg; *s*, shell; *d*, denser albumen, which extends around the yolk, outside of the internal layer of more fluid albumen; *c*, boundary between the outer and middle portion of the albumen.