

Eggs can only become "bad," when stored beneath the surface of a 10-per-cent. solution of water-glass, from the activity of micro-organisms already within their shells before preservation.

The object of storing crackers and cakes in tightly closed tins is, of course, the exclusion of moisture. Similarly, sugar, tea, and other groceries are kept in tin-lined or earthenware utensils.

Hams, bacon, or smoked meats or fish should be put into cheese cloth or linen bags before being hung in a dry, well-ventilated place.

Apples, lemons, tomatoes, and similar fruits should be wrapped separately in soft paper after wiping, and stored on airy shelves, which may be covered with straw or chaff or sawdust.

The reason for this care, which to some may seem superfluous, lies in the channels by which the germs of decay or the seeds of moulds reach the foodstuffs they destroy.

The two channels of primary importance, and those only to which reference can here be made, are:—

- (a.) The air.
- (b.) Flies.

(a.) THE AIR.

It has already been pointed out that these mischievous atoms of microscopic life, the organisms of decay, are always present in the atmosphere, with the exception of mid-ocean and the summits of very high mountains.

When the air travels fast, they are rushed along in its currents; but so soon as it is still the micro-organisms, with the dust of which they form an ingredient, gradually drop down on to the surrounding surfaces.

If these be moist and the air be warm, the chances are the seeds of decay will begin to grow. They will certainly do so if the substance on which they settle is one on which they can feed.

Now, invisible moisture collects in the "pits" round the eyes or stems of fruit such as apples, pears, or tomatoes; or in any dent in their skins, or in the crevice where two fruit rub shoulders.

*Porous Paper as a Fruit-preservative.*

Soft porous paper wrappings serve a double purpose. They absorb moisture from the air before it reaches the fruit at all, and by covering the fruit they prevent germs or moulds from falling on to its surface.

(b.) FLIES.

In conclusion, a few words must be said about the great importance of the protection of food from flies, which are known to be a fruitful source of disease in food as well as a channel by which the sources of decay menace its soundness and sweetness.

"Fly-spots" consist of the saliva and excrement of flies, as they pass impartially from cow-dung or night-soil to the baby's milk or the family sugar or cake. It is not, therefore, surprising that the fly is now shunned as one of the chief carriers, not only of dirt and decay, but of the infection of typhoid fever, tuberculosis, and other dangerous diseases.

*The Structure of a Fly and its Habits*

adapt it peculiarly for the conveyance of filth, in addition to the micro-organisms which swarm these "fly-spots." The six, many-jointed legs are densely hairy, and each leg terminates in a pair of hooks, with a "glue-pad" attached to each hook. A glance at Fig. (10) will make clear the enormous power possessed by a fly for carrying filth from the unclean to the clean.