## The Bumble Bee

HEREVER there are flowers, you will hear the loud buzzing sound that resembles that of an airplane far above you. The sound is made by the bumble bee.

Unlike the honey bee that you have already studied, the bumble bees are not very thrifty. They do not save enough food for a long cold season. Therefore, many of them die

The mother bee starts a colony in this way. She begins to look for a place where she can build up a new colony. When she has found a suitable place, she begins to make her nest. Usually the place is a hole in a tree or a deserted cave of the rats. She gathers pollen grains and nectar. She takes all these things to her nest. She makes the nectar and pollen grains into honey and bee bread. She piles them on the wall of her new home. After filling her pantry. she lays eggs. After a

time these eggs hatch and become bee grubs or baby bees. These baby bees hurry to the bee bread made by the mother bee. After a time they stop eating and spin a cocoon and begins to sleep. This is the pupal stage. Sometime later the cocoon splits and the bee comes out. The cocoon is then buried in the sides of the nest and these cocoons become the future store rooms of the honey. This is the reason why the nest of the bumblebees is not so well arranged as the honey bees nests. These bees become the workers. They do all the work. The queen no longer goes out, but stays at home and lays eggs only. After a time there will be drones in the colony who fertilize the eggs of the queen.

The workers are the most busy of all the bees. They do plenty of work. They take care of the mother bee. The mother bee is given food every day. They go out to gather food. It is very interesting to watch a worker bee at work. When she goes to a flower, she gathers the pollen grains with her hairy legs. The hair forms a pocket. It is commonly called the "pollen basket." This is the time when she helps us. When she goes from one flower to another she incidentally brushes the pollen-grains of one flower to another. This causes pollination. Without pollination we can not have fruit. Another important work of the worker bee



t work of the worker bee is to take care of the baby bees. She also arranges the home. She strengthens the silken pupa cradles with her wax. making them into rooms for storing honey.

The structure of the bumblebee is very interesting. Its antenna is short but very active. The mouth is well fitted both for biting and for sucking. She has two large compound eyes. In the middle of the compound eyes are three simpole eyes. The wings are four in number and are strong. The front legs are very short. All the legs have hair over them

and each ends in a three jointed foot tipped by a claw. This makes her foot fit for clinging to the flowers when she gathers pollen grains and nectar. The hind legs are very interesting. It has what is called the pollen basket. Bees brush the pollen with their legs and deposit the pollen grains in these baskets.

## NIGHT AND STARS

The night Is God's dark blanket To wrap us all in Our sleep.

The stars Are yellow flowers In God's vast garden— The sky.

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