

horn." With it the bird breaks open the bark of trees in search of insects. The tongue is equally adapted to its peculiar wants. It can be shot out three or four inches beyond the bill and being armed with a sharp point and den-
tated on both sides assists the bird in securing the prey which the beak has discovered beneath the bark. The duck's bill is flat, and in order that the water may be strained off and the food retained, is lined with plates of horn. The snipe and woodcock find their food in marshy or mellow ground, and hence are furnished with long, pointed, sensitive bills, for piercing the surface and reaching and detecting the worms and slugs on which they feed.

2. Take an illustration from the *Insect* world. The peculiar conformation of the cell of the honey-bee, is at once the wonder and the admiration of mankind. "The bottom of each cell is the shape of a flattened pyramid with three rhombic sides the shape of the diamonds on playing cards. This gives the greatest strength and greatest capacity with the least expenditure of material." A distinguished mathematician has determined that the two angles should be respectively 109 deg. 28 min. and 70 deg. 32 min., by mathematical calculation, and by actual measurement they are found to be 110 deg. and 70 deg. So wondrously has the Great Geometrician of the universe taught this tiny insect to frame its cell. But these cells are the store-houses for the honey and in order to preserve this from fermentation the bee needs wax. The two substances have an entirely different origin. The bee finds the honey but makes the wax. The one is gathered from the flowers, the other, which is necessary to its preservation, is provided for by the Great Designer who has so constructed the bee that the wax is formed by a digestive process in the body of the insect.

3. Look now at the *Animal* Kingdom, take as an illustration the stomach of the camel. This animal lives in the desert and makes long journeys where it is impossible to obtain water. How is this want met? We find that lying between the membranes of the second stomach, and opening into the stomach by small square apertures near the top, are a number of distinct sacks. After the stomach is full of water these annexed bags are filled through the orifices at the top. Thus the camel traverses the desert sands, armed with a supply of water which he carries in him, free from the action of the gastric juice, and ready for use whenever thirst becomes oppressive.

Turn to the human frame. The eye of man is most wonderfully adapted to his wants, and eminently calculated to lead the mind "from nature up to nature's God" as he looks abroad upon the works of the Great Architect of the Universe. His ear is delicately framed, and may be attuned to catch the highest harmonies of heaven. Both in their usefulness and marvellous contrivance are comparatively well-known. Hence, I have selected as an illustration in this department the structure of the larynx and the epiglottis. Down the human throat are two pipes, one leading to the stomach, the other to the lungs. The former is the passage for food, the latter for the breath and voice, and both open into the lower part of the mouth. Hence a difficulty occurs, viz: the passages being so contiguous, to prevent the food which should descend into the stomach from slipping into the wind-pipe, the road to the lungs. We all know the uncomfortable sensation produced when a crumb goes down the wrong way. Then how is this difficulty met? The food passage opens into the bottom of the mouth like the upper part of a funnel. Into this the wind-pipe enters by a slit. This slit is covered by a closely fitting valve. The food glides over this in its downward passage, and its weight, together with the action of the muscles in swallowing, close the valve.