



Carpenter in Feathers

**W**OODPECKERS are carpenters. That is what they are particularly good for; that is what their natural tools are shaped for. Their very success at carpenter-work inhibits them from trying another trade, like the weaving of the oriole or the mason-work of the swallow. They were 'prenticed to be carpenters ages ago, and carpenters they will remain until there are no more woodpeckers.

The woodpecker's beak, long, straight, strong, sharp-pointed, is set up as though nature had undertaken to show man how to make a chisel. His head is a hammer, impelled by the extraordinarily strong muscles of his neck and shoulders. His pointed tongue is like an awl—even more like a small saw or round file, for it is armed with numerous sharp little barbs.

Here, however, it must be admitted that the analogy weakens a bit, for that peculiarly wrought tongue is used by the bird not for any woodworking purpose but to drag insect grubs and other tidbits out of the holes his beak has dug. It is as though a carpenter had to chisel open a wooden lunch-box, and then pull his lunch out with the tip of a keyhole saw.

The most ladder-agile of human carpenters might well envy the wood-

pecker his natural climbing-irons. Most birds have three toes pointed forward and one directed backward. The woodpecker swings one forward-pointing toe on each foot into a back-pointed direction. This gives him two pairs of sharp-clawed, icetong-like grippers on each foot. If you have ever tried to pull a young woodpecker loose from a rough-barked trunk, you will appreciate how hard those toes can hold.

Complement to these hard-holding toes is the stiff-bracing tail. Each of its primary feathers is many times as rigid as the corresponding feathers in other birds' tails, and each ends in a sharp little spud or point. With his toes dug into the bark and this multiple brace of a tail firmly set behind him, the woodpecker is a combination tripod and

vise, giving his fast-hammering head due support and full freedom of operation.

You wouldn't expect to find woodpeckers where there are no trees, just as you wouldn't expect to find ducks where there is no water. But just as the wood duck nests in trees, some woodpeckers live in the treeless desert.

But they have substitute trees in the sahuaro, or giant cactus. In fact, the desert woodpecker seems to have rather an advantage in homesites, as compared with his forest brethren, for the pulpy interior of the sahuaro trunk is easily gouged out, yet after he has made his cavity the big cactus makes a very hard, rough callus around it, forming a very secure and solid shell.

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