

is resonance in the wood that the bird desires, and it keeps trying until a good sounding-board is found.

It was very satisfying to me when the superb King of the Woodpeckers—*pic noir à bec blanc*, as the great French naturalist named it—went over the call, time after time, with grand effect, letting go, between trails, one or two of his triumphant trumpet-notes. Hitherto I had not seen the *Campephilus* do this, though I had often heard what I supposed to be the call. As I crouched in my hiding-place and furtively watched the proceedings, I remember comparing the birds and their dwelling to some half-savage lord and lady and their isolated castle of medieval days. A twelfth-century bandit nobleman might have gloried in triggging himself in such apparel as my ivory-billed woodpecker wore. What a perfect athlete he appeared to be, as he braced himself for an effort which was to generate a force sufficient to hurl his heavy head and beak back and forth at a speed of about twenty-eight strokes to the second!

All of our woodpeckers, pure and simple—that is, all of the species in which the woodpecker character has been preserved almost unmodified—have exceedingly muscular heads and strikingly constricted necks; their beaks are nearly straight, wedge-shaped, fluted or ribbed on the upper mandible, and their nostrils are protected by hairy or feathery tufts. Their legs are strangely short in appearance, but are exactly adapted to their need, and their tail-feathers are tipped with stiff points. These features are all fully developed in the *Campephilus principalis*, the bill especially showing a size, strength and symmetrical beauty truly wonderful.

The stiff pointed tail-feathers of the woodpecker serve the bird a turn which I have never seen noted by any ornithologist. When the bird must strike a hard blow with its bill, it does not depend solely upon its neck and head; but, bracing the points of its tail-feathers against the tree, and rising to the full length of its short, powerful legs, and drawing back its body, head, and neck to the farthest extent, it dashes its bill home with all the force of its entire bodily weight and muscle. I