

Bows and Arrows.**HOW TO MAKE AND USE THEM.**

At the present time girls and boys alike are interested in archery, and commendably so, for the exercise is a healthy one, strengthening the muscles of chest and arms, and at the same time giving out-door exercise for the gentler sex. Not one boy in a hundred can make a good bow and arrow; not because there is a lack of mechanical genius, but because the way to do it is not understood.

The first requisite is suitable wood. White hickory, or rather hickory that is white, is preferable; but oak, ash, and indeed any kind of wood that is tough and elastic, will make a good bow. The sticks to make both bows and arrows from should be straight grained and split out. Let the sticks season before working, as they are liable to warp. The bow stick should be from three to five feet in length, according to the height and strength of the party to use them. Split the bow stick an inch square or thereabouts; place it in a position where it will not have a chance to warp much. It is best seasoned in the shade where the air circulates freely.

Make one side straight, or as nearly so as you possibly can. This is for the outside of the bow, or the side that will be from you when using the weapon. Next work off the two edges until the stick is three-quarters of an inch in the centre and three-eighths at the ends. By use of a straightedge you can get the tapers very true. As an aid to this line from end to end through the centre of the dressed side, and this line will be the guide in making the tapers. Now for the inside. Make the thickness three-quarters of an inch in the centre. The stick at this point will be just three-quarters of an inch square. Now do all of the tapering from one side—that is, leave the outside straight. Taper inside from near centre to ends so that the extreme ends are square—three-eighths each way. In this shape you have the bow "squared up." All of the rounding should be done upon the inside, and that only sufficient to get a good, true oval, the outside being left flat. Sandpaper until it is smooth, then cut string notches three-fourths of an inch from the end, slanting toward the center, and only deep enough to hold the string. Cut these string notches only on the outside, so that on the inside the string can have free action. The bow-string should be fastened at one end of the bow, and the other formed into a loop so that it can be slipped over the end and into the notch by bending the stick. When not in use, always leave the bow unstrung. The illustration will

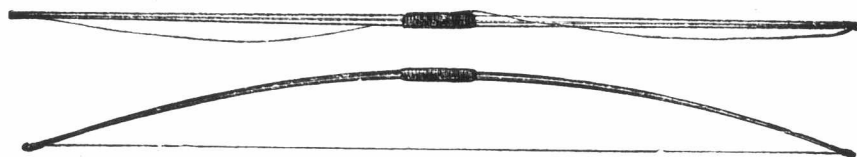
give a good idea as to the finish of the weapon, and as to the tightness of the string when in rig for shooting.

To make the arrows, dress out seasoned sticks on two opposite sides until straight and three-eighths of an inch thick, then straighten one of the edges, and mark in three-eighths of an inch from that and work to the line. Now you have a rod three-eighths of an inch square. Round up by taking off the corners with a plane or knife, then scrape with a piece of glass until round; finish up with sandpaper and a rag moistened in linseed oil. It is useless to whittle out an arrow and get it perfectly true and straight, and unless an arrow is straight accurate shooting cannot be done. Feather



ARCHERY IN THE COUNTRY.

the arrow on two or three sides, the latter being preferable. Strip a hen or goose quill and fasten to the shaft by means of glue. Do not



BOWS FOR BOYS AND GIRLS.

allow the feathers to extend to the end, but they may reach five or six inches up the shaft. The illustration gives both styles so clearly that further explanation is not necessary. The feathered end of the arrow should have a string notch.

A handsome bookcase can be made by having shelves fitted into a recess in the wall and suspending curtains made of double-faced canton, furniture satin or any heavy material; decorate with embroidery or a simple band of velvet or satin across the ends, about fourteen inches deep, contrasting in color with the curtains; finish with a fringe. Hang the curtains with a small rod and rings, so they may be easily pushed back to gain access to the books; loop away at the sides about three quarters of a yard from the floor with bands of ribbon or brass chains.

The Little Ones' Column.**Rover.**

"Now, Rover, I am very sure. There is no reason why You shouldn't talk as well as not If you will only try.

"You're big enough and old enough— Say, do you hear me, sir?— To be an educated dog, And not a common cur.

"Come, do not be so lazy, now; Speak out—*speak out*, I say! Just try how easy 'tis to talk; Why—I can talk all day.

"Now, tell me, when you scratched and scratched, And made a dreadful hole Among the pansies yesterday, Was it a rat or mole?

"Why did you chew up Lulu's doll? And then my rubber shoe, Where did you hide it? won't you tell? Well, that is mean of you!

"But say, old fellow, was it you That ate the candy up, That night we set it out to cool, And didn't leave a sup?

"You won't? Well, I'm ashamed of you! Go off, and snarl and growl, Like any other stupid dog, Just fit to bark and growl."

Better Whistle than Whine.

As I was taking a walk early in September, I noticed two little boys on their way to school. The small one tumbled and fell, and though he was not much hurt, he began to whine in a babyish way—not a regular roaring boy cry, as though he were half killed, but a little cross whine.

The older boy took his hand in a kind and fatherly way, and said:

"Oh, never mind, Jimmy, don't whine; it is a great deal better to whistle."

And he began in the merriest way a cheerful whistle.

Jimmy tried to join the whistle.

"I can't whistle as nice as you, Charlie," said he, "my lips won't pucker up good."

"Oh, that is because you have not got all the whine out yet," said Charlie; "but you try a minute, and the whistle will drive the whine away."

So he did; and the last I saw or heard of the little fellow, they were whistling away as earnestly as though that was the chief end of life.

Dignity is much better than much familiarity. In the coolness which it imposes it is always like water freezing, somewhat elevated.