

PHYSICAL EDUCATION FOR HEALTH
Radio Program

Feb. 23

"Archery Tackle, Its Care and Selection"
(Dr. V. W. Lapp, Dept. of Physical Education, and Mr.
Gordon Hoffman, Dept. of Chemistry)

Lapp

Before one can take archery seriously it is necessary to have some equipment; namely, a bow, arrows, an armguard or bracer, a shooting glove or tab, a quiver and a target. In addition, a pouch is desirable for carrying a spare bow string, the shooting tab, and a note pad. In the archer's terminology, the items just mentioned are called "tackle". Tonight we have with us Mr. Gordon Hoffman, who can be considered an expert in this line because for a number of years he has made archery tackle, both as a hobbyist and as a commercial artisan. I am going to ask him to discuss bows as the first item on our list.

Hoffman

In order to make the discussion of bows more understandable, it is necessary to define a few terms. First, the back is the outer or convex surface of the bow when drawn, usually flat or nearly so. Second, the belly is the inner or concave surface of the bow when drawn. Third, the limbs are the upper and lower halves of the bow. Fourth, the handle is the middle portion or grip. Fifth, the weight of the bow is the tensile strength at full draw, expressed in pounds, and is not the actual weight of the bow. Bows may be made of wood, horn, and sinew (called composite bows) and of steel. Steel bows do not break easily but are somewhat harsh in action and are not widely used. Composite bows are usually made of a thin layer of wood, to one side of which is glued pieces of horn from water buffalo or yaks; this side then becomes the belly of the bow; to the other side is glued shredded sinew, and this becomes the back of the bow. Composite bows are usually very short and strongly reflexed. By far the most widely used are bows made of wood. The woods most generally used are Yew, Osage Orange (commonly known as hedge), and Degame (or lemonwood), in the order of their excellence. Other woods sometimes used are hickory, lancewood, snakewood, bamboo and others. Yew is the bow-wood of song and story, and Yew bows command good prices ranging from a low of \$12 - \$15 for C grade bows to \$25 for grade A bows. Exceptionally fine bows are sometimes sold for much higher prices. For quickness of cast and smoothness of draw Yew cannot be beaten. Yew bows should have a layer of the creamy sapwood about 1/4 inch thick on the back, or perhaps a backing of some other tough wood, usually hickory. The heartwood is a beautiful reddish brown.

Osage Orange is a bow-wood of the highest order, and is desirable for hunting, but for target work good Yew is to be preferred.

The most serviceable wood for low-priced bows is lemonwood. Lemonwood bows are not so quick in cast and are heavier in the hand than Yew or Osage Orange, but are far less expensive. They have a smooth pleasant draw and if properly made are free from handle jar. Lemonwood makes an excellent bow, even for tournament shooting.

Hickory bows follow the string badly, have a very poor cast, and are little if any cheaper than lemonwood.

Bows in general may be of two types, the long bow and the flat bow, or may be a combination of the two. The flat bow is somewhat shorter than the long bow, but is wider and not so deep from back to belly. The flat bows generally have smoother draw and quicker cast,