



*Bow string rolls over eccentric wheels at ends of compound bow, dropping the pull to ease strain on archer.*

## It's a bow-and what a bow! But is it legal?

If Robin Hood and Hiawatha could return to see what has happened to the bow and arrow, they'd go right back to their legends.

William Tell would never even step out of the storybooks. Cleave an apple on his son's head? Much too easy!

But this folklore trio would have one thing in common with today's legislators and archery tournament directors. They'd take one look at the new equipment and exclaim incredulously: "That's a bow?"

Right out of Rube Goldberg, the compound bow is a maze of eccentric wheels, idler pulleys, S-hooks, laminated limbs, side plates and assorted nuts and bolts. A cable worm adjustment key is standard equipment but you can opt for a cushion plunger as an extra.

And this weird looking progeny of space age technology really delivers.

One week after the first one he had ever seen was placed in his hands last summer, Tom Melkioty, an Eastman Kodak carpenter, won the New York State Field Archery championship in the heavy tackle class.

Ron Barry, a Case-Hoyt printer and runner up to Tom, says of the new bow:

"Shooting the doorknob off a door at 30 yards is no problem."

The ultimate answer was given at a \$20,000 Professional Archery Association shoot last summer when

John Williamson fired three consecutive 300 perfect rounds. That's equivalent to a bowler rolling three 300 games in succession in a championship match. Williamson fired 30 practice arrows and 180 scoring arrows within a three-inch bullseye without a miss.

But the bow does have some problems. State game department officials and tournament directors can't make up their minds if it is legal.

Typical is New York State. First it declared the bow legal, then illegal and now legal again for hunting. Pennsylvania still rules it illegal but is wavering. The bow was banned in 1971 archery tournaments but ruled legal this year.

Anything as controversial and complicated as the compound bow has an interesting background. There is some confusion about its origin but apparently the principle was developed by a physicist in 1938. He was ahead of his time. The idea was put on the shelf and forgotten for 30 years.

Three years ago the Allen Archery Company of Billings, Montana, dusted it off, did some more development work

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Ron Barry and Tom Melkioty,  
local fans of the compound bow.

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patented it thoroughly and introduced it to the archery world.

Acceptance has been astounding. Although the Alien firm has expanded many times and has a patent arrangement with the Olympus Archery Company of Houston, Tex. and the Jennings Archery Company of North Hollywood, Calif., it still takes three months to get one of the new bows.

"I believe that within five years the traditional recurve bow will be the Model T of archery," Melkioty said. "Anyone who really knows anything about archery now wants a compound bow."

Melkioty and Ron cited the experience of Harold Converse, a veteran Rochester archer and national director of the Field Archery Association. He increased his archery score by 40 points the first time he tried the compound bow.

To understand the advantages of the compound bow it is necessary to be familiar with the ordinary recurve bow. The recurve has a pull varying roughly from 25 to 70 pounds. Male archers in competition generally use a 46-pound pull bow.

It takes a lot of arm, neck and back strength to pull a 45-pound bow. The strain can cause the fingers to twist up or down which will throw the arrow off.

When the arrow is drawn to its release point, usually the corner of the mouth, it is necessary to hold rock steady during the aiming. In archery parlance, this is the moment of truth. If the fingers creep forward at this moment of greatest strain, it's likely the arrow will miss its target.

If the same archer were shooting a 35-pound bow he would have no problem. There would be no strain on the fingers to twist the arrow and he could hold steady at the release point. This is what the incredible compound bow does — gives him a 35-pound pull on a 45-pound bow.



At the end of the limbs are eccentric wheels over which the bows string rolls. An eccentric wheel is one with its axis off center. As the eccentric rides to the tip, the bow is a regular 45-pound pull. Then, due to the way the bow is strung, the eccentric drops the pull to 35 pounds. The archer has no trouble holding and releasing accurately.

As the arrow goes forward, the forces work in reverse. The arrow picks up speed until the thrust equals 45 pounds. The idler pulleys comprise a feed-back system that assists both ways. The delivery is smooth and there is no backlash jar as with some bows.

Introduction of the compound bow has been a pep pill for the sport of archery everywhere. The Rochester area has been no exception. The Five Nations League has been twanging up a storm of competition.

The League includes the Avon Bowmen, Rochester Bow Hunters, Rochester Archers the Flying Arrows & Genesee Conservation League Conservation Club.

Outdoor competition up now, but some of the clubs have indoor facilities and the others are for them.

Rochester has many excellent archers but two standouts are Melkioty & Barry. Melkioty, who lives at 23 Cod Way and is a member of the Avon Bowmen, is a consistent winner and national tournaments. As mentioned previously, he is the current state Heavy tackle champion.

Barry, who lives at 170 Bock is a member of the GCL club, has been shooting for two years but finished ninth in the nationals last summer in Massachusetts. All of Rochester's competition archers are getting ready for the World Shoot in Canada next summer. The site has not been decided.

It's a good bet that most of the archers competing in the world tour; will be armed with compound. They're wonderful equipment, sweet handle, alive and responsive. You buy the best for \$245.

But what happened to the good old days when a hickory sapling and a shoestring was happiness?

**Original story from Upstate New York Sunday, January 14, 1973.**

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