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SEPTEMBER-OCTOBER 1968 50 CENTS

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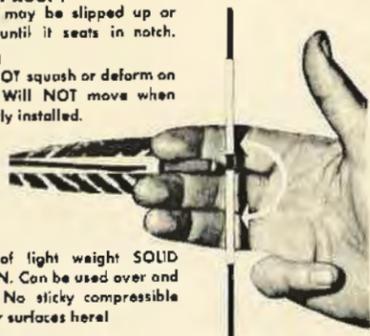
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## ANOTHER LOOK

In your July/August issue, I read a letter by a Ray Nelson, who mentioned that, in your past issues, you have ceased the practice of using a sketchline form of analysis of your featured archers.

As I am a new subscriber to your magazine, and to archery itself, I cannot comment on this practice. But I find, by studying your profiles I pick up valuable tips and information. I also try to compare the various forms of these fine archers.

I think your brilliant idea of sketching a picture of these artists (... archery is an art) with lines drawn in showing his perfection of form would be an excellent guide in studying their particular forms.

Eric Ferguson  
Powell River, British Columbia  
(Your request has been forwarded to art director Dick Gibson.)

## MORE ON BOW LOCKS

In some of your recent articles I have noticed pictures of C. R. Learn using a bow lock. I thought that he might be interested in seeing some pictures of the 'lock' that I have been using for about three years now. The lock is constructed of 1/8" laminated strips of plexiglas. As you realize I am sure, a bow lock is a very personal piece of equipment, and I must have built fifteen or so before I came up with just the right combination.

I have always been very interested in this phase of archery and would appreciate an exchange of ideas on designs, materials, etc. about this type of release and others you might know about.

Bob Crenshaw  
Dot Archery Shop  
Nashville, Tennessee



## WE'RE PERFECT???

I have been reading BOW & ARROW for four years and I never have read a more informative archery magazine, nor have I ever seen so much as one mistake or a false statement of any kind.

My wife and I had the pleasure of meeting and talking to Joe Higgins at the International Tournament at Cobo Hall last spring and we plan on going again this year. With people like Joe on your staff, I do not see how your magazine could ever fail.

Wayne P. Carpenter,  
Philadelphia, Pennsylvania

(We try harder!)

## SELF-HEALER

In the Nov./Dec. '67 issue, there is mention that the Perth Archery Club is looking for a self-healing target butt. Well, Herter's Special Broadhead Target Butt may be the answer. It is made of Epofeam plastic, is two feet in diameter and a foot thick. It weighs about nine pounds and has a guarantee.

I hope this information is of some help.

John Blair, President,  
South-Side Archery Club,  
Edmonton, Alberta, Canada

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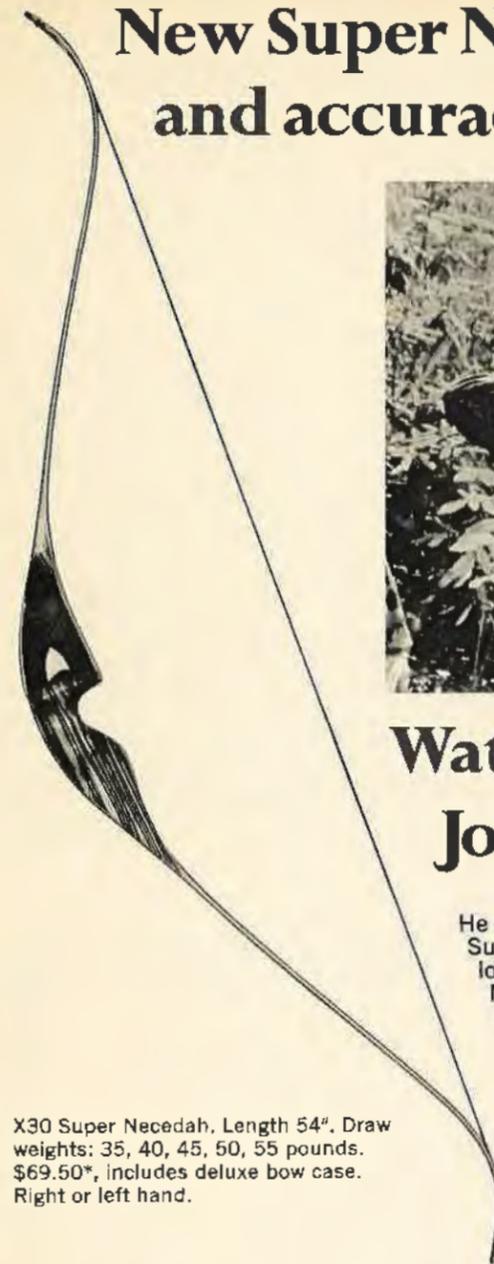
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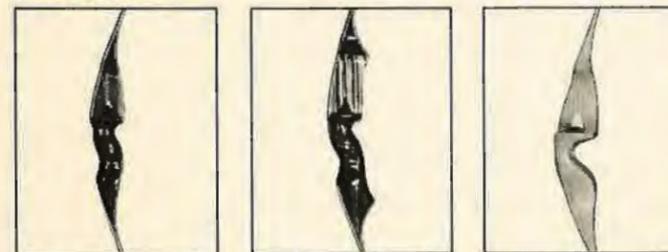
You'll like the Super Necedah, too. Its new widened limbs (2" wide) make for a smoother-shooting bow—in spite of its short 54". And its duo-flex design accounts for the Super Necedah's speed.

It's a real beauty, too. Limbs are finished with handsome, non-glare black glass. The comfortable, semi-pistol-grip handle is a triple laminate of laurel and zebra woods. A super bow, for super shooting.

Watch Joe Foss go after the big ones on TV—then hunt them yourself with the Shakespeare X30 Super Necedah—the short, light bow with the advantages you look for in a long bow. \$69.50\*, includes deluxe bow case. Draw weights, 35-55 pounds. Right- and left-hand models. See your dealer soon!

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# TECH TALK

## STABLE ARROW

I have read many articles in which it is stated that the twenty-eight-inch arrow is the most stable arrow in flight. Would you be able to tell how much more stable it is over the 27 or 26-inch?

Daniel L. Lantagne,  
Niagara, Wisconsin

*(Doug Kittredge has been involved with the testing of arrow stability in recent years, using high speed photography and shooting machines. As a result of this, he says, "I feel the statement that a twenty-eight-inch arrow being more stable than some other length is pure bunk.*

*("Arrow stability has a bearing on the size, material and angle of the fletching, which then is related to the length and diameter of the shaft, plus the weight of the head. Stability has nothing to do with shaft length*

*independently, and any length — short or long — can be made to fly with complete stability.")*

## CAMO QUESTION

It seems that camouflage is stressed by most of your bowhunting writers right down to the hands and feet. Yet many of them use white fletching and even all-white arrows.

Bob Learn showed in a recent article (see *A Lousy Image*, Jan/Feb '68 issue) the obvious value of natural barred feathers over white for hunting, but Doug Kittredge, Jack Howard, Jim Dougherty and others do not seem hindered by using white. I would be interested in knowing how you feel about this.

Donald D. Myers,  
Brooklyn, New York

*(There are both schools of thought*

*in this regard and obviously Bob Learn makes a good point. However, Doug Kittredge says, "I keep my white fletched arrows in a Silent Stalker belt quiver, which hangs rather low at my side. I have a thin silk cover in a dark green color, which I slip over the fletching to hide it from view. Anything heavier than silk could damage the feathers.*

*("I don't feel the slightest disadvantage of the white fletching on the arrow kept on my bow, which offsets the material advantage of being able to see the flight of the arrow, so as to determine whether a hit was made and, if so, where.*

*("I have talked with several of my bowhunting friends who hunt with white fletching to see if they feel it has caused them to spook deer or other game. To a man, they say it has not.*

*("I feel camouflage of the face is a*

*Continued on page 72*

## MODEL PERFECTION UTOPIAN



The extraordinary value and quality of Herter's archery tackle rightfully places them as one of the top leaders in this field. Their Model Utopian 75 inch target bow helped me in many ways to win First place in not only the largest indoor archery tournament in the world but also the most difficult of all tournaments, the 1968 Ben Pearson International Indoor Open.

*Jim Pearson*

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Photo by C. R. Learn

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## HUNTING WITH Doug Kittredge

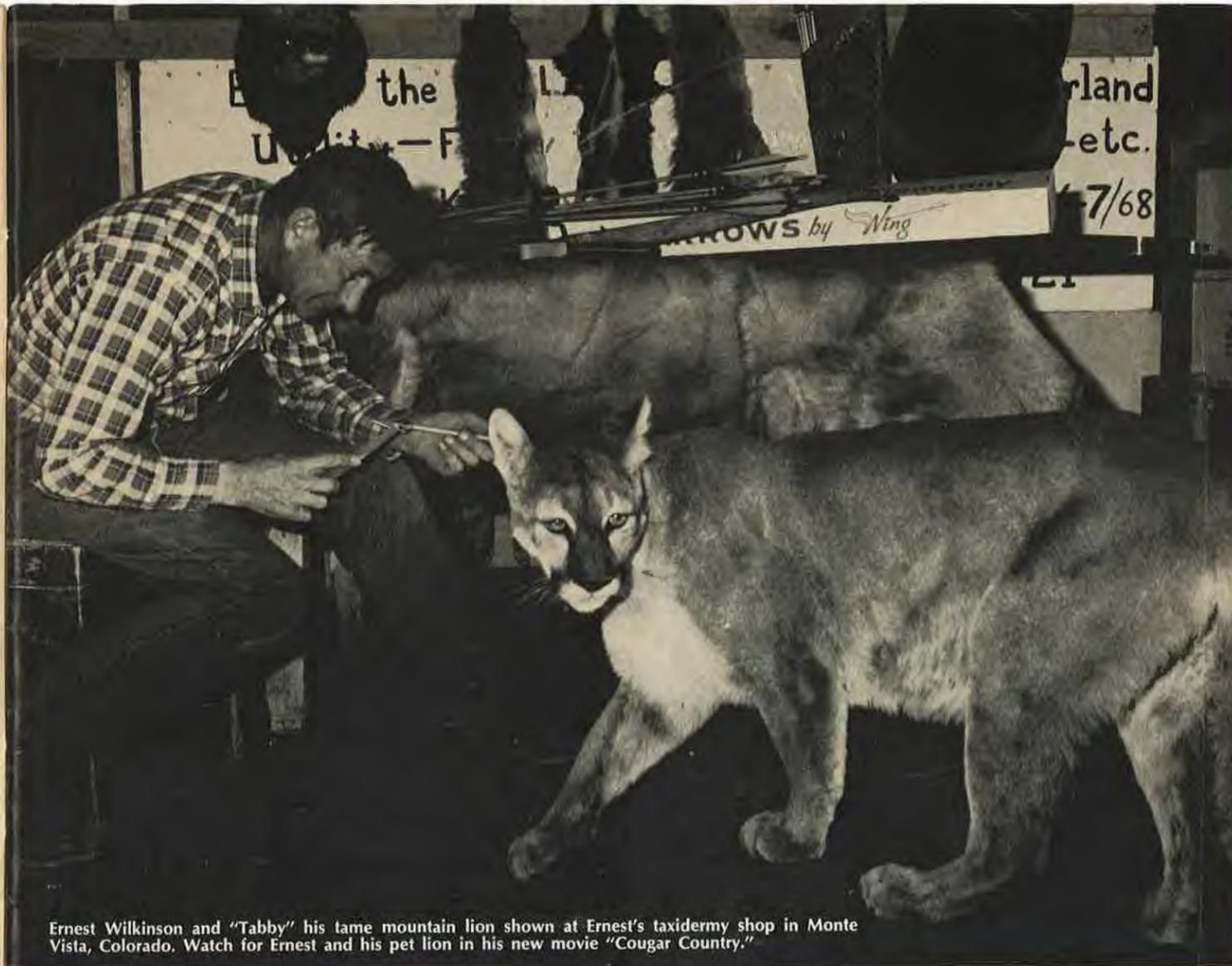
A group of us were warming up our front feet over the last glowing remains of our campfire, when one of the fellows remarked that he was convinced patience was the bowhunter's most valuable asset. He further claimed that without it, the nice three-point buck he bagged last fall would yet be roaming the high aspen patches of the back country. With a new topic of conversation to chew on and a couple of sticks of fresh wood on the fire, the discussion got a-going hot and heavy.

It seems this three-point was feeding with its head down in a patch of buck brush just to the edge of a quaky patch the bowhunter was working around. Animal and hunter were slowly coming together, each completely unaware of the other's presence. Then our hunter took that one step too many and found himself eye-ball to eye-ball about twenty-five feet away. Both froze as though cast in cement. That deer just didn't know what to do . . . he knew he'd been caught flat-footed, but he didn't know by what. In situations of this kind, Mr. Buck seems to say to himself, "As I don't know what you are or what you intend to do, I'll just wait you out and let you make the first move."

Now most of us confronted with our deer at such close range will wait a few seconds or so and when the critter doesn't move, we'll try to slowly raise our bow, draw, and figure even if we spook him, we'll get off a fast shot at which such close range is bound to have a good chance for a hit. As Ben went on to say at that campfire, he had been in similar situations the past several years and had yet to get a hit by playing it his way . . . in fact, twice he had been able to get the bow to full draw with the deer still standing there. Yet, as he would let 'er go, the deer invariably would explode like a coiled clock spring and all he hit was air where the deer had been a split second before! We think of our arrow as traveling pretty fast the first twenty yards or so, but there is no doubt that the reflexes of a wild animal can beat it all hollow . . . even when he is standing but a matter of a few feet away from the shooter.

This time Ben figured he'd play it cool and wait until the deer made the first move. Each second that buck stood there seemed like a minute — and the minute rapidly was adding up to hours, it seemed. Then the buck slowly started to turn its head and bent down as though to feed again. But just as his head dropped three or four inches, ol' Mr. Buck snapped it around again trying to catch our hunter off his guard. This game was played several times. Then the deer started to carefully turn as though to sneak off. Ben let him take a few pussy-foot steps until the deer's head was completely turned. At that point, he started his draw. The deer snapped his head back to look at Ben once more . . . and for a few agonizing seconds, the eyeball to eyeball game was played once more. Apparently Mr. Buck decided Ben wasn't something to get acquainted with and he started to move, off taking a full rapid step just before going into a run, but just at that moment twenty-nine inches of steel tipped shaft rammed its way just back under the last rib and buried deep into his chest. The deer ran, but where can

Continued on page 14



Ernest Wilkinson and "Tabby" his tame mountain lion shown at Ernest's taxidermy shop in Monte Vista, Colorado. Watch for Ernest and his pet lion in his new movie "Cougar Country."

## Ernest Wilkinson is a Wing dealer whose reputation depends on it.

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Ernie says a lot about Wing in those few words. This year, Wing has two new bows to go along with the RED WING HUNTER . . . the THUNDERBIRD in 52" and 62" lengths and the deluxe PRESENTATION II HUNTER. Your Wing dealer has them all.

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Extra set of limbs	64.95
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# TACKLE TIPS

by Emery J. Loiselle

**W**ITH summer tournament time coming to a close and the leaves up north starting to turn, the archer's thoughts start turning to the excitement of the hunting season. Don't procrastinate. Break out the heavy equipment, get it in shape, and practice under simulated hunting conditions if you would enjoy a successful hunting trip.

Hunting equipment and target equipment require different tactics and methods. An instinctive archer may use a number of anchors with target tackle to keep the arrow tip as close as possible to the target in the sight picture. For the hunt, he may prefer to use a single hold for all shots. There is no room for the delay and confusion occasioned by having to decide which anchor point to use when there is a deer sitting on the tip of your arrow. Target archers may wish to convert to bare bow techniques. Instinctive archers may go in for a hunting sight.

The target bow usually is laden with accuracy aids. This is fine when accuracy is of utmost importance and the archer can take his time with each shot. For hunting the equipment must be stripped down and streamlined. No longer are the stabilizers needed for that extra degree of accuracy — they will only weight down the bow and catch in the brush. Greyhound grace and litheness of the bow limbs aren't what count now. Heftier tips that won't lag on the job of getting the heavy arrow airborne, even with the added drag of camouflage stocking and brush buttons, are in mode

this season. The bow is heavier for greater penetration. This precludes some steadiness of the bow arm and holding time after the draw.

Much of this goes against the theories of good target technique. Consider, however, that the "moment" of the hunt generally requires a fast shot at an uncertain distance in a sometimes difficult environment. Extreme accuracy ceases to be the prime factor. The ability to locate, stalk and outwit a deer is of greater importance.

Shed excess baggage wherever possible. I don't use a tab or shooting glove. My wife adds elastic to the bow arm sleeve of the camo jacket to eliminate an arm guard. I like a short bow which becomes an aid to travel by helping fend aside brush.

Certain accessories are good to have on the hunting bow. Camouflage can be cloth stocking, tape or coloring of your own creation. Brush buttons prevent brush and fir boughs from becoming snagged between the string and bow tip. They sound damp the twang of the bow string, sometimes permitting a second shot at the same deer. The exotic tournament arrow rests give way to an arrow pad and rest of sound-reducing material thick enough to prevent scraping of the arrow against wood.

A bow quiver will hold a sufficient number of arrows for a day's hunt handy to the draw hand. It eliminates the back pack of arrows which allows shafts to rattle, catch in brush and flash signals to the deer. An arrow holder can take over the job of the index finger of the bow hand.

A useful aid is a piece of white tape stuck in a horizontal position on the bow facing the line of sight area. The width of the tape should cover a twelve-inch height at fifty yards. When conditions of the "moment" allow time to compare this tape with the vertical thickness of the deer's chest area, it reports the range as nearer or farther than fifty yards.

Examine your hunting arrows and check for quantity, split shafts, sharpness and straightness of broadheads, broken nocks and nocks which are not on straight and feathers which are shabby or have come unglued. Apply waterproofing to the feathers as you will probably be out in the rain with them.

If you shoot cedar, make sure the shafts are fairly straight. The inherent straightness of glass arrows is an advantage, but they are less expendable than wood. Serpentine characteristics in the wood won't matter too much if the ends and middle point are in line and the feathers are spiraled to rotate the arrow in flight.

If the broadheads are in line with the shafts and your field points are identical in weight, practice with field points should be sufficient. It is more important to keep the broadheads in top shape with razor sharp edges than to ruin them with practice. Satisfy your need for broadhead practice with a couple of bummies that missed the deer last year.

Sharpen up your accuracy and reflexes by getting practice with the heavy tackle. If you have a bale set up in your backyard, practice at random distances by walking around the yard taking shots as you go. My wife and I take turns calling the position, fast or slow shots and the moment, then turning and shooting at the target. This adds interest to the practice and perplexes the neighbors.

Roving is wonderful practice for hunting. This involves a leisurely walk through the woods with a buddy or two, shooting at anything that represents a target — a stump, a hummock, even the base of a tree. Use your most dispensable arrows for this sport. An exercise in gauging distances in open areas is shooting at baled hay in the field after getting permission from the farmer. If you belong to a field archers' club, you can do the twenty-eight target course shooting at random distances as you approach the targets.

Don't be satisfied with stationary targets. Many of your hunting shots will be at a deer moving out. Gauging lead on a running deer is largely a matter of experience, guess and luck. I have my own rule of thumb for lead. On a running deer I "guestimate" a lead of one-sixth the distance from my position to the spot where the deer should be when the arrow gets there.

Excellent practice for running shots can be had by rolling an old tire containing a sixteen-inch target mat down a hill. You can cut down the size of the firewood pile by rolling the tire at an angle across the hill and shooting uphill. The tire will fall towards the uphill side and the arrows won't be crushed. Take the tire and mat on the hunt to get in some practice during the lazy part of the day.

You will need navigational, logistical, survival aids and sundry items for personal well-being. A good compass is a must. There are small compasses available, made for cementing into a hole in the bow handle or gunstock. You will need a parka or rain suit. Warm clothes, gloves and comfortable boots are for the cold mornings and late afternoons when the deer move and the hunter stands. You cannot be overdressed at these times.

Pack an extra bow, bowstring, hunting knife, telescope, coil of small diameter rope, and a pouch containing such items as first aid kit, snakebite kit, quick energy snacks, coiled outdoorsman's saw, twine, pliers and plastic bag. Don't forget smokes, comb, toothbrush, shaving gear and the all-important camera.

See that your car is in good mechanical condition.

Make reservations for accommodations lest you undergo a night's lodging in your own car. My wife and I had that thrill one opening Saturday during football season when we could find no vacancy in the entire vertical length of the State of Vermont. ●

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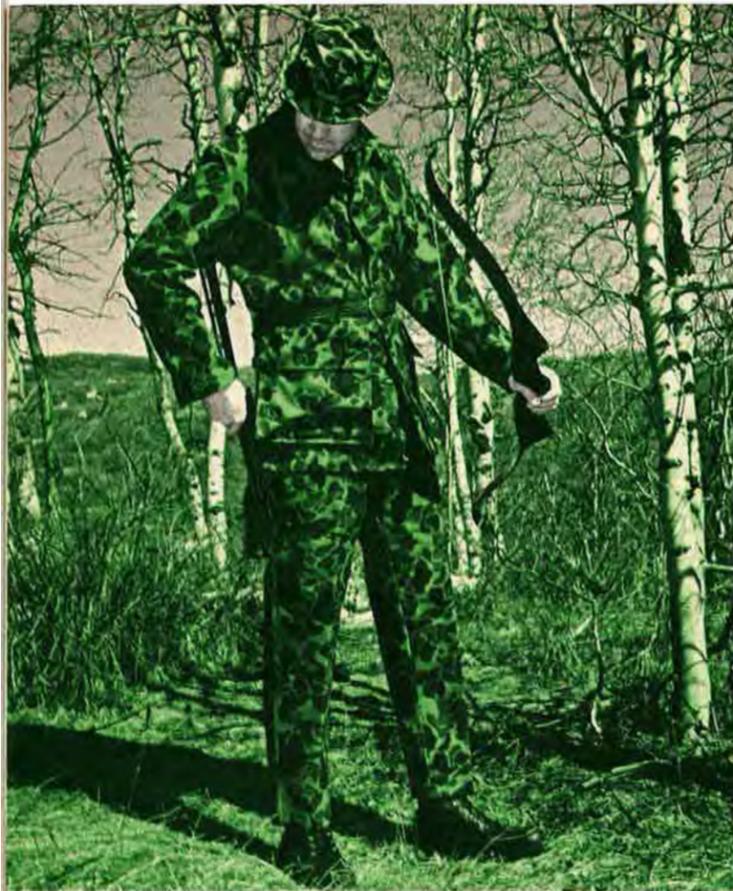
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### KITTREDGE

Continued from page 10

you go under such circumstances? Ben had himself a nice buck, shot with the help of patience in waiting out the deer until a good shot could be made.

Jack Howard and I were working a hillside together when Jack spotted the tips of a beautiful set of antlers bobbing about in the brush some thirty-five yards ahead of us. The deer moved a couple of steps forward, raised its head and offered a close shot at the head, neck, or high on the back . . . shots that are pretty poor from a killing point of view; however, with this tremendous grand-daddy buck, had I been in Jack's shoes, I'm sure I would have taken a shot, figuring a chance like this may never come again. Not so with Howard. He had spotted a small hole about fifteen feet ahead of the deer through which he could get an arrow if the deer cooperated and moved there. For about seven or eight minutes we watched this trophy buck poke along his trail toward this hole. I couldn't have been any more keyed up if I had been the one who was going to get the shot . . . my heart was pounding up against the roof of my mouth and it was everything I could do to keep from doing something. Finally the buck had moved just to the edge of the hole. Jack, meanwhile, had this bow raised ready to draw.

The buck moved forward. Jack drew, yet failed to release the arrow. I almost shouted, I was so tense. Jack stayed at full draw a few more seconds and the deer started to move again. The shot made hash of the upper tip of the heart!

When I saw that arrow dart forward and heard the *ka-chunk* as it hit, it was just like poking a pin into a tightly filled balloon. I literally exploded with satisfaction. Later on I found that when the buck first moved in front of the hole and Jack was at full draw, the deer had stopped with its leg covering his heart area which could make for a bad hit. Jack simply gritted his teeth and waited for the deer to start forward again, moving this leg out of the way so a clean shot could be taken. Here again the hunter's ability to be patient and wait the deer out paid off.

It was Howard who told me a long time ago — though he agreed that even a poor hit was better than no hit — a good hit was so much better than a poor one that it always is well worth the wait and chance of not shooting to try and take the best shot possible. After all, once you've taken the shot and hit the game, you are obligated as a sportsman to do all possible to recover the animal. With a good sound hit this generally is quick and easy; but with a poor hit, a day or more can be spent tracking. Time that perhaps could have more profitably been spent hunting.

Patience is one of the bowhunter's most valuable assets and will pay off time after time with all kinds of game. Knowing when to shoot and when to wait is the mark of the experienced bowhunter. It has to do with knowing how the game is going to react under certain circumstances . . . is he going to stand there and wait, or is he going to bolt? Is he going to move this way, or that way? I've flubbed a lot of opportunities at big and small game simply because I failed to dope out the situation and zipped when I should have zagged. I'm sure other bowhunters feel the same way.

Looking back on different occurrences, the most common mistake is to shoot too soon, with the animal moving when he probably would have stopped if I'd waited. Or shooting when he is too far out rather than wait to let him work in yet closer. Or with the animal's body in such a position that a good killing shot is almost impossible, but with a little waiting the game might have moved to offer a better shot.

As a general rule of thumb, don't take a shot when the animal is looking at you. Wait and let him make the first

Continued on page 45



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# GO-GETTER

# GAMEMASTER

By C. R. Learn

**R**OMAN Gray and I had made arrangements for a midweek bow hunt on California's Santa Catalina Island with Doug Bombard, the hunting director, and Roger McElroy, his hunting manager.

When we taxied out of the water in Catalina Air Lines, amphibian at a spot called Cat Harbor, McElroy helped us load the gear into a four wheel-drive Toyota. At Howlands Landing camp, he left us with a few words of caution about fire, since the island was tinder dry, and said he would pick us up in time for the 3:30 p.m. flight on Friday. This gave us almost three full days of hunting.

I loaded my bow quiver with eight 2016 XX75s, each with the three-blade Bodkin tipped with razor blades. This then went onto the *Gamemaster*, the fifty-eight-pound personal hunting bow of Jack Howard. That is the reason Gray and I were preparing to tackle the goats and hills of Catalina.

The *Gamemaster* had aroused my curiosity, since I had seen one or two in shops, but I had never had the opportunity to shoot one.

Batting the breeze in a local archery shop with Gray, I mentioned I was scheduled to do a bow test on the *Gamemaster*. Gray didn't say a word but got up and left. A few minutes later he returned with a stuffed bow sock and pulled out his fifty-pound *Gamemaster*. The best way to find out about tackle is to ask the man who owns one.

Gray has this fifty-pounder and a matched pair of sixty-seven-pound *Gamemasters*. Anyone who thinks enough of a bow to own three arouses my curiosity. Gray has been in archery for about fifteen years and worked in an archery shop for two years with the opportunity to shoot all of the bows in the shop. In this period, he picked a *Gamemaster*, the fifty pounder he now owns, to see how it would perform. He liked the stability, speed and, as he said, "Target accuracy with hunting tackle."

He wanted better penetration in big game, so ordered a sixty-seven-pounder from Howard. Then he figured he had better have a second for a back-up bow.

When I go into the field, I will take at least two bows, but they usually are two different makes with different shooting characteristics. My first question to Gray was whether the two matched bows really did match. They did, he assured me, right down to the sing of the string.

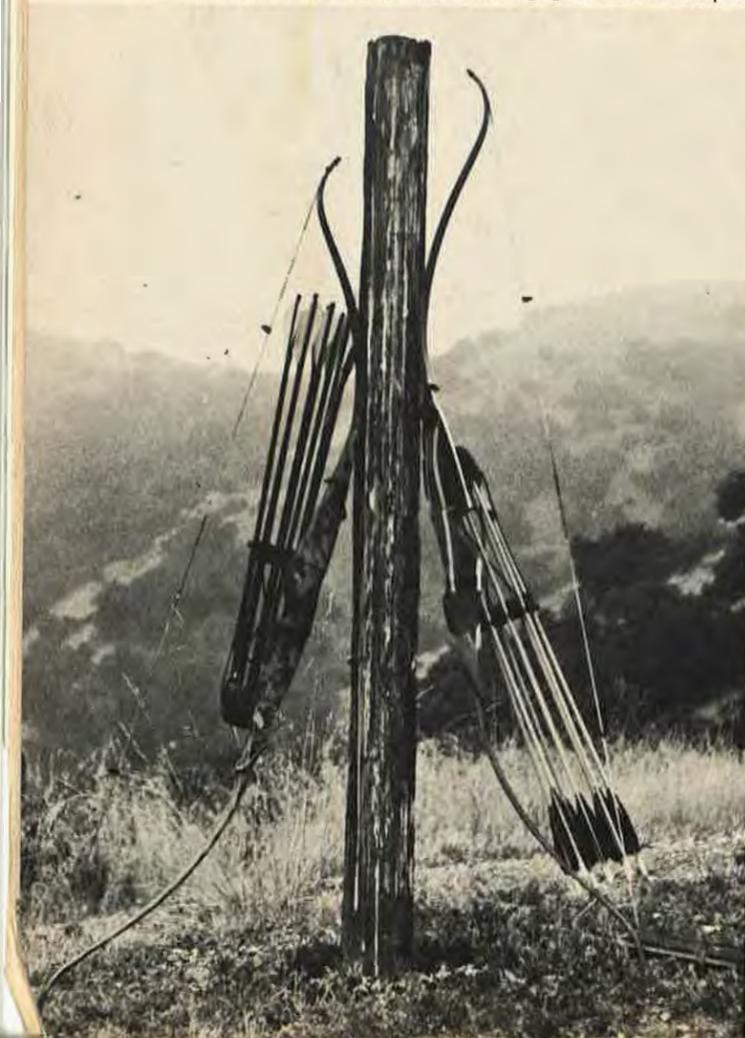
Gray hunts with a sight, but on target or field shooting he shoots barebow, the reverse of most hunting and target procedures. He wants the hunting bowsight to give him greater concentration on his sighting and to help him in picking a vital spot on the animal. After he had dropped a few goats, several deer and boar, he tried the newly arrived twin and found it had the same sight picture, same draw and matches all the way down the system of checks. He recently dabbed a coat of camo over the finish to take it into the field.

Gray pops a 2020 out of the sixty-seven-pounder with a



Catalina Goats  
Got Author's  
While This Bow  
Stole The Show!

Gray drags in the second Spanish billy, which he dropped at 70 yards on Santa Catalina island, using his 67-pound *Gamemaster* bow. (Below) A time out in the early morning fog for some glassing found the two Howard *Gamemasters* resting against convenient post.



five-by-one-half-inch fletch right helical and likes the speed the heavy arrows get from the Gamemaster with his twenty-nine-inch draw. His pins are set at 20-40-60 and he uses a loose, high but straight-wrist grip with a hair tab.

We stepped out to the short range at the shop, and I drew the hunter and slapped the arrow into the bales with authority. The range was too short to really tell much.

A few days later two bows arrived. One was a bright shiny new Gamemaster at fifty pounds, the other Jack Howard's full camoed personal hunter, complete with a spare string taped to the back of the bow. The new bow was for me to check color and similar detail, since it is a bit hard to tell about a bow's original features under a camo paint job.

The new bow had the lines I remembered with a slight deflex with good recurve on the ends. The handle riser is a beauty with black composite material for strength and weight. The wood is vermilion hardwood from Africa. This bow came to me just as it would to a purchaser, complete with string, arrow rest, bow sock and side leather plate in the sight window.

The glass on the limbs is white on the facing and black on the back. The nocks on the ends are tipped and add strength without being massive to slow down limb recovery. The handle was styled by Howard and fits most archers with no problem.

Howard's personal Gamemaster drew fifty-eight at twenty-eight and fifty-five at my draw. He sent the heavy bow he uses for elk and big game.

Howard's manufacture of his bows, target types as well as the Gamemaster, is not on a production line basis. For ten years he made bows in his spare time, and for the last twelve years has devoted full time to the art.

Most manufacturers make the entire bow up in a large blank with glass facing and backing, the hardwood core in the limbs and the handle riser, then cut and shape the bow from a straight blank to the finished product. Howard pre-shapes the laminates before gluing up in the forms. This gives him complete control at any point in the process.

When he gets a shipment of glass for his bows, he sorts each section according to the strength of the glass rather than the thickness. For example, the .40 glass will vary a fraction from one end to the other, and he utilizes this variation.

He tests the glass by a process he has developed over the years and can select a variety of strengths from one thickness of glass. This came about from testing he did years ago. He has computed tables from which he can give the customer a limber bow — stable but flexible — or stiffer action.

He cuts the glass laminates, the core and the handle riser to standards he has set up. All his handle risers will fit from one year to another, and the handle will be the same on all Gamemasters.

From this point, he goes into selective choosing for the components of the bow. He may determine that the strength of the two pieces of glass for the back of the bow should be of twenty-two. He reaches into the bin where he has a stack of twenty-two strength glass preformed. Out of this will come a matched pair of laminates for the back. Next he selects the pre-cut hardwood core and determines the wood to glass ratio he wants for that bow. The wood to glass ratio controls the feel of the bow, limb flexibility and limb stability.

On longer draws of twenty-nine to thirty-one inches, the bow limb should be more flexible. By utilizing the strength of the glass and changing the back and face strength, he arrives at the bow for the situation. If a customer writes in and asks for a soft pulling bow he can achieve this by decreasing the wood and increasing the glass content.

If a customer orders a fifty-five-pound Gamemaster with



*There are goats atop the ridge in foreground and finding them is no real problem, but getting close enough for a shot can be.*

*Right: The Gamemaster, along with a supply of custom-fletched 2016 aluminum shafts is a killing combination against wily goats.*

a twenty-nine-inch draw, Howard goes to his chart, and from his calculations he knows the proper wood to glass ratio to put in that bow to give the longer draw smoothness and speed. If the customer decides later he wants a twin to match the first, as Gray did, he can send his registration number back to Gamemaster and Howard will pull his card from the file. From the notations he has made on the card for that customer, he can give him an exact duplicate in the wood-to-glass ratio for his draw length.

Finding goats on Catalina is no problem.

Generally you are quiet and listen for game. These goats bleat and blat continually and you locate the herd from the noise.

I worked down the slope to the bottom, up to the cactus-covered crest of the next ridge and eased over. Some silly nanny spotted me from the scrub oak she was feeding in and, away the herd went. I hadn't seen her at all. The goats here have no natural enemy. They know man is the villain.

I picked up my glasses and was checking the ridge below me where a nanny was feeding in an open. A noise behind made me jump. I thought the herd might be coming back over the ridge. It wasn't a goat but Gray. He had outspooked a young billy and zonked him.

The billy had a small head but he had been hit cleanly.

I worked my way down the slope, keeping in the fringe of scrub oak on the right of the ridge to give me cover. I was looking over the area when, the herd found me again. I had a 2016 on the string and raised up to see what might come out of the cactus and oak patches. Sure enough a gray billy came boiling out at full speed. I came to full draw, led and let fly --- too much lead. Another shaft on the string gave a going away shot that went just over his back and into

*Continued on page 44*



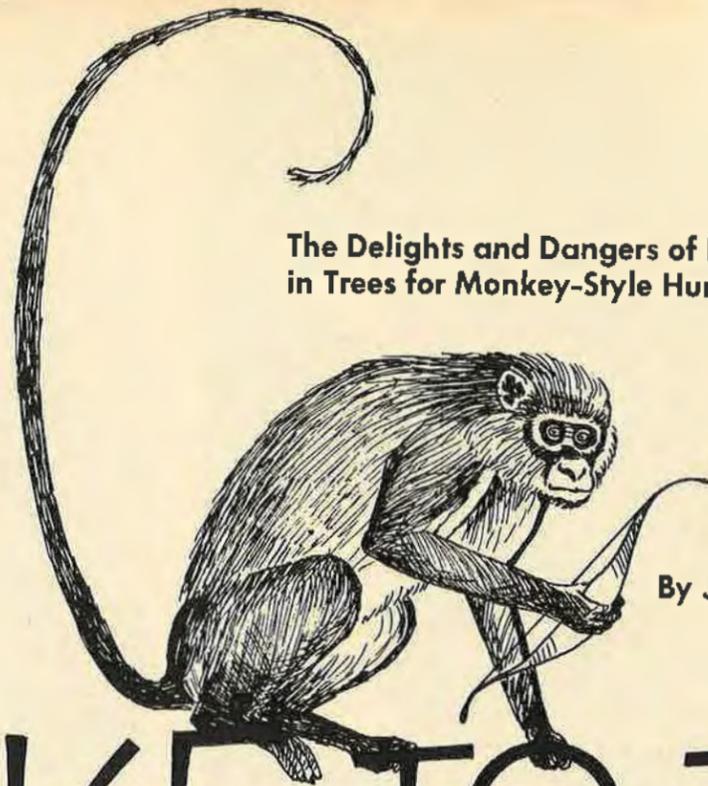
*Roman Gray glasses a slope during a break in the day's hunt. Note that heavy fog is still hanging above hilltop in background.*



*The nock ends of the bow are strengthened and give the string a good working area as well as adding grace to bow's lines. (Below) Jack Howard's shop has fiberglass set up in categories for varying strengths, thickness.*



## The Delights and Dangers of Dangling in Trees for Monkey-Style Hunting



By Jim Dougherty

# TAKE TO THE TREES

L.J. MacKool is called "Mac" for obvious reasons. I had reason to believe "Crazy Mac" would be more apt, and was voicing this observation, while reaching for the bottle of Scotch he slid across the table between us.

"Jim, I'm telling you. Your shot won't be more than thirty feet, and you won't shoot anything less than a ten-point the first day." Thirty feet is my distance, but I have a tendency toward sober skepticism, when someone is guaranteeing a bowhunting situation that good.

I had arrived in McAlester, Oklahoma, for my indoctrination in the art of bowhunting the wily whitetail deer. From all that I've been told and read, people just don't go calmly about clobbering ten-points at thirty feet. Mac, however, knows his business. More whitetails have wound up on the short end of an encounter with him than you could count on all your fingers and toes. You would have to borrow several sets of nearby feet to get half a total.

"Well, I came here to be shown. Just how are we going to get me a whitetail at thirty feet? But before you tell me pass the soda."

"A tree, my friend. You are going to sit in a tree and the deer will walk right under your tree. Just don't shoot anything under ten points," he confided.

"I shot a big buck once, from a tree, back in my formative years. I got so shook afterwards I about fell out. Very dangerous business, this hunting out of trees."

"We have a rope so you can tie yourself up in. You are up about twelve feet, a high blind."

To be perfectly honest, at this point I wasn't the

slightest bit concerned about shooting a whitetail. After all, they couldn't be that much tougher than mule deer. If this place was such a hot spot, I'd just go out and give them the old western stop-and-go tactics and tag a deer. Ignorance is bliss and the Scotch was pretty good.

Hunting whitetails, I was to learn quickly, is not at all like hunting mule deer. The only similarity, as far as I'm concerned, is that they both have four feet. They put bigger springs in the *virginianus* models, however.

The next morning, I greeted the day with a sore head. Mac took me in tow. Off we went to the Naval Ammunition Depot to meet Colonel Robert Jones of the USMC garrison based there. The NADS site is chocky jam full of whitetails and the surplus has to be harvested on an annual basis.

This is carried out under the direction of Game Manager Jim Hodge, who works for the state, and Fred Lowry, whom everyone calls Davy Crockett, if for no other reason than he is a hell on wheels hunter with a middle name of Crockett.

These fine gentlemen gave me the inside on the program and filled me in thoroughly on security regulations and precautions. The base is open to bowhunters for two week ends, and believe me, they flock in. I was to soon see why.

The day was spent putting up tree blinds. In between locations we ogled the deer, conspicuous by their abundance. I also spent some time slipping about in my best western tradition, trying to practice sneak the whitetails with a camera. No way!



Left: Dougherty illustrates how he shot his first deer from a tree 14 years ago, but balancing on a limb offers little in the way of maneuverability, can be dangerous. (Below) Tink Nathan, executive secretary of the Professional Bowhunters Society, is one who uses a homemade stand on cross-braces fashioned from logs native to area.

Mac had several portable tree stands, some he had designed himself, and a couple of commercial models. We utilized one-by-twelves, and nailed several platforms in trees, that were built properly in good locations. My blind, which we set up last, was a commercial model with a little, teeny folding seat, and we did put it up twelve feet in the air. On a trial run, the twelve feet looked pretty foreboding. The platform was about the size of an index card. There was no room for extras, barely enough for my size tens. I got the impression it would be no problem at all to fall off.

Setting a tree blind is tricky business. The shooter has only a limited field of maneuverability for a shot. Knowing just where the target will be is crucial and care must also be taken to give the hunter as much cover as possible, without restricting his necessary motions and to avoid silhouetting him. We did all these clever things that day. I was pretty impressed, and after my trial stalks, I was beginning to see the logic.

I sat in my blind the evening before the season with my camera and a handful of acorns. By dark, fourteen deer had passed by. I saw four bucks, one that I estimated as an eight-point. I had vivid intentions of jabbing him on opening morning. Never in my born days had I seen goosier animals.

The following morning, seated on my postage-stamp platform, I awaited full light to the rhythmic chattering of my teeth. It wasn't that cold. I was either excited or scared that I might fall off.

The promised rope with which I could secure myself was



nowhere to be found. It may sound like the chicken-hearted way, but I have become a firm believer in a safety rope in a tree blind.

With full daylight, I suddenly was looking at a deer slipping silently straight to my position. A bald headed deer. Within the hour, an even dozen had come along, most of them passing on the appointed trail, just as we had planned. I was impressed. Not one deer ever was aware of my presence. They were all does and one little forked horn. The promised ten-pointers were elsewhere.

When I first saw the big buck of the evening before, he was on the bad side and I was sitting. There was no way to shoot and I dared not move, as a doe and fawn were feeding almost straight below. The buck took off in a stiff-legged trot after another doe.

About eight-thirty, a buck hopped out in the clearing in front and headed right to me. He was a six-point, pretty and alert. He stopped right under me and, raising his head, looked me right in the eye. We carefully studied one another, then he dropped his head to the ground to feed. It was a trick. He popped those two eyes right back up, as if he intended to catch me in an imardonable act.

Half torn between the desire to shoot and the desire to let him go, I was undecided. His big brother who hopped up, made up my mind for me. This one sported an honest eight and was twice the body size of the six-point. He trotted straight across the opening and came to a halt on the other side of my tree. He was twenty feet away and safe. There wasn't a thing I could do but wait.

I could hear him chewing up acorns behind me, and all the while the six-point was moving in his direction. Soon I was going to be reduced to a zero potential situation. I decided to shoot the six and the heck with MacKool's ten points. As I slowly raised the bow to bear on the little buck, I had to turn slightly in the direction of the big buck. Out of the corner of my eye I could see him studying the whole program. He kind of grinned and let go a snort that about knocked me out of the tree. So much for that. The six-point's first bound carried him off about eight hundred yards.

After I climbed down, MacKool greeted me with what I can only say was a nasty grin. He had collected one of the NAD's famed fallow deer, an old timer with a huge palmated rack. Besides everything else, there went five bucks down the tube. Conceivably I could still best Mac, but I wasn't making any more bets. None of this double or nothin' jazz.

The big buck had come by Mac's tree blind in heavy cover, passing an opening about twenty-five yards. The first shot took him in the hip, angling forward, and as the confused buck circled the blind in his dash, a second slipped through his ribs.

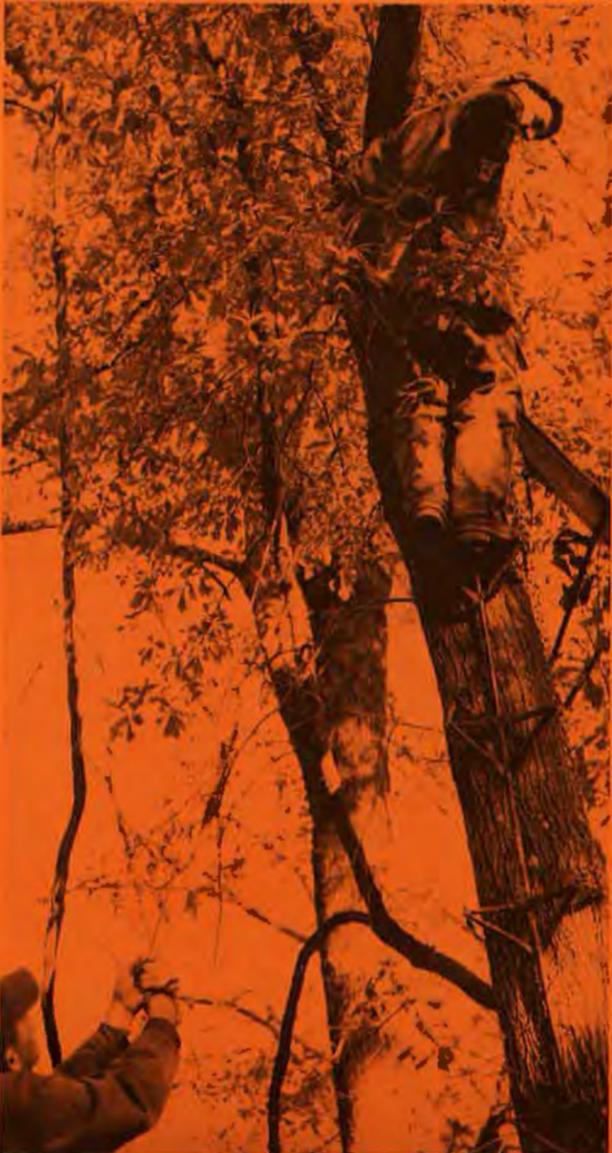
There are a lot of disadvantages to being in a tree. The advantages of height, wind and concealment are obvious, but the advantages are about equalled by the restrictions. Twenty minutes into my watch of the afternoon, I heard the unmistakable sound of something chewing up acorns. One eye wrapped around the tree trunk at my back clued me in on the culprit. This was another eight-point that had made no sound in his approach and was in a vulnerable position. His path was headed right up the slot along the little creek that was ten yards from my blind. As he came along the trail behind me, I could hear each step. The bow was ready, arm extended covering the spot on the trail.

Casually he turned to his right, still short of the tree and bounded across the creek. Unspooked, he sauntered away



*For those shots that may be almost beneath the archer, it always is a good idea to be tied in with a rope to avoid over balancing.*

*MacKool puts up his portable blind. Note the clamp-on ladder that makes mounting the blind and future access a much simpler matter.*



looking for does and gobbling acorns. He passed a small opening at forty yards and out of desperation, if not frustration, I turned the arrow loose at the hole filled by his golden hide. The shaft hummed through like it had eyes --- after the hide had passed beyond.

The McAlester hunt did result in my first whitetail, a button buck that came late on the afternoon of the last day of the season. That happens to be the way my luck runs. Less than magnificent, he was nonetheless a whitetail and I felt some satisfaction in adding one of these creatures to my collection of sub-standard representatives of North American big game.

My education in hunting monkey-style wasn't to end there. A few weeks later, I was in Louisiana sitting in another tree. My blind on this hunt was a portable step ladder arrangement with another comfortable postage stamp at its peak. Butted snugly to a towering pecan tree, I had a commanding view of several deer trails and a field

dotted with new green rye tops. It was here that I found the best use for a safety rope.

It was impossible to shoot sitting down from this blind as a full draw could not be made against the steep downward angle. I was to find out another complication of tree blinds. It was an hour earlier than the deer were supposed to be moving, so I was sitting on the platform, bow across my lap, sucking on a jaw breaker the size of a new Dunlop golf ball.

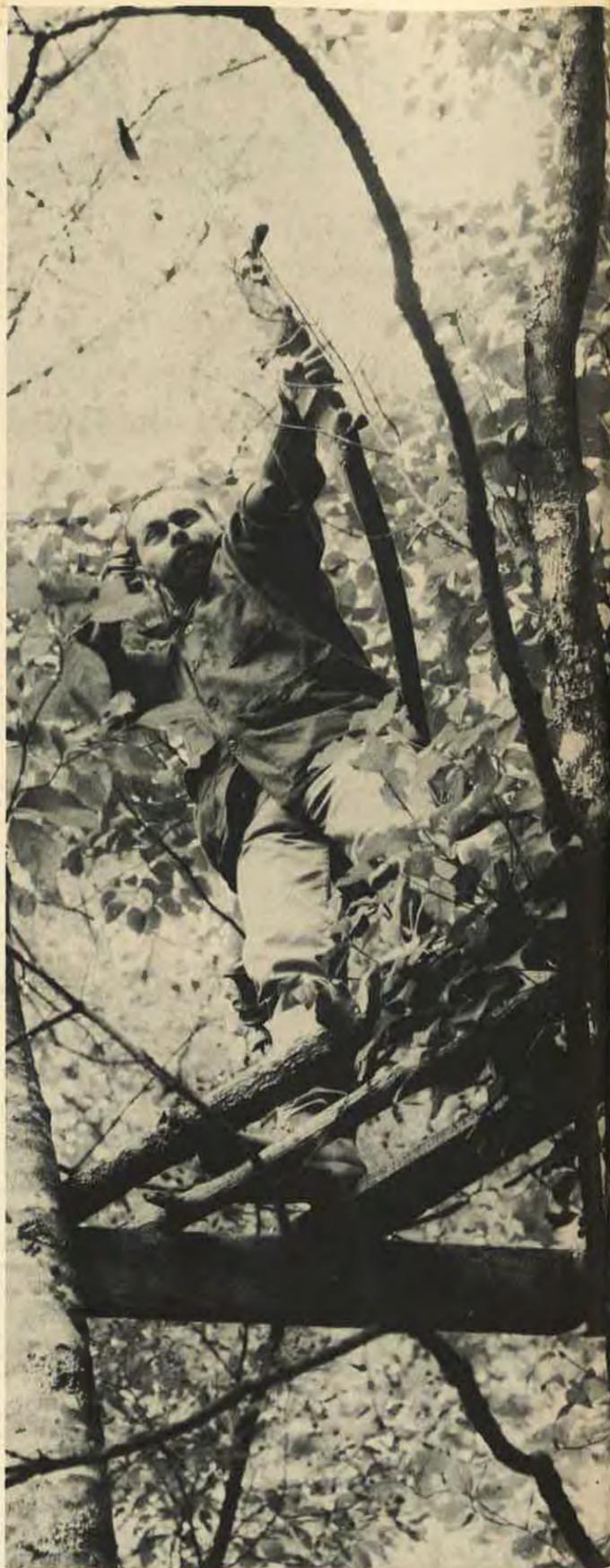
A big doe stepped out twenty yards away and began to feed daintily on the new sprouts. We were allowed a handful of deer apiece in Louisiana. Carefully, I brought the bow up, after first depositing my jaw breaker. A jaw breaker filling your entire mouth is hard on your concentration. My left arm stretched back drawing the string -- for about fourteen inches -- before my elbow ran into the tree trunk.

I kept jamming my elbow into the tree, hoping for a

*Accommodations may be limited but they are comfortable for the author as he waits in sitting position for any sight of a deer.*



*Tree stand can be fashioned from materials at hand with little effort, yet affords an archer freedom of movement if it's planned.*



spot that would allow me to finish the draw. Naturally, my commotion aroused the deer's attention. She was now standing half cocked, watching me bang my elbow repeatedly into the pecan. Something had to give, so Molly made up her mind and became absent.

From then on I stood. I drove a nail into the tree and hung my bow, with the arrow nocks pinched tight on the string and an arrow within easy reach.

The rope was looped over one shoulder and around the tree. I allowed enough slack so I could lean way out over the edge at a relatively steep angle. This made shots straight below easy to cover, once you convinced yourself the rope would hold. When another big doe walked under that Louisiana pecan, I was leaning almost flat out over her back when I turned the arrow loose.

The angle of a shot from a tree blind makes heavy tackle necessary, in my opinion. If the shot will be taken at a relatively flat angle, then medium weights would suffice. Other times you happen to be in a spot where you need a lot of stuff on the arrow to drive it clear through from the top. With a high wound and no low exit, trailing can be difficult at times.

Most tree blinds are restrictive. Mac has the right idea with his homemade stands. His platform is larger than most, padded with rubber and vinyl-coated for additional warmth. They are extremely quiet. With his portable ladder arrangement the blind goes up in minutes, is secured with chains and solid enough for two big men.

Picking the proper tree is the secret. A tree with a big crotch up over eight feet is excellent.

The best thing about a tree blind is the elevated vantage point. You really can see what's going on and chances at a greater variety of game are easier to come by. Sitting in a blind never has been my strong suit, but in a tree it seems as though more is going on. I think it's easier to stay in a tree blind after you get in, if for no other reason than the problem of getting up and down.

Where it is legal, more hunters are taking to the trees for the big, wide-racked bucks than in the past. It's not as simple as it may sound. In areas where deer have been hunted from trees for several seasons, a lot of deer, particularly wise old does, walk along and spend a lot of time looking up.

I talked to one fellow, who had missed a big doe from a tree on two successive days. On the third day, he watched her come along, slowly checking out each tree, until she saw him. She made a wide circle, snorting and blowing all the way. The next day, she did the same thing; spotting him, circling, and telling all the world about it, until finally



*Hunters check in a deer taken from tree stand during open season at the naval installation in Oklahoma, where whitetail abound.*

*Fred Lowry carries a portable tree stand into the field for it to be installed in tree prior to beginning of the hunt. Most of the commercially constructed models are lightweight, easily handled.*

she walked under him and he drilled her. The sneaky guy had put a dummy in his old blind and relocated on the deer's new trail.

Camouflage is a must in a tree, especially on the face and hands. It is easy to match up to the foliage and shadows of a tree to hide the body.

It may not seem ethical to lie in wait of game, hidden from eyes that seldom look up. I have talked to some who consider it less than sporting. Perhaps they have a point. However, things are never that good or simple when you are hunting with bow and arrow. I have to go along with the tree hunters. It is a good way to go about the fine art of bowhunting, for whitetails in particular. If it was all that easy, then what ever happened to that Oklahoma ten-point at thirty feet? ●





David, center, with Junior Olympic winner group in all classes, with trophies.

Despite a record entry list of over 1600 which included most of the big names in the sport, the applause was being reserved for a timid youngster from Olney, Illinois, when the last arrows were shot in the 1968 International Indoor Archery Championships at Detroit's spacious Cobo Hall.

As a preliminary to the international competition, the inaugural Junior Olympic Archery championships were contested, as a crowd of an estimated 5000 was treated to a remarkable exhibition of marksmanship by young David Wilson.

A sixth-grade student at the Silow Street School in his home town of Olney, David has been shooting for only 3-1/2 years, but he looked like a veteran campaigner while placing arrow after arrow into the exact center of the gold and earning the championship of the Junior Boy's Division with a perfect 540 total.

Wearing a pleasant smile, yet appearing somewhat bewildered by his successful invasion of the big-time ranks, the boy also proved himself a most gracious champion.

He first started shooting with his brother, Steve, who placed second in the Junior Boy's division with a mighty respectable 534 score.

Although their father and mother and five-year-old sister, Linda, are non-shooters, the brothers shoot every night of the week for sometimes as long as three hours. It has been touch and go as to which is better for quite some time.

Calling archery his only serious hobby, David has won a few local tournaments in Illinois. He says he enjoys shooting the PAA professional round most, and adds that he has been looking forward to competing in the nationals.

Anyone who might have passed off the last statement as a youthful dream found in a hurry the next day that the kid from Olney was for real.

This was Saturday, the start of the International Open, supposedly a tough spot for a twelve-year-old to be making his debut among the men. He had shot a perfect score in the junior competition, but the pressure would be greater here. The old adage about separating the men from the boys never was more overworked.

David still had a surprise or two left for the doubting thomases. The boy, who stands 4-1/2 feet, shot a 299 for the first-day lead. Even more surprising, he still was leading the pack until the tenth end Sunday, when disaster struck.

David's first two arrows had found the spot but upon drawing his third arrow he mistakenly shot on the clicker of the competitor next to him. His shaft dropped into the two ring.

A look of despair flashed across his face and he lowered his head and shook it to one side. One couldn't hear him, but he was scolding himself mentally for blowing his big opportunity.

David regained his composure and proceeded to place his fourth and fifth arrows where he aimed them — dead center. At the end he had a twenty-three for a 294 and a two-round aggregate score of 593. He had put on a tremendous performance, a showing that can only result from practice and more practice.

David's equipment consists of a thirty-five-pound Bear Tamagin bow, Easton 1616s, cut to twenty-five inches, with American Archery nocks, and a twenty-inch Bear stabilizer with the Root weight.

He also uses a small piece of tape as a rear sight on the twelve-strand dacron strings, which he makes himself, and displays excellent form while anchoring under his chin and shooting from an erect position.

Getting back to the Junior Olympic competition,

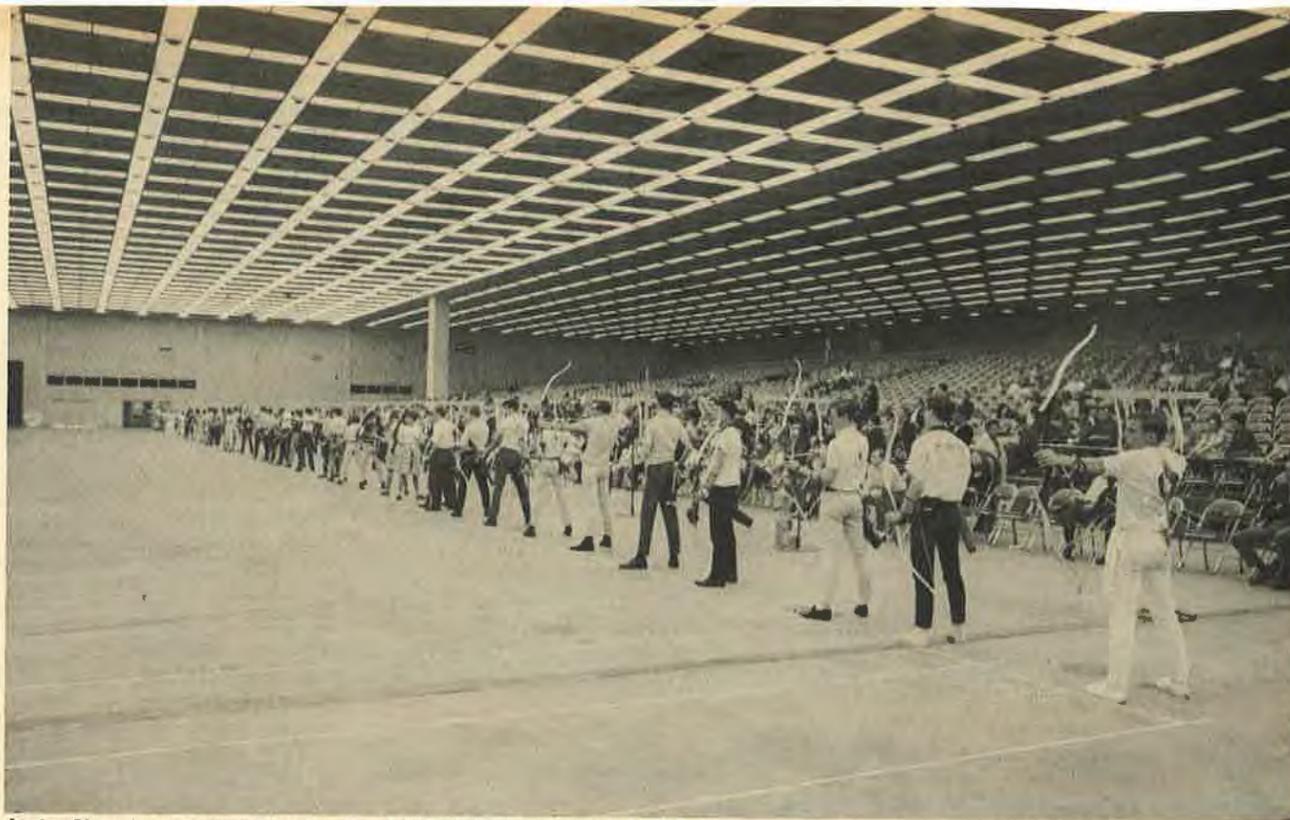
The Pint-Size Archers Stole The Thunder From The International Indoor Big Boys!

# Profile of a Champ:

## DAVID WILSON By Joe Higgins, PAA

*Though only a dozen years old, David has learned the value of faithful practice.*





Junior Olympic contestants shooting the 1968 Indoor Championship at Detroit.

approximately two hundred youngsters from all over the United States participated and the enthusiasm displayed by them was a pleasing sight to these target weary eyes.

Next year should produce an even greater attendance. Encouraged by the success of the initial endeavor, tournament officials are predicting a turnout that may well exceed 500 junior competitors.

It is my personal belief that, if every serious-minded archer or instructor took it upon himself to put together a team of these aspiring youngsters, the personal satisfaction derived from watching them improve would be most rewarding.

What could be more satisfying than following the progress of one of your own products from the beginner's level to the stardom achieved by young David Wilson?

The Junior Olympics classes included Cadet boys and girls, Intermediate boys and girls, and Junior boys and girls.

In addition to the fine performances turned in by the Wilson brothers, as they finished first and second, little Robert Rusch of St. Clair Shores, Michigan, was impressive in the Junior Boys division as he placed third with a 530 score.

He is a spitting image of his dad, Robert, Senior, with whom we had the pleasure of shooting during the 1965 Nationals at Point Pleasant, West Virginia. A fine archer and nice guy, the senior Rusch was a proud father over young Bob's showing.

The Intermediate Boy's crown went to Steve Lieberman of Reading, Pennsylvania, who posted a 538 score, while Thomas Ladd of Caledonia, New York, finished second at 524, and Joy Boyd of Findlay, Ohio, was third on the strength of a 518 total.

Another youthful representative of Caledonia, Charles Carson, walked off with the Cadet Boy's championship after shooting a 494 aggregate. Second place in this division went to David Harper of Portland, Indiana, with a 456

score, while Jeffrey Parise of Royal Oaks, Michigan, wound up third at 454.

The Junior Girl's pacesetter was Betsy Sne Harvey of Knightstown, Indiana, who carded a 510 total. She was followed in second and third place by Janice Wilson of St. Clair Shores, Michigan, at 468 and Jacquelyn Orvis of Flint, Michigan, at 446.

The state of Michigan was well represented in the Cadet Girl's competition, where Julie Coay of Battle Creek edged Geralyn Hoerauf of Royal Oak, 409-392, for the championship. Third place in this class went to Susan Buck of Cincinnati, who came in with a 382.

In the Indoor Open, Jim Ploen of Bloomington, Minnesota, recorded his second victory in this event, but had to survive a shoot-off with Ray Cearley of Indianapolis before making it official.

Shooting a Herter's bow with stabilizer, Ploen proved himself a pressure-tested competitor in the shoot-off as he shot a twenty-five to Cearley's twenty-four.

Ploen had carded a 299 for the first-day lead and added a 296 for an aggregate 595 Sunday, while Cearley opened with a 295, then roared home with a 300 in the second round of the competition.

Placing third in the final standings was Richard Roberts of Three Rivers, Michigan. Shooting a Dickie's Fireball, a bow he manufactures himself, Roberts carded a pair of 297s for a 594.

Meanwhile, Fred Hurst, a newcomer to the national ranks from Tacoma, Washington, finished fourth at 593 after shooting rounds of 296 and 297.

Art Robinson of Orange, California, placed fifth with a 297-295-592 performance, while Vic Berger, the outdoor professional champion from Springfield, Ohio, came in with a pair of 296s for a 592 and had to settle for sixth spot in the overall standings. Seventh in the star-studded field of over 1,600 was Ed Rhode of Muscatine, Iowa, who fashioned a 591 on rounds of 295 and 296. ●

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**Jeff Haines**  
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**Eddie Snyder**  
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Your "Scratch & Dent" sale ad of Hunting Arrows was given to me by a friend who was well satisfied with his purchase. I would like to put in an order for 2 dozen.

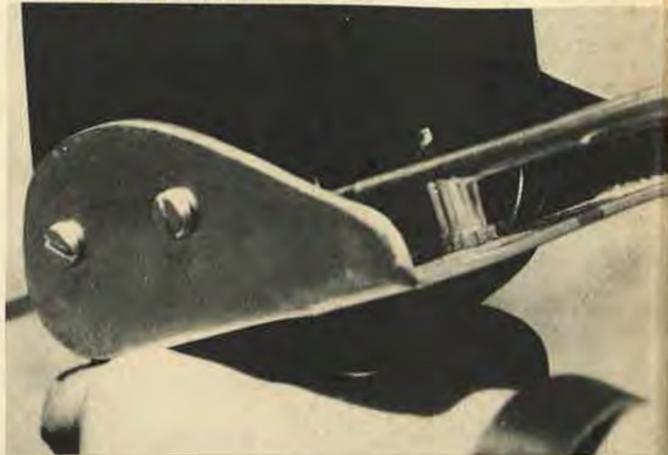
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I recently purchased one dozen of your cedar arrows and I am very pleased with them. I also want to thank you for your rapid service.

**Robert J. Martin**  
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Left: One gains a target's eye view as Vione Miller prepares to line up shaft in keyhole. Note Merrill sight, sight bar on back of bow. (Below) Overdraw shelf is fitted with rest cut short from a nylon toothbrush.



by C. R. Learn

**BOW &  
ARROW  
TEST**

Peeking Through  
The Keyhole May Prove  
A Boon To Bowman

Cutting capers with a keyhole bow proved to be a joy. I am some slouch as a target shooter and this revolutionary bow made me feel ten feet tall on the range. But let me explain how this bow came about.

The idea of shooting through a keyhole or center-hole in the bow isn't new. Flight archers have been doing it for years. This isn't a center-shot with the shaft resting right or left-handed on the side of the bow. It is a keyhole bow designed to have the shaft fit through the center of the bow, with an overdraw shelf behind and nothing for the arrow to bend against. It gives a clean uninterrupted flight.

Harry Drake has made more archery flight records in his lifetime than there is space to enumerate. He also sold his own bows for years. Finally he stopped making anything but flight bows, for himself and his customers. He is the

# The KEYHOLE CAPER

only flight bow manufacturer in the country that I know of.

During his experimenting years he decided to see how a target bow would perform utilizing the flight principle. He took twenty-inch limbs and elongated the riser or handle section. To follow through with the idea used in flight, he made a full center-shot bow with a seven-inch sight window. This is longer than the usual small round keyhole found in flight bows, but the principle is the same. He placed the handle for the bow below the keyhole.

His first bow drew twenty-nine pounds. This is light for some target archers, but the bow had much to say for itself. Drake finished the bow using a walnut riser, the usual glass facing and backing. He used a tapered lamination in the hardwood limb core as well as tapered limbs.

Length of the bow came to sixty-four inches completed, still using the same short twenty-inch flight limbs, adding the remaining twenty-four inches in the riser section.

This bow is like none you ever have seen. It looks like a conventional bow when held by the archer, but the giveaway comes when you reach for a shaft. In shooting a conventional bow, the arrow is placed on the shelf. It rests against the side of the bow, is drawn and released. With this bow the arrow sits dead center on a section of nylon toothbrush Drake has cut down for an arrow rest. To make it more distinctive, it has an overdraw shelf. This gives an archer the advantage of being able to shoot a shorter shaft. I use a twenty-eight-inch shaft in target, and this bow allows me to shoot a twenty-six-inch shaft, one spine weight lighter than recommended. This gives a faster arrow, flatter trajectory and lighter shaft.



This view of the keyhole bow by Harry Drake shows the beauty of its construction and the symmetry of the limbs, riser section.

Drake mounted a Merrill sight on the back of the bow with the markings for the different distances. In the string itself he uses a peep. When I first saw the bow, my reaction was, "How do you shoot it?" This could be a problem, as there is no archer's paradox.

With this keyhole system there is nothing for the shaft to bend around. If you use the right-hand finger release, the arrow will fly off the nylon rest and into the side of the bow, with poor results if it ever does get airborne. If you use the three-finger release, the shaft usually will bang against the side of the keyhole and drop out a few yards in front. This is not conducive to good scores. A bowlock won't work. It utilizes the same principle of the shaft bearing against the bow. The new Six Gold release might work with patience.

How can you get an arrow to fly out of this bow? Back to the flight principle and the double flipper, a leather strap doubled around, with one end longer than the other and a rivet at the back. The loop fits around the little finger with the long side of the flipper laying against the palm of the hand. When you use this release, place the short end of the strap around the bow string below the nocking point. Bend the longer inside end around the string and short end. Then hold the loose end of the flipper, which will be on the outside facing your thumb, by pressing the two pieces together and holding them with the thumb and first finger.

To draw the bow, pull back with the flipper in place, come to draw and anchor and relax the thumb-finger pressure. The double flipper unwraps first with the long side flying out, then the short side moves away from the string, and the shaft is long gone on a straight, true flight to the target.

Well, it's not quite that simple. The leather of the flipper must be hard enough not to soften under string and thumb pressures and soft enough not to take a hard or permanent set. It shouldn't stretch, as this would make the flipper gain in length and cause erratic groups. Trial and error with different types of leather will give the desired action.

The nocking point on the string is identical to other bows except Drake uses a double nock, one below the shaft and one above. The one above gives the shaft the proper nocking height, critical but not difficult to determine. The lower nocking point prevents the flipper from riding up and putting pressure on the shaft and upper nocking point. A piece of dental floss or serving thread on the ten-strand string between the nocking points allows the shaft to sit on the string with no aid or pressure.

With this double flipper system there is no actual contact with the shaft in any way. When you shoot three fingered you hold the shaft, or at least have contact with it between the first and second finger. With the bowlock you can use the thumb for contact point and with the Six Gold or new Little John release, there is no contact with the shaft.

When Harry Drake first showed me the bow, I tried to keep an open mind. We went to Drake's range, where he loosed a few shafts. Eventually I managed to get the bow.

My usual style of shooting is canted bow, leaning into the bow, bowlock release and snap shooting. I do have an anchor point, but when I touch it, the shaft is released using instinctive technique. At one time I tried sticking some colored pins in a piece of tape, but I never had tried a true commercial sight.

Just getting strapped onto the bow seemed a chore. First the hand goes through the loose-fitting bow sling, then the



To use the double flipper with this bow, one places this double leather strap in the open hand with the long side next to the hand. (Below) Wrap the shorter inside leather around string away from the body or toward the outside of the string. When the first leather is in place, wrap the other piece around the first piece, then bring it back to the side of the thumb, author says.



When you apply pressure to outside flipper section with the thumb and first finger, you have the double flipper wrapped and ready to draw. Relaxation of finger pressure cause the arrow to fly.



shaft is placed through the keyhole and the small nocks are pressed around the built-up serving between the nocks on the string. The arrow is held to the string by the nock, the bow is lifted to position and the double flipper is attached to the string below the bottom nock.

This was a two-handed job at first. It must have been a sight to see a man holding a weird looking bow between his legs, while the bow's upper section dangled by the bow sling from the left wrist, with both hands madly wrapping the short left side of the flipper and the long right side around the string.

When this was done, I raised the bow and tried to get that little 1516 Easton aluminum on that small nylon rest in the middle of the overdraw shelf.

The shaft remained in place. I lifted the bow and the shaft fell off. I had canted the bow. This bow will not perform with any technique but a straight up and down grip. Keeping this in mind I lifted the bow, gripped the flipper between the thumb and side of the first finger and started to draw.

My usual anchor point is the corner of the mouth, but with this sight-peep system it is under the chin. I came to a comfortable position, aligned the peep in the string with the round ball-centered Merrill front sight, and lined up on the gold center of the target forty yards away. A slight relaxation of the pressure on the flipper and the little 1516 zipped down the range, plopping into the red seven ring.

Not bad, but what was that lying on the ground in front of me? I failed to notice and Drake failed to mention that the fletch on these shafts is different. Drake uses three Plastifletch 2-3/8-inch P-26 vanes on his 1516 shafts. They are fletched in the usual manner, but what he neglected to mention was that they go on the string in a different manner. Usually the cock feather is mounted on the left for right-handed shooting. This allows the feather

to clear the side of the bow. On the keyhole bow the shafts are fletched with the nock pressed on snugly, then the nock is moved so the cock feather is in a vertical position. This allows it to clear the bottom mount of the nylon brush rest.

So I had one arrow in the bale-minus one fletch. This time I mounted the cock-feather vertically. As I started to draw, Drake mentioned that the bow would perform better if I didn't strangle it. Now I stood with an open stance, the bow held loosely in the left hand, whipped the flipper around the string one-handed this time, came to draw, managed to keep the left hand from closing on the handle, aligned the peep, pin and target and struck gold!

I am the first to admit my target shooting won't panic the PAA, but I still enjoy a round once in a while. My first impression was that, in the hands of a truly serious target archer, this bow might just set some new mark. It was an effortless one-point release. The shafts are shorter, lighter and fast in flight. Drake said for this twenty-nine-pound bow he determined a point on distance of 125 yards, using the under-chin anchor, full draw and sighting over the tip of the shaft to the center of the target.

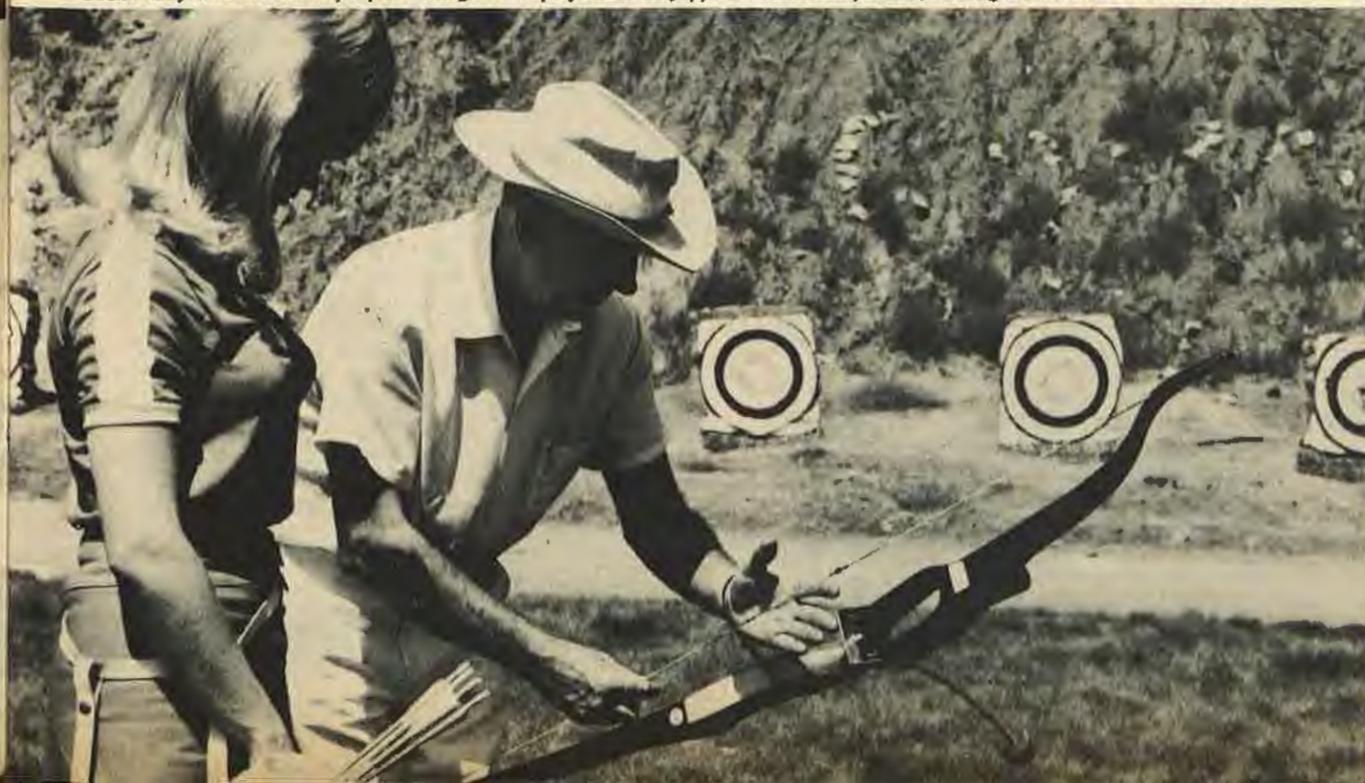
"I believe this is the most accurate system ever been devised for shooting a bow by hand and still officially sanctioned by the NAA," Drake said.

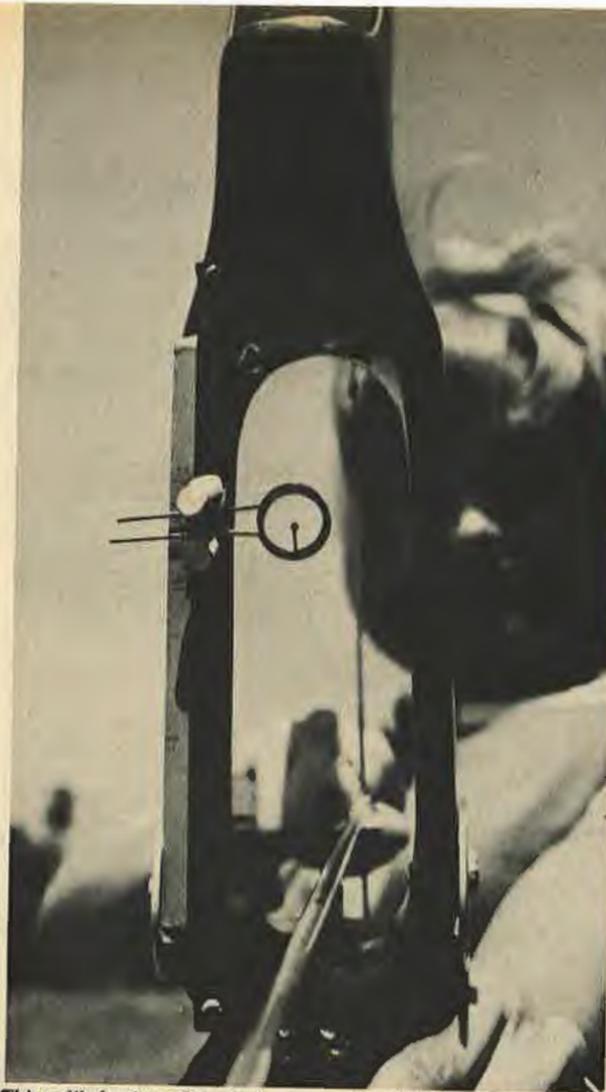
For curiosity we decided to see if other archers would have any trouble with the flipper. The shooting technique is the same — loose grip, under the chin anchor and pin, but the flipper might flip some archers. We called on Vione Miller, who spends more time hunting rabbits and rounding the broadhead range than target shooting. I thought she would make a good test for the flipper.

We met at the archery range located near the football field at Calwestern University on the ocean side of Point Loma in San Diego.

Miss Miller had no problem with the flipper or the

Drake has found this technique for starting the wrap of the novel flipper to work best for him, although some do it with one hand.





This unlikely view of the Drake innovation in bow building gives one a view of the sight, string and position of the arrow on the rest. Note that the sight is located inside of the bow's keyhole.

Double nocks on the string aid in this type of shooting, author insists. The center between the nocks is built up in order to make the nock of the arrow fit snugly, but still release freely.



keyhole technique. After a bit of fumbling, she could one-hand the double flipper with dexterity.

I had to find out how the keyhole Drake would perform under target competition. The Chula Vista Archery Club has a monthly round and a congenial group to shoot with.

The day was hot and they shot the 900 round using the American face and yardages with ten-ring scoring. It has been some time since I shot with target people, and when I saw the groups some of them put in the bale, I felt it wasn't long enough.

I wondered if the flipper release would slow me down or hold up the other archers in any way. When I shoot target I shoot barebow and usually have my six shafts in the bale before the rest have shot their fourth. This is not conducive to good scores, as snapshooting will wipe one out in target.

I took the keyholer out for several practice sessions to get the sight zeroed in. At sixty yards I was just about halfway down the scale on the pin. I tried a few at eighty and still had over two inches on the scale to move the pin down. It is fast.

We all lined up for the practice rounds, then got down to the serious part of the game. I sent a few bad shafts wobbling down to the bale but even with a bad release they still scored. As the shoot progressed I became more impressed with the bow. The flipper offered no problem, and by moving the flipper one-quarter of an inch below the Nockset, I could get consistently clean releases. If I put the flipper against the Nockset it seemed to bind, and I got a few wobblers off. This could be overcome by using the standard tied nock, but I have become addicted to the Nockset. They are fast and have yet to move after I pinch them in place.

After shooting the required ninety shafts to complete the round, I had a score of 609 from a possible 900; not impressive against some of the other scores, but good for me. The afternoon showed improvement with a 620. It proved to me the bow had the stuff, provided the right man was behind it.

The bow brought mixed reaction from the archers present. Some looked, others came over to ask questions. I took special notice of the trajectory of my 1516s against the other shafts being shot. They were arcing high at sixty yards and the little keyhole was drilling them in flat.

I even retraced my shooting technique back to Zen to get the breathing system again. Don't knock it till you try it. There is a little book called *Zen In Archery* that has a few points to ponder. The breathing technique they use has helped me in the past in my target shooting, where holding and concentration are important. A little here and a little there makes a well rounded archer. I may not be the best on the range, but I read a lot.

The only irritant at the all-day meet was the flipper. It came snapping over the first finger and whanged the knuckle on my second finger. I had to put on a Band Aid to absorb the flipping flipper, but had no sore fingers at the end of the day as did some three fingered shooters.

Drake is planning to make a few keyhole bows if archers are interested in them. They will market at around \$250. They are unusual and accurate, but I always maintain that all bows are basically accurate. Some shooters aren't. But this bow gave me more confidence for target shooting than I ever had.

Drake is contemplating a heavier bow for hunting. This would have to be a minimum of forty pounds to meet most state laws. It would work from a blind or stand were one knew his distances and could hold the bow vertically. You certainly can't cant this bow or you'll lose your shaft.

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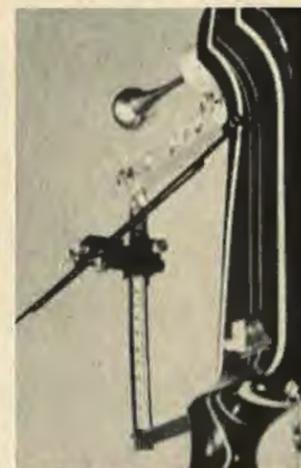
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# BUDGET BOW CASE

By Walt Knuepfer

For A Bit Of Time — And  
Minimum Loot — Give  
Your Archery Tackle  
Protection It Deserves

**T**HE advantages of a bow case, or a combination bow and gun case, are constantly reinforced by its presence and use. The specialized good looks and usefulness of a fine cabinet, and its display of treasured equipment, can be enjoyed by every sportsman.

Gun cabinets which can be modified to accommodate archery equipment, are available in finished, unfinished and kit form. The cost of an adequate cabinet can be quite expensive and the means of overcoming this problem was studied to improve that situation, since the purchased case would require extensive modification to make it a good bow and arrow case.

The least expensive way to construct a cabinet, a desk or a table is to attach it to a wall. The advantages are found in reduced cost, time in construction and maintenance. Cost is saved in materials, as no back is required, stiffening requirements are minimal — as the wall holds and squares the cabinet — depth of the cabinet also can be less than the standing type and no leg structure is required. A wall cabinet generally takes up less space in a room and cleaning under the cabinet is simpler.

The cabinet shown was constructed of selected No. 1 pine lumber of standard widths. The overall cabinet size shown is six feet high by thirty inches wide, but these dimensions can be altered to suit the requirements. With a cabinet of the size illustrated, up to four bows, forty-eight arrows, three guns,



binocular, knives and other miscellany can be stored in a non-crowded practical fashion. The upright side members were made of one-by-ten stock and the top and bottom beveled sections were made of one-by-twelve stock. Essentially, the basic cabinet structure consists of a rectangle, with a front glassed door and accommodations for the equipment. The two arrow containers consist of a removable rack at the top of the cabinet, and a removable sliding drawer at the bottom of the cabinet. Each of the arrow containers is completely removable from the cabinet to facilitate the construction, sharpening and storage of arrows. The rack is held to the top of the cabinet and a removable such as those used to hold the old style window screens.

Two blocks of the same thickness as the top section of the rack are attached to the inner top of the cabinet to provide a locating nest for the top of the rack. The wing fasteners are attached to these locating blocks. When constructing the rack, it is best to drill the top separately and use it as a template for the bottom, which is drilled only part way into the total thickness. Rubber syphon tubing, in three-quarter-inch lengths, is inserted into the holes to act as non-dulling broadhead retainers. The rack is set in height for your longest hunting arrows by sliding the bottom section to the proper dimension on the four support one-half-inch diameter wood dowels and by fastening the base to the dowels. The arrows are positioned first by pushing them in the proper hole in the top section and lowering it onto the rubber tubing in the proper hole in the bottom section. When shorter arrows are used, a longer rubber hose section is inserted into the base hole. About one-quarter-inch of the nock should engage in top section hole, after locating and settling the arrow in the base section. The drawer rack with its face of six-inch lumber also consists of one drilled through top section and

Continued on page 78

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### Part III

## Some Final Tips On Fletching For Your Favored Shafts!

By Steve Barde

# THAT STABILIZING INFLUENCE

**T**HERE is a shortcut when fletching with turkey fletch. There are pre-cut or die-cut feathers on the market that will allow you to fletch your shafts, not burn them. They usually come in packages of one hundred or by the dozen. You merely place the fletch in the jig and apply the cement as in the regular procedure. They save the time of burning, give a satisfactory fletch and come in various sizes to accommodate the hunter and target archers.

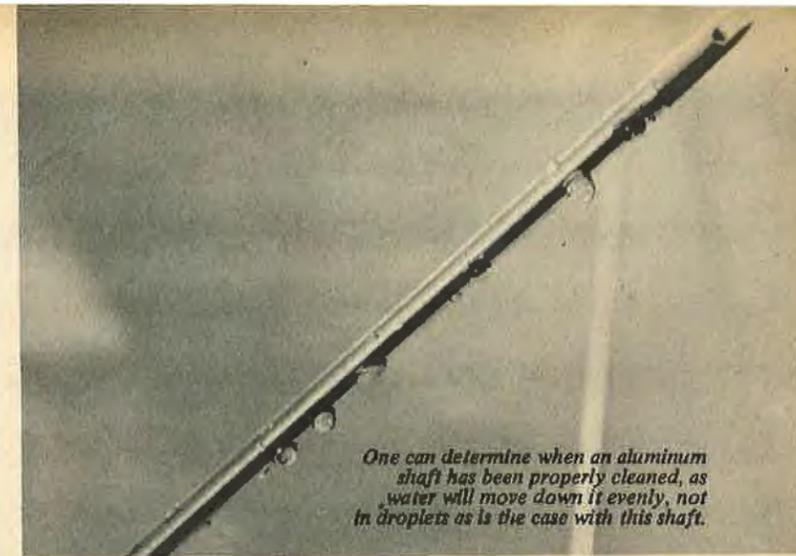
If you still prefer the full length fletch and object to burning, there is another method, using the **Little Chopper** sold by Waterloo Archery in Waterloo, Iowa. I have choppers in two different sizes and they really pop out the feathers. They are made with a cutter blade shaped in either the shield or parabolic cut from two and one half to five inches. There are three sizes in each and you can get two different lengths from each size. They vary about one-half inch on each form.

You place the full length tom feather in the base, lower the blade onto the feather and whap the top of the cutter head with a hammer. The blade cuts the fletch and out pops a perfect die cut feather. I ordered two sizes, the P5 to cut from 4-1/2 to five inches for the hunting fletch in the parabolic cut, and the S3 which cuts a 2-1/2 to three-inch shield cut for the target arrows. My first attempt was a success. Out came a beautiful shield-cut fletch three inches long with the end of the quill already tapered. All that is necessary is to place the die-cut in the clamp and fletch the shaft.

When I tried the long five-inch model, I had trouble at first with the heavy base quill and had to make a second tap on the base end. You can make the feathers fly with the Little Chopper. In less than an hour I had over one hundred of each size boxed and ready to fletch. These sell for about \$15.

Regardless of the method used for cutting — burner, purchased die-cut or your own die-cut with the Little Chopper — you have a good fletch. You seldom see anything but feather fletch on a wood shaft, but you can experiment with other types.

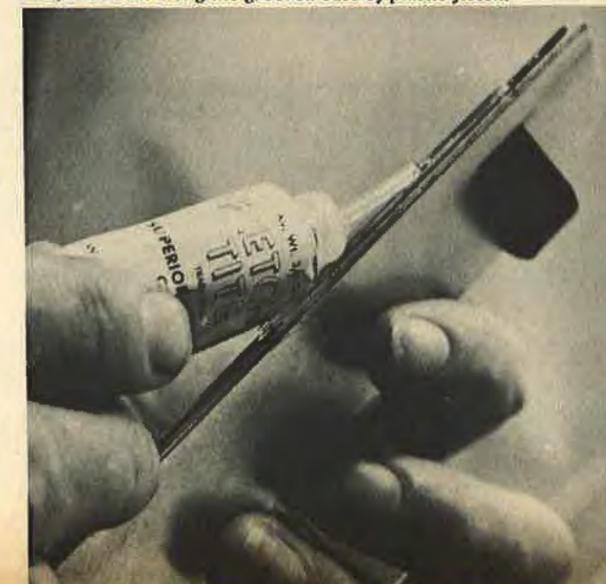
One that caught my eye was the **Fletch-ette**. These are three pre-formed plastic fletch on a tube base with the three fletch mounted on the tube. They can be mounted quickly by placing them in warm water and slipping them over the end of the shaft. You can give them a bit of a spiral by holding one end and twisting the tube a bit. I placed three on three different shafts

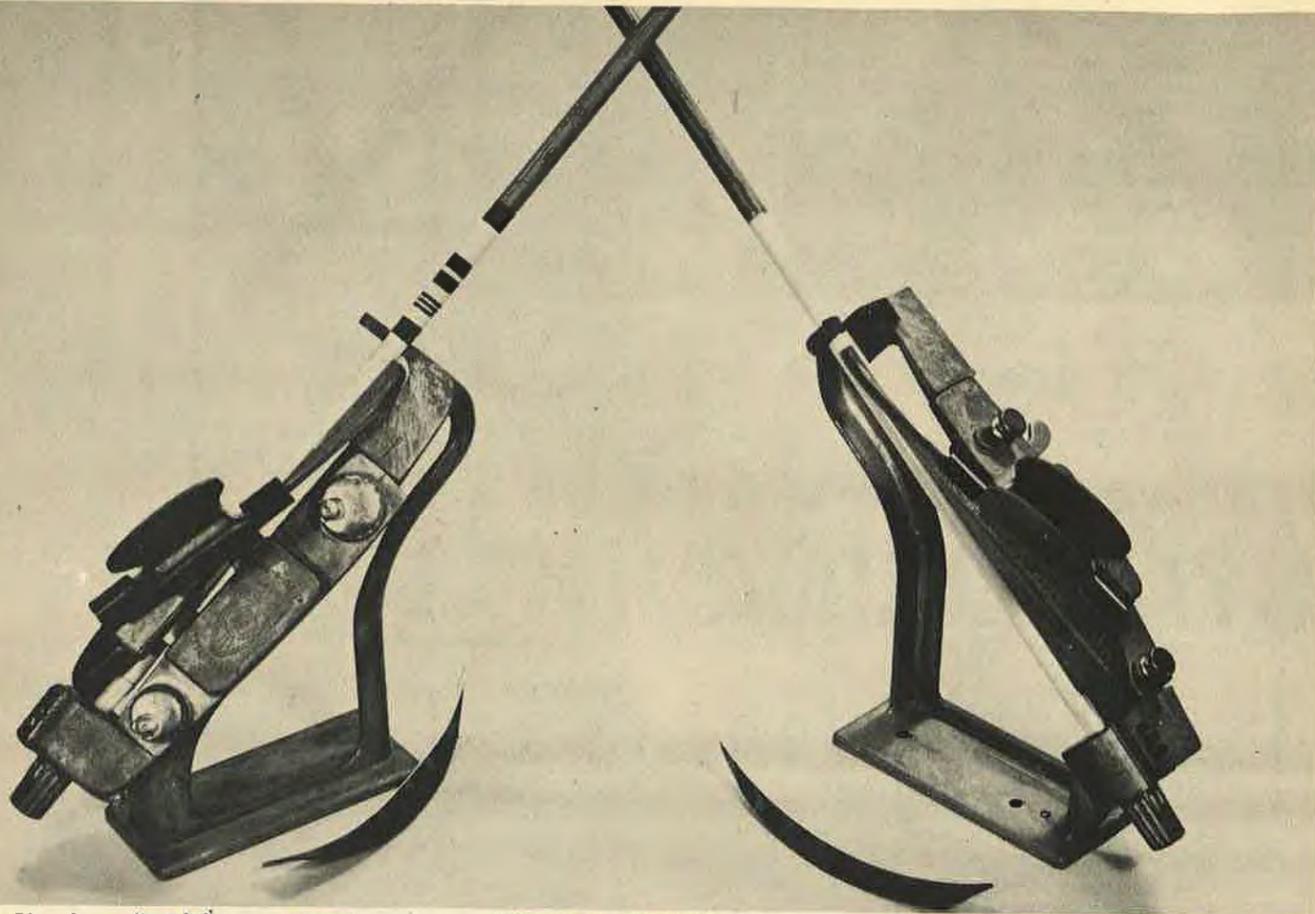


*One can determine when an aluminum shaft has been properly cleaned, as water will move down it evenly, not in droplets as is the case with this shaft.*



*To fletch with plastic vanes, pre-cut plastic material is placed in the clamp, positioned properly for alignment in order to keep all of the fletch even around shaft. (Below) The cement tube is squeezed to remove bubbles in the applicator tube. When cement flows smoothly, apply thin, even coat along the grooved base of plastic fletch.*





Bitzenburger jig at left fletches a right helical feather, while one on right holds the left helical fletch.

— two on woods, one tipped with a standard field tip and one with a Black Diamond broadhead. The third shaft was aluminum. I placed a lower parabolic fletch on it. These shafts are spined for a fifty-pound hunting bow, so I took them out to see how they would perform.

I usually mount my arrow rest on the shelf of my hunting bows and I was curious to see if the large vanes would clear the shelf. They didn't! I had arrows all over the bale and on two occasions the broadhead went into the ground about ten yards in front of the bale. I was shooting from a distance of thirty yards.

I wondered if it could be the rest on the shelf causing my problem. I took another fifty-pounder that had a Herter's brush rest mounted about one half inch up the sight window from the shelf and all three shafts flew straight and centered in the target. The plastic vanes hadn't cleared and were kicking up off the shelf, giving me an erratic flight. Once I changed the arrow rest position they flew well.

The Fletch-ettes would be a good back-up kit to carry on a long trip. If you get into rain or snow conditions, merely slip these over a few unfletched shafts. They would do well at a camp or school, as they will take a lot of abuse and are easily changed if damaged. Further tests would be necessary to see how they would hold for serious target work, but that would be for the individual to determine. Some people can't shoot a stiff fletch like this. They range in size from 2-1/2 inches for target to four inches for hunting or field work. They will fit shafts from one quarter to eleven thirty-seconds of an inch. There are comparable sizes for glass and aluminum.

For Forgewood compressed cedar shafts you follow the same procedure as for a regular cedar shaft. First

dip in lacquer, then fletch. They have a smaller diameter than the regular cedar materials but fletch the same.

The fiberglass shafts offer the archer a middle choice between the cedar and aluminum. They are rugged, not quite as finely tuned as the aluminum and better than the wood. There are archers who will take exception to anyone who doesn't tout their favorite. They all have their place and all are good in their own way. You are the final judge and must decide what you prefer.

When you obtain the raw shaft in fiberglass, the length will vary. Some manufacturers and dealers will cut them to your specification, others sell the raw shaft. An unfinished fiberglass shaft is about thirty-two inches long. Both ends may be rough.

When you cut these materials to your length, it requires cutting from both ends to remove the rough edges. Make a ninety-degree cut for the nock and adapter or target point to meet. Cut about two inches from one end, turn it around and cut your desired length. A hacksaw works well on fiberglass, but be careful you don't get filament threads. I use a small miter box that allows me to hold the shaft firmly against one side for a ninety-degree cut. As I make the first cuts, I rotate the shaft slowly to make a circling cut around the outside of the shaft. By the time you have done this there is little left to hold the shaft together, so it takes a slight cut to go through.

Lightly sand the ends to remove any rough edges. Place the nock insert, or if you have a Gordon shaft, the combination Nocksert, or if you prefer, you can purchase the aluminum or magnesium nock inserts for the fiberglass shafts. The cutting should be slow and careful to prevent a filament from pulling off the ends.

Your shaft is cut to length. Now you can take a

two-solution epoxy from the dime or hardware store, mix and apply a reasonable amount to the insert and adapter or target point. I prefer to make one epoxy mix and do both ends at the same time.

Set the shafts aside and allow the epoxy to harden. If you are in a hurry, place them near a light bulb and cover them with a small box or lid.

When the epoxy is set and the insert won't turn, you are ready to continue. If you prefer to dip the shaftment of your fiberglass in a lacquer dip, do so now, using the same procedure as for wood shafts. After the lacquer I use the Fletch-tite or Easton cement. They work on all types of shafts, while Duco is used only on the lacquered shafts.

Now for the undipped fiberglass shaft. Take your nocks, put a dab of cement on the insert, then place the nock on the insert and twist it around. This gets the cement flowing around and into the grooves on the insert and coats the inside of the nock.

When you first start making shafts into finished arrows you may regard the nock as just a piece of plastic to guide the shaft on the string. You're right, it does. However, a crooked nock sends off an erratic arrow. Put your nocks on as straight as possible. Place them on your cresting lathe and rotate them slowly. If the nock is out of line or off center it will wobble. If you work with it as it dries, you can get your nock on very true. This helps eliminate one more problem in the finished arrow.

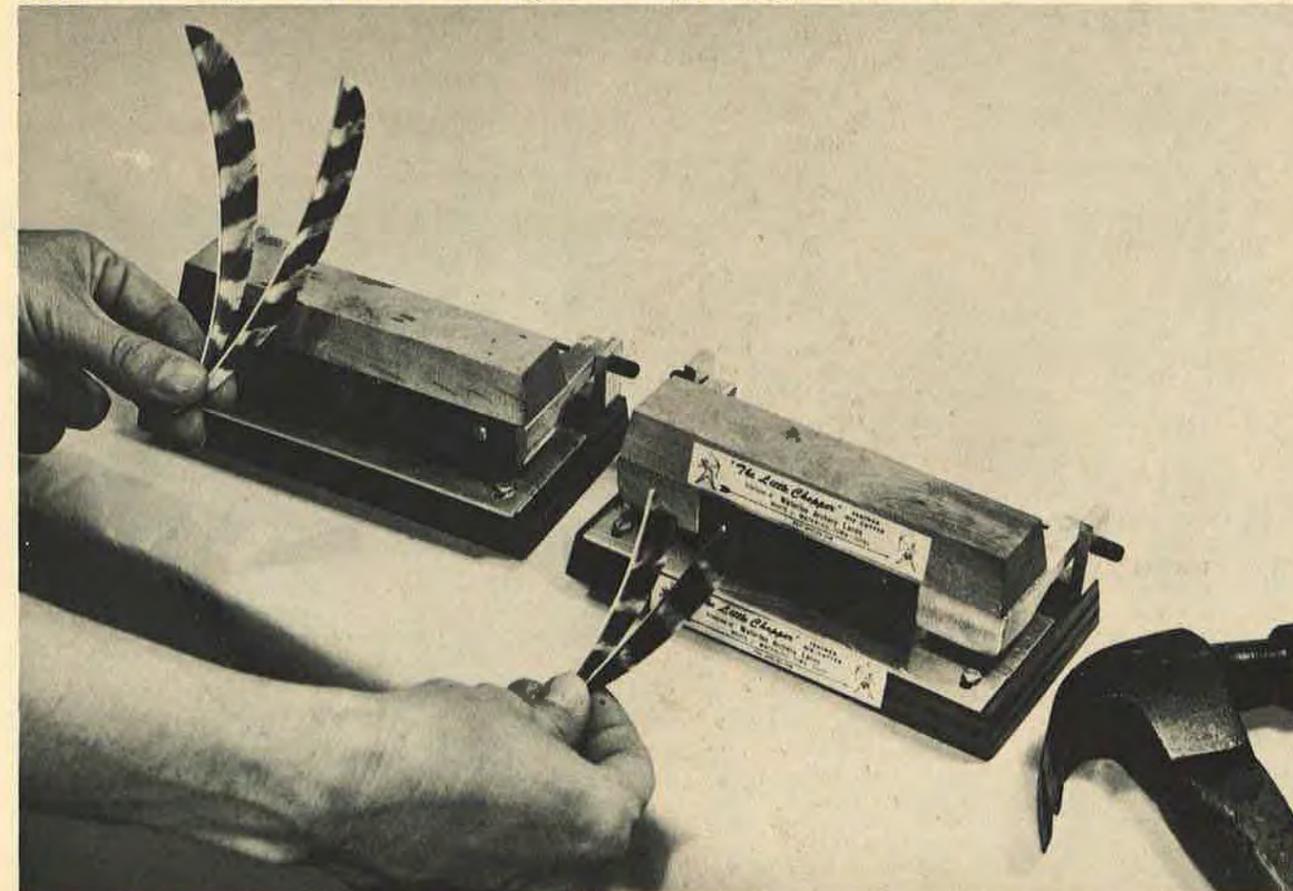
When fletching fiberglass and aluminum, the relation of the nock to the shaft is unimportant. Let the nock cement dry and you are ready to start fletching.

The cements don't adhere well to fiberglass material. In some cases the shaft may be covered with a very



The nylon Nocksert is placed into the tube of the fiberglass shaft, then it is seated to this shaft.

With the two Little Choppers shown, one can cut the long five-inch hunting fletch (left) or shorter shield cut.



fine powder from the factory. Wipe the shaft, take a portion of Fletch-tite, squeeze some in a lid or small jar, add an equal amount of lacquer thinner. Take your cresting lathe and a large half-inch brush, dip it into the solution and, as the shaft rotates, brush it onto the glass shaft from the nock far enough down the shaft to cover the length of fletch you intend to use. If you have no lathe you can make a small dip tube and use the same mixture. It will require more for the tube than the brushing technique. You could brush it on freehand, but the lathe makes a neat, fast job.

The sizing you have just placed on the shaft makes a good bonding base for the cement on the fletch. This coating is light and dries rapidly. You can now take your shafts and place them in the jig, put your fletch in the clamp and proceed as before. The Fletch-tite may take longer drying on the glass, so allow at least twenty minutes. Rotate and continue until you have the shaft fletched.

Aluminum shaft materials are relatively new to the archer. Easton made his first aluminum shafts in the middle thirties and went into production in the late forties. The Easton shafts are considered leaders in the field. People have found problems in fletching the aluminum shafts directly on the metal and bypass this by dipping the shaftment in lacquer, then proceeding.

The nock end of the Easton shaft is swaged at the factory, so there is no nock insert. The shafts will come to you cut and tipped if you so order. A small fine-toothed saw is a must if you do your own cutting. A small rotating blade works well on glass and aluminum. Most dealers have a cut-off saw designed for cutting the aluminum and glass shafts square on the end with no ragged edges. The only end you need to cut with the Easton is the point end.

For fletching your shaft without dipping in lacquer, here is a method prescribed by James Easton:

Take a cleaning powder like Ajax and scour the nock end of the shaft, then rinse until the water flows off leaving no droplets behind. Wipe the shaft with a clean paper towel, or dry it by the heater or a portable hair dryer. Don't touch the cleaned area as the oil in your hands will form a surface and the cement won't adhere.

Position your nock then place the shaft in a jig. Put your fletch in the clamp, apply a thin coat of one of the special fletching cements for shaft material, then lower the clamp onto the shaft. Rotate and finish fletching.

Aluminum will pick up moisture rapidly. This factor plus the moisture on the cement may cause the fletch to fall off later. Fletching aluminum shafts in hot, moist weather can be a problem. Most arrow manufacturers will fletch only in an air-conditioned room where the humidity and temperature can be controlled.

Easton is experimenting with a new anodized coating which will improve the bonding surface for the fletch. The anodizing process will add a brilliant or muted color, leave a thin, hard surface on the shaft and be more porous than regular shaft material. You fletch directly to the shaft without dipping.

Plastifletch adheres to all the above shafts but is used usually on aluminum by serious archers. They can be fletched in the same jig with the same cements. Plastifletch can be mounted with a small spiral or straight down the shaft. Max Hamilton says some archers have tried a helical fletch with the plastic vanes and had trouble clearing the bow.

When using Fur Fletch by Sweetland, make sure you have a clean shaft and apply the fur as directed. To be double safe you can place a drop of cement on the front of the fur, hold it down until the cement dries and do the same at the back of the fletch. This gives added strength and makes a smooth surface to pass over the bow.

One other use for the little bunny strip is to wrap one around the shaft just behind the feather fletch. This provides a dab of white to aid in following the



If you prefer Sweetland Fur Fletch, peel backing off the bunny fuzze and place it in your hand to wrap shaft.

shaft to the target or game. It has little drag effect used in this manner.

The question of whether to go straight, spiral and helical becomes a matter of individual choice as does the selection of right and left wing feathers and fletching Test and see what you prefer. There is something to be said for all of them.

Laying Fur Fletch along the hand, it moves easily toward the shaft and won't stick where it shouldn't. But start it 1/2 inches below the nock.



I recently obtained a Drake Keyhole target bow with an open center section. You shoot straight through the middle of the bow. There is no archer's paradox to contend with, and I have been experimenting with fletch and shafts. I took some light fiberglass shafts and fletched them with a Plastifletch with a one-degree spiral.

I took the bow out to the bale and those arrows started going all over. I could hold them on but couldn't get a group to suit me. I knew it wasn't the bow. The release was clean, so it had to be the spine of the shaft or the fletch. I took another group of the same shafts and put a straight fletch on them, right down the middle. This is just the way those shafts flew right to the gold as if they were magnetized.

The flight archer will use nothing but a straight fletch, one of the smallest used. They provide a bit of guidance on the back of the light missile and a minimum of mass.

The spiral fletch is found on most arrows today. It is easy to apply, and even the inexpensive arrows are using a spiral and some helical. The little arrows you find for the kids usually have a high, short fletch right down the middle, since it is the fastest way to get the job done.

The longer the fletch, the more stability it gives to the shaft. The higher it is the more forgiving it is, if you have a bad release or have a heavy broadhead on the tip of the shaft.

I have seen archers shooting target with a six-inch triple fletch about three-eighths inches high. I have heard of a successful hunter who shoots short balloon shaped five fletch.

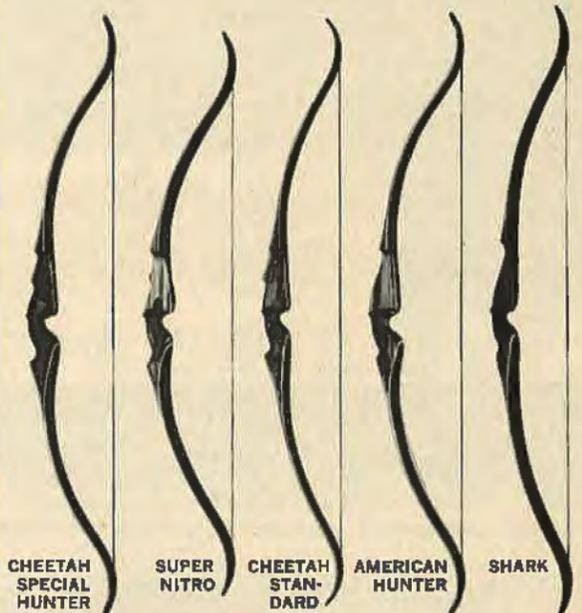
The style of the cut, the number of fletch and the type is up to you. Experiment and find one that fits you best. There is nothing more pleasing than walking into the field or range with a set of shafts you have made yourself. That is one of the satisfactions of archery. ●

Fur Fletch comes in a variety of colors and goes on with little problem. It will not break under normal wear, tear.



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## GAME MASTER

Continued from page 19

the hill. That was it; no more goats in sight, but they were still bleating.

The next afternoon I spotted my gray billy sleeping on a knoll of red dirt just above a deep wash. He had a respectable head. I watched the area to pick up any others that might be with him. This time I didn't want to be phonked.

I looked and checked, moved slowly with nocked shaft to the edge and when the phonk came this time it was right next to me. I had practically stepped on a nanny asleep in the scrub. By the time I came back down to earth my gray was moving out up the hill. I drew back and let fly at the femoral artery on the left hip, or if he should turn a bit, I could enter the rib cage and get the lung. He went right instead of left and my shaft zonked into the ground a few feet in front of him.

I decided to try lofting a shaft to the top of the hill to see if I could spook the herd back toward me and bring the gray with them. I let go a shaft that really amazed me for distance. It didn't turn the herd, but I managed to get another shot at the billy and went over the top of him. The bow was putting out a faster arrow than I was accustomed to.

So much for that. I had made a good stalk over three-quarters of a mile to get within easy range just to be blanked by a stupid, sleeping goat. I was beginning to wonder who was stupid at this point.

When I reached the top flight shaft I had sent to spook the herd, I couldn't believe the distance I had flung that arrow. It was less than fifty feet from the top of the ridge. I had to agree the Gamemaster had speed.

When we rolled out of the bag the next morning, the fog was at treetop level in camp. Gray and I decided to team up. He had worked another area yesterday with as little luck as I had.

We split around a ridge. I took the left and Gray the right. I was moving through the scrub when I heard him call. He had spooked out a small bunch and had popped one of the 2020s out of his sixty-seven-pound Gamemaster to bring another billy down at about seventy yards. The arrow went through the lungs.

I sat and glassed the opposite hill and spotted a group of four billies, all respectable, feeding in the edge of the scrub. Then I noticed some hunters on top. They started down and I didn't feel too bad as I saw them slip and slide. The goats moved out long before the hunters came in range.

We sat and glassed the ridges and spotted about six more hunters working the area. We collected our tackle, Gray picked up his horns, then we headed back to camp to pack and be ready for the four-wheeler to return us to the landing.

Gray had two sets of horns, not as big as he wanted, but not bad. I had some cactus spines still imbedded in my shins and legs and a new respect for hunting Catalina. It is rough country to hunt. The game is every bit as hard to hunt as a mule deer, maybe harder.

I packed Howard's personal bow, shipped it back to him, and kept the information sheets and brochures. He tells you how to tune the bow properly, how to set your nock height, the recommended brace height and other pertinent information.

Hunting with the Gamemaster on Catalina, even though I blanked, was a great experience. I'll go back. This bow shoots a heavy arrow and moves it out. For all that, my short draw did make me feel I wasn't getting as much from the bow as a longer draw archer would. This bow looks good, performs well and gives the custom, individual touch in this age of mass production.

## KITTREDGE

Continued from page 14

move, unless you feel because of wind or other circumstances the animal is going to spook and the only shot you'll get is right now.

Try not to take shots straight on at the front of the critter, even if he doesn't see you. The target area is much smaller and both the heavy shoulder bones and the slope of the rib cavity can deflect a well shot arrow. It is generally best to let the animal move to where he gives a broadside or quartering shot. A rear end shot can be deadly, but it can also be most disappointing because of the heavy bone structure of this angle. Much better is a quartering shot from the rear which allows the arrow to penetrate deep into the body cavity.

A moving animal is far more difficult to hit than one standing still. If by waiting him out, there is a chance that he will stop, by all means hold off the shot.

Quite often a hunter sitting beside a game trail will have the animal coming directly towards him. The wise bowhunter will have himself so situated that he can take his shot after the animal has passed, thus not taking the chance of having the animal spot him as he moves to shoot. I can well remember the time I was crouched behind a small clump of sagebrush on the razorback ridge of a steep hogback. Ahead of me were several deer brouseing around while I watched them through my binoculars. One nice forked horn broke away from the group and started right up the ridge toward me. I looked around frantically for a better place to hide and tried to get off the deer trail I was on, but the canyon wall was so steep that there simply was nowhere else to go. That buck came towards me like a donkey with his head bobbing up and down and his eyes directly on the ground in front of him. There was no time when I could take a good shot until he was about three feet away, with his nose practically in the little bush I was crouched behind. Figuring I had him dead to rights, I rose up, drew, and to my complete amazement, watched him instantly bound into the air and off the side of the steep hogback straight down the slippery slope about thirty-five yards before I could bat an eye. If I'd only had that clump of brush a few feet off his trail, that buck would have walked past and presented one of the easiest shots I've ever had! All a result of not being located in a position where a shot can be taken.

One of the most difficult tests of patience occurs when hunting from a blind with game in plain view yet not within shooting range, or when attempting to stalk in closer on game you've already seen but is still a bit too far for a good shot. The more time passes, the faster the tension builds up, until you feel you'll have to take a shot just to get the whole thing over with so you can calm down. When one of the animals happens to be a real trophy just out of range... coupled with smaller deer well within shooting range, the suspense can prove more than a man can hardly bear while trying to get a whack at the bigger deer. But again, as long as the game is unaware of your presence, it is best to just wait it out until the shot you want presents itself.

In the case of trying to stalk up on game, when you begin to get close, but not yet close enough, and the inner-man says to shoot now while you still have a chance, yet reason tells you to hold off a bit, I've found that the best cure is to stop and take a full ten deep breaths while figuring where the next bit of cover is you are going to move to. This seems to calm a person down, making the next move much easier. As a rule of the hunter's thumb, when in doubt, stop. Movement made when you are not sure of yourself will often prove to be the one step too many! Just remember, by keeping a tight rein on your patience, you will have full control of the hunt. ●



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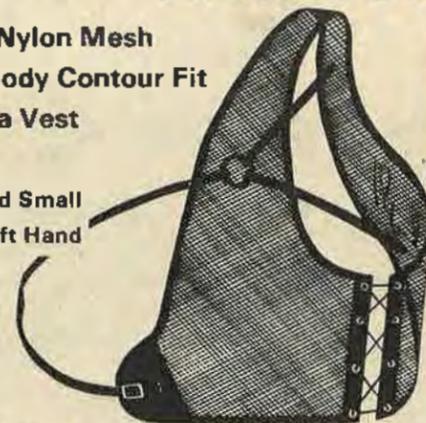
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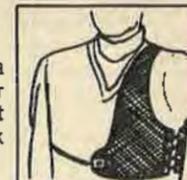
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**Head North, young man,  
there's game in them thar hills!**

**By Murray J. Martin**

At the Hidden Valley Lodge at Lionshead, Ontario, Norman Greenside and nine other archers from the York County Bowmen were signing in when he asked how the resident bowmen made out during the first week of the pre-season. Hopes rose when they found that archers from London and Kitchener had taken deer.

The Hidden Valley Lodge is located in the Bruce Peninsula. Night travel cross-country is not recommended due to the chimney pots or cracks in the rocks that are ten feet deep in some places. The pastures used by beef cattle at the foot of the ridges offer top food for the local deer herd, as anyone who has taken deer from the Bruce will vouch.

Saturday, after three days of snow, Greenside rose early and left for what was shown on the map as Mud Lake. Alongside of an old lumbering road, he spotted a small waterhole with a number of fresh deer tracks around it. He picked a clump of cedars twenty yards downwind from the waterhole and the wait began.

Twenty minutes later and forty yards out, a doe was walking down the trail. The distance shortened. At twenty yards this was it and he was as ready as he would ever be. This meant shooting from a sitting position; any movement might scare the deer off. He slowly drew his forty-four-pound *Starflight* to almost full draw and released. The arrow hit deep into the rib cage, then the doe bolted into the bush and back up the trail.

Now began the wait. He sat for twenty minutes, then started to follow the blood trail left by the injured deer. Fifty yards up the trail he found his aluminum arrow, and twenty yards later, he saw his doe. The deer had not lived more than ten seconds after the arrow had struck it. The arrow, equipped with Bear *Razorhead*, had passed through the rib cage, just missing the heart, but cutting the wind pipe and passing clear through the lungs into the far side of the rib cage.

Five hundred miles to the east, at Kemptville, Floyd Armstrong, with one other member of the Belleville Bowmen, once again was making a strong attempt to bag his first deer with a bow. This was his third year for the Kemptville pre-season and he had that good luck feeling this time.

The Kemptville deer range is different from the Bruce Peninsula. Here the land is made up of a rolling forested area bordered on the north and east by the Rideau River, on the south by the town of Kemptville, and open farm

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## CANADIAN HUNTING

land to the west. The area has been under the management of the forestry branch for some years and no firearms had been allowed in the area for eight years. The deer herd was estimated at around thirty, although over sixty bowmen had been known to hunt the area on one day and fail to kill one deer.



As Armstrong walked from his bus that first morning, he could feel the tension in his shoulders. The feeling was getting to him, and he knew he would have to shake it. He felt better as he climbed up into his tree blind over a well-established deer trail. About two hours later he saw a movement in the bush. A large red fox moved out and started down the trail. As it passed under the blind, Armstrong attempted what is to me the hardest shot in archery— shooting at a target directly under you. The arrow thudded into the ground about one inch to the left of the shoulders and money has it that fox hasn't stopped running yet.

The next day Armstrong started stalking. By the end of the day he had bumped six different deer, shot at four, but hadn't registered a hit. I know these misses had no effect on his ego. In hunting, a miss is all part of the game and he accepts that, although he has been known to change the color of the air, when one of those misses comes along.

The last day of the hunt was a typical eastern Ontario morning. The sky was clear, and the early morning frost shone on the fall leaves. On his previous day's hunt, Armstrong had come across a bedding-down area and planned to get there early in the morning and wait it out. He was well hidden when the deer returned around nine o'clock. He took a steady draw and released. The arrow was driven deep into the shoulders. The doe staggered from the initial shock, corrected itself, then within a few short feet dropped to the ground. The arrow had split the doe's heart.

For two years, I had hunted the Kemptville area for deer with no luck. I'm not crazy about hunting the same bush with thirty other hunters, although I'm convinced that archers are the safest people with whom you could hunt. I planned to pass up the pre-deer season and go after moose. The idea was soon picked up by Ron Alguire and Jack Cadieux, my steady hunting partners from Cornwall, and we were later joined by Ray Cote, all of the Seaway Valley Archers.

At the end of a 700-mile trip by car, we stopped at a little village called Fauquier on the banks of the Groundhog River. Jack picked up our licenses and traveling permits, while the rest of us got the gear loaded into the canoes.

The Groundhog River is beautiful in the autumn, but at low water, the river is full of rocks and shoals. The true splendor of the north is seen in the falls. Here the river shoots down in two twisting drops, about ninety feet each, amidst high rocky edges and contrasting forest.

We reached the first rapids in the evening, and made a hurried camp. The next morning, Jack and Ray portaged much of the equipment a mile upstream, while Ron and I looked after getting the two canoes upstream. In my first attempt to paddle upstream between the ten-foot rocks, I got caught in a swirl and almost took an unwanted trip down the rapids. At this, Ron decided to pull his canoe along the shore.

Rain fell periodically throughout the day. By afternoon, after passing a small creek that showed our first signs of moose, we decided once again to make camp. The rain continued through the night and the Groundhog, although over a hundred yards wide, rose two feet.

Any attempt to paddle up the creek was a waste of energy, so we pulled the aluminum canoe upstream for a mile and a half. We hunted the high ridges, always keeping the creek within sight, in case we should chance upon a moose feeding along the shore. Three hours later the rain started to increase, so we returned to the canoe. As we started back down the swollen, fast-moving creek, the canoe picked up speed every second. I never had gone this fast even in a motor canoe.

Every bend got a little harder to maneuver. One bend was too bent. We went plowing through the branches of a low-hanging tree and it took sheer determination to keep the canoe upright. Then came the test. As we rounded the last bend, before we reached the main river, Ron yelled back, "Look! A log!"

There, just a few feet ahead of us, was a large log jammed across the creek. I hoped there was enough water passing over it. I straightened the canoe dead for it and Ron took a tight hold of the sides. We hit with a thud that seemed to shake every rivet in the canoe. The front shot out of the water and, had Ron moved an inch, we would have tipped over. I threw my weight to the midsection and the canoe dropped over, still upright much to our pleasure.

That afternoon we moved our camp to an old cabin at the foot of Ten Mile Rapids and set up moderate housekeeping for the rest of the week. During the next five days we met twenty hunters using firearms. No one had even seen a moose. We took a number of compass bearings

Continued on page 58

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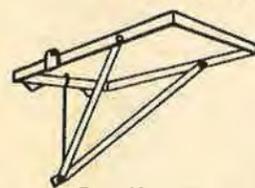


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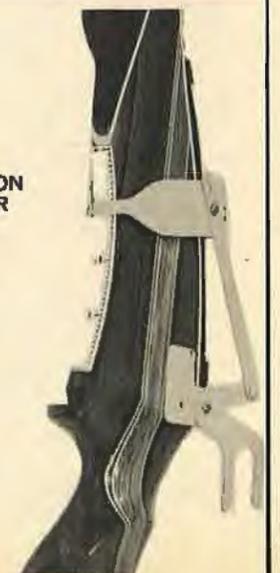
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# COMPETITION EXPLOSION

By Lieutenant Colonel Milan E. Elott (Ret.)

**T**HE entire archery world is experiencing an interest in competition shooting never equalled in history!

For years, many sportsmen considered target archery somewhat of a sissy game. Some still look down their noses at a bow that weighs less than fifty pounds. However, it is more difficult to hold a thirty-five to forty-pound bow steady during an entire tournament than it is to shoot a sixty-pound bow in the customary snap-shooting style.

Competition shooting is far from a sissy sport. It is, without question, one of the most challenging games ever devised. Competitive archers must develop nerves of steel, strength, co-ordination and a technical knowledge of equipment, in order to stand a chance of winning.

There are a number of reasons for the dramatic increase in competitive archery. One, is the steady growth of bowhunters to an estimated 7,000,000. Not all of this vast hoard of bowmen are willing to lay down their bows at the end of hunting season.

Many have joined the various archery clubs and pursue the sport year-round. Bowhunters may be surprised to know that all the most prominent bowhunters: Art Young, Howard Hill, Fred Bear, Ben Pearson, and many others, were expert target archers or field archers --- competitive shooters.

Shooting facilities are more widely available. In the last ten years, archery clubs have built thousands of ranges for the specific purpose of competitive shooting. At the same time, commercial indoor ranges began to appear. These ranges offered the opportunity for a shooter to practice and compete in tournaments at night, after work hours.

There is another factor involved in this proliferous expansion of tournament shooting — improvement in equipment. Modern equipment is much more accurate and durable. What is more important, it is more efficient. Anyone from ten to eighty can participate with a chance to win. It is no longer necessary to shoot a heavy bow.

The National Archery Association was organized about —

140 years ago, for amateur target archery. For years, they have been holding an annual national tournament, and were instrumental in forming and sending a United States team to the World Championship tournament. Few people even know there is such an event as a World Archery Tournament, let alone that the United States has done well in these events.

For years the NAA has been working to have archery included in the Olympics, and, at last, they have been successful. Archery will be included in the 1972 Games. This has sparked the organization of the Junior Olympic Program to produce some U.S. Gold Medal winners.

In addition, the first national inter-collegiate tournament was held last year. College archery has always been sort of tame, but with national competition, we can look for some real action in the colleges in the future.

Let us delve into a few of the details of target archery. In tournament competition, men shoot at a four-foot target with a nine-inch bullseye, from a distance of one hundred yards. A good competitive archer can hit that bullseye on an average of four out of six shots at one hundred yards. You shoot a bow as strong as you can pull and control, because you must be able to hold it steady, if you expect to put seventy-two arrows in or near the gold.

This is the toughest archery game: men's target archery. To win, you must have the finest equipment, be in excellent physical condition and know how to shoot. Women and juniors play the same game, but at shorter distances. This is the type of shooting done at the World Championship tournaments.

Another type of competitive archery is field archery, controlled by the National Field Archery Association. Competitive field ranges usually are laid out in wooded hilly areas, with distances varying from ten to eighty yards. It is popular, not quite as difficult as target archery and more informal. The chances are ten to one there is a field archery club and field course in your area.





Laurie Lanier of Atlanta, Georgia shows her complete concentration and determination in preparation for possible Olympic competition.



Miss Lanier learned the importance of perfection of form early in her development. Note her in-law draw and steady hand before shot.

In some areas, the most popular form of competition shooting is indoor archery. The object of the game is to put sixty arrows in a three and one-quarter inch spot at twenty yards. Of course, you shoot at a larger target with several other scoring rings. The American Indoor Archery Association has played a big part in promoting interest and tournaments. Indoor archery has an advantage in that it is available after work hours in the evening and during inclement weather. Further, as much of it is operated in commercial ranges, it has been handled by professionals in the best possible manner. This is important as these operators have devised games and targets that make competition shooting interesting to both novices and veterans.

Unbelievable as it may seem, nearly 1,700 archers competed in the Grand International Tournament, which has been held in Cobo Hall, Detroit, for the last ten years. The 1968 tournament certainly indicated the tremendous interest indoor competition has generated. Archers came from more than forty states, Mexico and Canada to participate in this shoot.

Now, when 1,700 shooters drive, fly or ride a train to attend a tournament, there must be a compelling reason. Some travelled over 2,000 miles to spend two days, shoot 120 arrows, and watch the champions sweat it out. The \$15,000 in prizes played only a small part in attracting this record-breaking crowd. They came to see the show, and be a part of it.

It was inevitable that, sooner or later, archers would start shooting for money. Professionals began to appear. During the last ten years, money shoots have begun to snowball. The Professional Archers Association was organized. There are now several hundred members.

There is an annual Professional Archers Association outdoor tournament with cash prizes of from \$10 to \$12,000. The total amount of money prizes this year will

be around \$100,000. The top shooters are now able to pick up to \$8,000 a year in prize money. Every year, there is an increase in the number of shoots and amounts of cash prizes.

Some professionals are associated with tackle manufacturers, so they are able to make a career of shooting. We wish to make a point of this, because for years there was little reward or incentive for the shooter who worked hard and became a champion. Now, and in the future, it can be really worthwhile monetarily. The PAA has just completed plans for a \$25,000 tour of five tournaments. Next year, there will be more. Competitive archery is taking its place among the professional sports.

For some totally unknown reason, competition shooting can get into an archer's blood. The more he becomes involved, the more he realizes that there is more to learn — and further involvement. He must become an expert in the technicalities of equipment. In no other sport does equipment play so important and individual a part. He must take care of it and shoot it.

Suppose you decide to become a competitive shooter, where do you start? Well, it can be a long haul or a fairly short one, depending on how you go about it. In the first place, you must clear your mind of all prejudicial ideas, in particular, bow weight. If you miscalculate the bow weight you can handle, you are finished before you start.

Accurate shooting depends on control, and if you cannot physically hold your bowhand steady, you haven't a chance. At least seventy-five percent of the competitive archers would shoot higher scores, if their male ego and false ideas did not demand they shoot a bow that is simply too much.

You must learn to walk before you can run. A twenty-five-pound modern bow, properly handled, is perfectly capable of shooting extremely high scores on the indoor ranges. For years, every expert on archery has

strongly advocated that beginners learn to shoot with a light-weight bow. This advice has not been spelled out carefully enough. Read it here and now, and always keep it in mind.

When you first begin competitive shooting, you must learn the technique. This is literally impossible, if you insist on fighting bow weight. The average man should begin with a bow of about twenty-five pounds, and the average woman about seventeen to twenty pounds.

We have a problem before we start. Who wants to buy a twenty-five-pound bow? Actually, no one. There is a sort of stock-in-trade custom, that an archer should shoot a thirty-five pound bow for competition shooting. A thirty-five pound bow is too much weight for the average beginner. Thirty pounds will cause most new shooters to strain, if they actually attempt to shoot in proper competitive style.

For competitive archery, bow weight must be measured by the ability of the shooter to hold the bow still at full draw for eight to ten seconds, then shoot it, without falling apart.

A bowhunter, who has been snap-shooting a sixty-four-pound hunting bow, is handed a twenty-five-pound target bow. Much to his amazement, he discovers he cannot hold it still and aim. This is a big let-down. In fact, he probably decides to skip competitive shooting and becomes a drop-out before he begins.

Bow weight has been built up so much it over-rides all common sense. It seems more important to brag about shooting a strong bow than it is to hit anything.

If you last long enough to get involved in competitive shooting, you find out that hitting the gold is where it's at. If you become sufficiently involved, you shoot with whatever will shoot the most accurately for you.

The smart way to get started is to stay under thirty pounds at your draw, and don't fall for the old gag of, "I'll buy thirty-five pounds and work up to it." Working-up-to-it usually takes a year, if it ever happens, and your shooting form suffers in the meanwhile.

The first year of shooting, the average male should stay with a lightweight bow. Ten to one, most men will consider themselves above average, but this would allow time to learn the technique of good shooting form.

Such a program would mean an investment in first class bow and arrows, because, if you are foolish enough to start with a second-rate set, you can expect poor results.

Next to beginning with too much bow weight, the most serious danger is snap-shooting. The big money is won by deliberate shooters. When you can draw, aim, and know for certain you are going to hit before you release, you have become a deliberate shooter. The winner of this year's Grand International, Jim Ploen, held each arrow at full draw from eight to ten seconds.

Try shooting your bow and have someone time you from the instant you touch your anchor point until you release. The odds are thirty to one you do not hold three seconds. You do not hold because your bow may be too heavy, you do not really aim, or you have developed the habit of snap-shooting.

By far the best place to get started is on an indoor range. Here, there is no temptation to try and shoot sixty or sixty-five yards before you know how to shoot. You can take instruction and follow it up with daily practice sessions. Learning to shoot on a series of Sunday afternoons is a slow and doubtful way to develop into a top shot.

The career possibilities in professional archery at this time are unlimited. The field is wide open. Two or three years ago, there were about half a dozen consistent winners. This year the number of possible winners has more than doubled. There are at least a hundred top shots, who need

Continued on page 62

## What's Saunders ever done for bow hunters?

EXCEPT FOR...

Camouflage Bow Covering

Pressure-sensitive — sticks on snugly out of the way for a season. Peels right off—can't harm bow finish. Helps you get in close. 98¢

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Holds 7 arrows at your fingertips. Safety hood protects against broadheads. Mounts—unmounts instantly. \$14.95

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Quiet, calf-hair covered plate and spring rest that gives as arrow leaves bow, reducing wobble. 2 Models \$1.75 or \$1.49

Kwik-Lok Arrow Holder

... releases instantly when arrow is drawn. Saves cold, tired fingers..... \$1.98

Nok-Set POSITIVE NOCKING POINTS... 5 for 98¢

Whisper String Silencers 4 for 95¢

... and there's BRUSH-OFF that keeps bows from snagging, and SAUNDERS MATTS and portable easel STANDS for hunting practice, and realistic ANIMAL FACES and FLU-FLYS to make flu-flu arrows and BROAD HEAD SHARPENING STONES and CEMENT and a number of other aids, but that's all Saunders does for bow hunters.



# TARANTULA



TARANTULA overshadows all conventional bow designs as the very appearance of this bow speaks for itself. Fantastic panoramic sight window with wide sweep viewing, either right or left side of arrow viewing. TARANTULA has perfect four-point balance and stabilization built right into the very nature of its design and not just false promises. NO TORQUE STABILIZERS NEEDED AND NO EXTRA CHARGE FOR LEFT-HAND MODELS. Too many features in the TARANTULA to explain on this page so write today for more details. Ask also about our target model, the TARANTULENE. Check this other little hunting bow — the new, powerful INTERCEPTOR.



## INTERCEPTOR

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P. O. Box 2231, Montclair, Calif. 91762

## CANADIAN HUNTING

Continued from page 49

for a mile into the forest and found all sorts of tracks.

Ron and I decided to work our way to a small beaver pond located four miles north of our camp. The going was anything but easy. After ten steps, you couldn't see where you had been. At noon, we stepped into a small swamp 120 by 900 feet. An old beaver dam was at the south end of the swamp, blocking a small waterhole.

We both knelt at the edge of the water hole and I attempted a moose call. We thought we heard a reply. I tried again, and this time we were sure. We both rested an arrow on our strings and stuck an extra arrow into the ground beside us. Ron was using his forty-three-pound Bear Grizzly, while I was using my fifty-pound Bear Kodiak. Both of us were using Microflite arrows equipped with Bear Razorheads with inserts.

I grunted on the call. This time the bull moose answered and we knew he was close. The branches started to crash. We could see his huge form coming through the brush. We both drew and held for what seemed eternity. Then the moose stepped out into the open, his huge set of racks and massive shoulders protruding out of the brush. He stopped only thirty-five yards away, looking over the pond for a female moose. I released and Ron followed immediately. Both arrows penetrated his neck. He bounded back from the sting of the arrows and went crashing through the bush. Then we heard a loud thud and everything was still.

We remembered the old lesson — wait twenty minutes, then follow, so we each sat down and ate an orange, not speaking. We went over to the point where our arrows had struck the moose and found a pronounced blood trail. Sixty yards later we found our moose, all 1200 pounds. His rack measured fifty inches across. When I removed his lower jaw, I found him to be about 4½ years old, judging from the teeth.

Next year, I imagine Norm Greenside will be back in the rocky ridges of the Bruce Peninsula, and Floyd Armstrong will be in his swinging bus around Kempville. For sure our crew will be stomping in some northern swamp after moose.



"It's just that there are so many good archery people in show business already!"

## Bow hunt with the best at half the price

# Shakespeare

## ARCHERY EQUIPMENT

### SUPER NECEDAH X30

### NECEDAH X26

Wherever there's bow hunting — they know Necedah! Handsome! Fittingly named Necedah, to commemorate that famed Wisconsin bow-hunting spot. Designed explicitly for demanding shooters who know what they want — and now further refined with even more quality and performance. Necedah is light, fast, and short enough to handle well in a blind or out of a tree. Outstanding features: Semi-pistol grip, contoured thumb rest and benge riser; mock overlay also benge. Cinnamon color glass face and back blend with the out-of-doors. Give it a try.

No. X26—58", with S71-58" string. Draw weights: 35, 40, 45, 50, 55 lbs. at 28". Right or (LHX26) left hand. Regular price ..... \$60.00  
MY PRICE ..... \$30.00

### TIOGA X21

This is the all New Shakespeare '60-inch' designed especially for dual duty (hunting and/or target) use. But for the hunter who prefers the gentle smoothness that is part and parcel of longer bow design, here's a model for hunting with all the earmarks of the bow type: Full working recurved limbs; and the flat-shot trajectory needed for casting heavier hunting arrows. Colorful handle is laminated of exotic Imbuys, as are the nock overlays. Has shock-absorbing arrow rest, calf hair plate and dacron bow string. A great field test shot in Pennsylvania's deer hills got this bow its name.

No. X21—60", with S71-60" string. Draw weights: 35, 40, 45, and 50 at 28". Right or (LHX21) left hand. Regular price ..... \$50.00  
MY PRICE ..... \$25.00

### MANITOU X20

BRAND NEW! 58-inch bow, named after a story book test area on North Manitou Island, in Lake Michigan, a whitetail paradise (and a source of top grade maple for Shakespeare bows). Sized so precisely between the power-packed hunter and the long limbed tournament-styled smoothie that the good archer will be truly amazed at its tremendous range for either hunting or target work. It's a marvel! Handsome, too, with handle laminated of Island Maple, as are the nock overlays. The appointments are recognized quality: A shock absorbing arrow rest, clipped calf hair plate and top grade dacron string make it the top notcher in its price class. Look it over.

No. X20—58", with No. S71-58" string. Draw weights: 35, 40, 45, 50 lbs. at 28". Right or (LHX20) left hand. Regular price ..... \$45.00  
MY PRICE ..... \$22.50

"Nothing . . . no, There's nothing like the Necedah" echo the owners of our nifty No. X26 — and what a treat is in store for them when they see this year's surprise package in archery, the new No. X30 Super Necedah by Shakespeare. It's short (54"), fast (duoflex design) and as power-packed as any hunting bow ever produced. For its size, the new X30 is unbelievably smooth, with a release that is pure pleasure. Our secret, the new wide track limb, finished to perfection with glare-less black glass. The shooting style handle, semi-pistol grip, is a triple laminate of decorative laurel and zebra woods; the three-ply nock overlay is also laurel and zebra wood. For super shooting — go to the new Super Necedah!

No. X30—54", with S-71-54" string. Draw weights: 35, 40, 45, 50, 55 lbs. at 28". Right or (No. LHX30) left hand. Regular price ..... \$59.50  
MY PRICE ..... \$34.75

### YUKON X24

The EXTRA BIG VALUE in Shakespeare's great new line of bows is this sturdy, economical, well-crafted, full working recurve model, fashioned for hunting (and named after Alaska's fine Yukon fare) as well as recreational pleasure. The Yukon is ruggedly built to take the strenuous beating of beginners in physical education classes, summer camps and recreation programs. For its size, it has surprising speed and stability, and handles with all the feel and ease of a high priced composite. Its appointments can be enumerated; outstanding are: (1) The long wear vertical feather rest. (2) An arrow plate of calf hair. (3) A polished handle of Island Maple wood which is contoured for a palm-pressure fit. Face and back are neutral color.

No. X24—60", with S71-60" string. Draw weights: 25, 30, 35, 40, 45, 50 lbs. at 28". Right or (LHX24) left hand. Regular price ..... \$30.00  
MY PRICE ..... \$15.00

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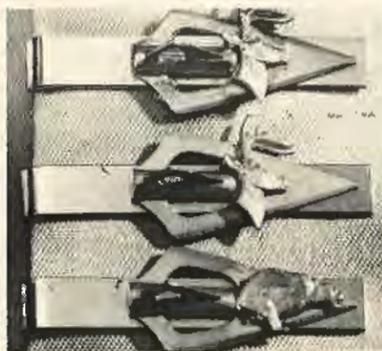
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**PAA CHANGE**

The officials of the Professional Archers Association have approved the following change in distances for the PAA Outdoor Round:

Target	Number	Yards	Face Size
Practice	1	20	14
Practice	2	20	14
Practice	3	20	14
Scoring	1	20	14
Scoring	2	25	14
Scoring	3	30	14
Scoring	4	35	22
Scoring	5	40	22
Scoring	6	45	22
Scoring	7	50	22
Scoring	8	55	30
Scoring	9	60	30
Scoring	10	65	30

Under this new system, three arrows are shot from one position at each target. The old setup required one arrow to be shot from each of three distances, walking back, on each target. This change should be less confusing to the spectator and will allow the shooter to concentrate more fully on his shooting, speed up the tournament, reduce chance of measurement errors and simplify the range set-up.



**GULMAN'S GOAT**

Bouncing Betty Gulman of Fullerton, California, who was profiled in a recent issue, sends a note on return from a Catalina Island, California, hunting trip, where she bagged a Spanish goat that will go in the California Bowhunters Association record book; her first record trophy.

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**UTAH WINNERS**

Eight of Utah's archery clubs were represented this year at the state indoor championship tournament, which was sponsored by the Timpanogas Archers at their indoor range in Orem.

Each archer shot one PAA round and half of a Flint round. Shown in picture are (from right): Dwaine Johnson, vice-president of the Timpanogas Archers; Barbara Batty, first place, women's class A instinctive; Kathryn Lyman, first place, women's class A free-style; Fred Shielols, first place, men's class A free-style; Lew Harris, first place, men's class A instinctive and Keith Nicol, president of the Timpanogas club.



**CHARITY SHOOT**

The Keystone Federation of Bowhunters held their annual charity shoot at the Wapiti Course at Fort Washington, Pennsylvania, with proceeds going to the mentally retarded of the area.

In the past five years, over \$8,000 has been raised by these fine clubs. Over five hundred shooters were expected for the shoot this year. Instinctive shooting at thirty animal targets layed out in a forest course makes the meet interesting.

**LATER BUGS**

All clubs interested in announcing meets in this column, please send the information three months in advance of the date. Four months is nicer.

The Early Bird Open was held in Canton, Ohio, under the auspices of the Canton Archery Club, at Meyers Lake Park. There was a \$10,000 purse for the PAA sanctioned meet.

Another Blackhawk group, this one the Bowmen, Incorporated, of Evansville, Indiana, and the Evansville Chamber of Commerce co-hosted the first annual \$1000 Greater Evansville Pro-Am Archery Tournament.

Mount Shasta, California, archers held a "cat shoot" with forty-two life-size, hand-painted targets. Trophies were awarded in all classes.

**SHOWROOM SAMPLES**

These have never been out of our showroom and are in new condition but are no longer in their original factory containers as are the bows on the preceding page. I am listing the quantities so you can see how limited my stock of these items are. All are priced at list less 50 to 70%, so naturally they are FOB, Selma. Because of the limited stock, let me know your second, third and fourth choices.

- Model X15 Titan \$125.00 bow-40# and I only have one for \$50.63
- Model X16 Supreme \$75.00 bow-35# and I only have one for \$30.38
- Model X17 Ocala \$75.00 bow-50# and I only have one for \$30.38
- Model X27 Kaibab \$75.00 bow-35# and I only have one for \$30.38
- Model X25 Trident \$50.00 bow-40# and I only have one for \$20.25
- Model X25 Trident \$50.00 bow-50# and I only have one for \$20.25
- Model X22 Custer \$40.00 bow-40# and I only have one for \$16.20
- Model B8 Rocket \$10.00 bow-45# and I only have one for \$4.05
- Model B9 Fury \$7.50 bow-15# and I only have one for \$3.05
- Model K1H Hunter \$32.50 set-45# and I only have one for \$13.17
- Model K8B Rocket \$15.00 set-35# and I only have one for \$6.08
- Model K9 Sub Teeb \$10.75 set-15# and I only have one for \$4.37
- Model K5 Archie \$4.95 set and I only have one for \$2.03
- Boxes of 6 Arrows Model A20-F regular \$23.50 per box but my price \$9.53
- Boxes of 6 Arrows Model A20-NP regular \$20.00 per box but my price \$8.90
- Boxes of 6 Arrows Model A20-T regular \$18.50 per box but my price \$7.10
- Boxes of 6 Arrows Model A20-T regular \$17.50 per box but my price \$7.10
- Boxes of 6 Arrows Model A50-4 regular \$12.50 per box but my price \$5.07
- Boxes of 6 Arrows Model A50-T regular \$8.50 per box but my price \$3.45
- Boxes of 6 Arrows Model A2-T regular \$5.00 per box but my price \$2.03
- MODEL L69 Quiver regular list \$17.50 but my price is just \$7.10
- MODEL L67 Quiver regular list \$12.00 but my price is just \$4.86
- MODEL L64 Quiver regular list \$10.00 but my price is just \$4.05
- MODEL L66 Quiver regular list \$10.00 but my price is just \$4.05
- MODEL D200 Quiver regular list \$7.00 but my price is just \$2.84
- MODEL D202 Quiver regular list \$5.00 but my price is just \$2.03
- MODEL D214 Quiver regular list \$4.00 but my price is just \$1.62
- MODEL L59 Quiver regular list \$2.50 but my price is just \$1.02
- MODEL L56 Quiver regular list \$1.75 but my price is just \$.72
- MODEL L58 Quiver regular list \$1.25 but my price is just \$.51
- MODEL L44 ARM GUARD regular list \$4.00 but my price is just \$1.62
- MODEL D222 ARM GUARD regular list \$3.00 but my price is just \$1.22
- MODEL D223 ARM GUARD regular list \$2.50 but my price is just \$1.02
- MODEL L42 ARM GUARD regular list \$2.50 but my price is just \$1.02
- MODEL L41 ARM GUARD regular list \$1.60 but my price is just \$.54
- MODEL L52 LG GLOVE regular list \$2.50 but my price is just \$1.02
- MODEL L503XL GLOVE regular list \$2.00 but my price is just \$.81
- MODEL D502 LG GLOVE regular list \$1.50 but my price is just \$.62
- MODEL L38 TAB regular list \$1.50 but my price is just \$.62
- MODEL L46 LG TAB regular list \$.50 but my price is just \$.21
- MODEL L39 BOW CASE regular list \$17.50 but my price is just \$7.10
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BATTLESHAFT	10.95	17.95
HUNTER (over 29")	7.50	12.95
(29" long)	6.50	12.95

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## COMPETITION EXPLOSION

Continued from page 57

only two or three more points to raise their average to the winner's circle.

The road up is fun as well as rocky. First, local club shoots, local indoor leagues, state tournaments, regional tournaments, then national tournaments, international tournaments, and the big money shoots. The champions have travelled this route. Along the way you keep learning a multitude of little things about equipment and shooting form, the importance of a correctly placed nocking point, matching arrows to the bow, how to position your bowhand, and the different techniques of aiming.

Actually, you can start in your own backyard, garage or basement, after you have taken a few lessons from a qualified instructor. Professional instruction in the beginning will save months of trial and error in shooting form. Professional advice on equipment will save you hundreds of dollars that may be wasted in buying the wrong equipment.

There is no rule of thumb on the purchase of competitive shooting equipment. To produce the best results, the equipment must be tailored and matched to fit your shooting style. Buy the finest bow, expertly made arrows, and a complete set of well made leather accessories.

If you buy less than the best, it won't be long before you are trying to get rid of it (at a loss), then purchasing the best. No tournament archer will tolerate equipment he knows is costing him scores.

Good instruction is a short-cut to success. The principal value you receive from expert instruction is that you save time. Let us not overlook the value of instruction for shooters above the beginner's level. If you have been shooting for several years and not winning, an expert may be able to put his finger on precisely what is wrong. Further, he will be able to tell you exactly what corrective action is necessary.

There are so many new tournament archers being generated every day, that many manufacturers are having difficulty in producing enough top grade tournament bows to supply them. Some of the major manufacturers of equipment increased plant space and doubled production last year only to discover they had underestimated the competitive archery explosion.

When you fully understand the following comment made by a thoroughly experienced tournament archer, you are on your way: "I combined an omni-coupler and a cushion plunger which changed the spine requirements of my arrows, but plasti-fletch sailed out of my bow without a touch and they are grouping."

Archery is without question the most versatile sport of all. Competitive shooting of one kind or another is done from ten yards to 180 yards. Inside, in barns, basements, or commercial ranges, or outside on open fields or wooded hills. Competition archers just shoot anywhere and everywhere at all kinds and sizes of targets. What is the attraction? The thrill of competition, the everlasting challenge. It ain't easy.

Due to the improvements in equipment, technical know-how on tuning and shooting form of competitive shooters, there are many instances of archers' losing points by arrows glancing off arrows in the center of the target. It is perfectly possible for an archer to lose a championship, when he shot more accurately than the winner.

A shooter can work for months perfecting his shooting, and have all that effort go down the drain, when an arrow or two shot dead center glances off into the next ring, during a major tournament. Tournaments should not be decided by luck when it is possible to avoid it. Most of the points lost in this manner are on the Indoor PAA Round. A

deflected arrow can easily cost a shooter \$1,000. In the future, it could be \$10,000, or more.

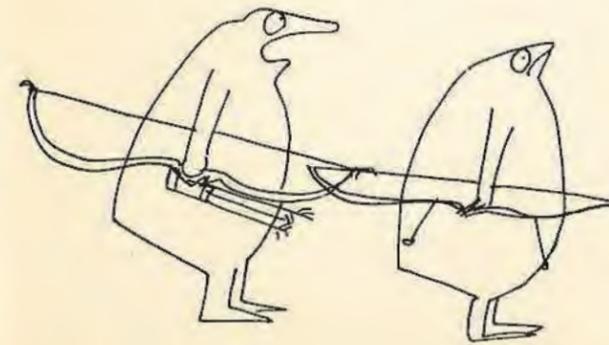
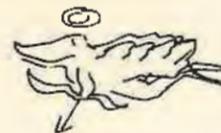
One sure way to eliminate any loss of score due to arrows glancing off arrows in the five-spot, would be to change the target so that there are five five-spots, one for each arrow the archer shoots. This can be done on the same size target face by eliminating the three, two and one rings, and arranging five, four combinations as shown in the picture. This will not hurt the scores of the top shooters, since arrows in these rings knock them out of the tournament anyway.

In addition to eliminating glance-offs, the arrows on the five, four-line could be scored more accurately. There would be less chance of the edge being so shot up that doubtful arrows would be difficult to call. In outdoor target archery, the problem could be helped by decreasing the number of archers on a target from four to three or two. Field archery has already increased the number of targets on the short distances. This is a step in the right direction.

Action along this line is the only possible way to be sure that the best shot wins. One more rule might be added: an additional arrow would be shot on all bounce-outs, witnessed or not, until someone invents a target butt that eliminates this possibility.

Another important point to consider is that this multiple five-ring target would be more interesting from the spectator's point of view, as each hit is more visible. Only time will tell whether or not the multiple spot target will be adopted, and whether 300 scores are easier or more difficult to shoot on it.

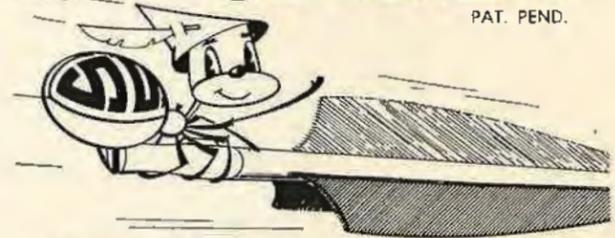
There were an estimated 15,000 tournaments last year. We can expect more this year. The next step is to create shoots that have more spectator interest. This is a tough nut to crack but sooner or later someone will take a whack at it. ●



"I dunno. I've never seen him  
at any of the other tournaments."

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At last you can stop gambling on losing game (or arrows). For successful tracking this hunting season, follow the Shaft Spider.



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Four limbs  
may confuse  
you at first,  
but each  
seems to  
serve a  
purpose!



Neil Tarbell, inventor and manufacturer of the Tarantula bow, lines up on resting rabbit.



By Ross MacKay

**A**gent named Neil Tarbell called and asked if I knew of any hunting country worth looking into. That I did, so we set a weekend hunt and he promised to bring something new in the line of tackle.

Tarbell has been in archery, both as archer and manufacturer, for fourteen years. He makes the short Interceptor bow and I was curious to see what he would deliver. When he showed up Friday night he had a grin and his partner Ken Jeffers. He asked what I had in mind for hunting so I got out a map and showed him the territory.

We drove to Calexico, California, just north of the Mexico border in Imperial Valley, that night. I asked what he had for me to shoot and had been told to bring some fifty-pound spined shafts along. All that was open to hunt was the old reliable floppers and squirrels, so I loaded a mixed quiver of blunts and field tips, then threw in a few odd broadheads along with some under and over spine shafts.

That night, in an air-conditioned motel in Calexico, I told Tarbell and Jeffers I had my eye on the New River bottom just west of town. It was thirty-eight feet below sea level and would be hotter than the proverbial by noon.

After an early breakfast it was to the river bottom, a farming section offering plenty of cover. The steep embankments should provide some squirrels, while jack rabbits should be lurking in the bottom. On a side road, we stopped a half-mile from the highway. Now I was to find out what Tarbell had up his short sleeved shirt.

The bow he handed me to shoot was radical. Instead of the usual single upper and lower limbs, there was a matched pair of them, one on each side of the handle which was dead center in the bow. The tips of the limbs were held together with a cross-piece of hardwood, top and bottom, and this caused me to wonder. One thing desirable in bows is light tip weight. These tips were massive, the string held by center nocks on the cross pieces. The handle was held to the limbs in two places — above and below — with the hand going between the two mediators and the twin limbs. Tarbell had two bows, one for me to shoot and one for himself. This was the new Tarantula, as monicker Tarbell calls the radical bow.

He handed me the bow and the string. I had brought along my tackle box with nocks. I held the bow in the standard stringing position, then was stymied. There was no limb to slide the hand up to string the bow. This could be a problem but Tarbell had the answer. He used the new Dei stringer, the first time I had ever seen one in action, and the bow was braced with no problem. The foot-type stringing cord would work but this Dei made the job extremely simple.

Strung, the bow resembled a conventional bow in that it had a string between working limbs. In this case it was four limbs, but the principle was similar. I took my Saunders bow square, marked the string, attached the nockset with the pliers and was ready.

The bow I had was forty-five pounds. This was enough for the little varmints. The handle fit and the arrow rest on this bow can be adjusted from dead center and down the shaft to either plus or minus spine. By moving the rest to the right, I could shoot a thirty-five-pound spined shaft out of the bow and by moving it back to the left and a bit past center I shot a fifty-pound spine.

Most of the hunting was done with my cedars, which spine out at sixty pounds — ten over the fifty-plus bow I usually shoot. This gave an advantage in that the rest could

# SPLIT PERSONALITY for a bowyer



Panoramic visibility (Below) of area around aiming point clearly is shown in this photo of new bow. By comparison, here's what you see (Right) when aiming at game with conventional bow design.



be adjusted to the individual's needs and a variety of spines could be shot from the same bow; not at the same time, of course, but after a bit of adjusting for the arrow in use.

I picked up my cedar shaft, brought it along side the bow and smacked it into the left limb, I had tried to put the shaft on the bow in the conventional manner but this wasn't a conventional bow. I grinned and took the shaft down between the limbs and onto the rest. Tarbell had cut a side groove in the rest so the fletch would move below the rest and pass through. With the handle on this bow you could shoot either right or left-handed, merely adjust the arrow rest.

I nocked the shaft, brought the Tarantula up and came to full draw. It had no stack at my draw and held on a sidehill to see if I could hit a clod of dirt about thirty yards away. The shaft came close; close enough for a new bow at any rate. The tips moved slow, but the arrow moved well for a forty-plus bow.

While I shot a few practice shafts to learn whether I needed to adjust the arrow rest for my shafts, Tarbell strung up the other Tarantula. He had this tuned for his shooting and said it was about forty pounds. I wanted to try my shafts in the lighter bow. They flew left and didn't come close to the dirt clod. I had some lighter shafts in the bag and took one at thirty-five pounds and it zipped out of the bow right on target. Tarbell had it set to shoot his own shafts, so that would make the difference. Jeffers set up his short hunter and we were ready for the critters.

We dropped off the side of the river bank to the wide greasewood clogged bottom and spread out. I had the river on my left, Jeffers in the middle and Tarbell on the extreme right. The bottom had a wide barren section down the middle. Along the actual trickle of river and the bluff on the right were high, almost impenetrable growths of greasewood and willows. I could hear Tarbell's 250 pounds plowing through the brush on the right. If there were rabbits in there they would come boiling out, but there not one creature of any type. On the way back to the pickup, we decided to backtrack and try the other side farther up the river. I let three shafts fly in a flight test to see how far the Tarantula would throw its web. I paced off 157 paces and there were the three shafts in a neat row, not more than two paces separating them. The arrows had moved out of the bow in clean flight with no wobble or wiggle.

Stump shooting on the way back, we moved back across the bridge. I remarked that we were probably the lowest hunters in the U. S. that day, hunting thirty-eight feet below sea level as we were. They warned me that another remark like that and I might be walking back.

The sun was really burning down now. When we dropped over the river bank on the opposite side, there wasn't a breath of air in the bottom land. Hot and sticky, the day was just warming up. The water kept the humidity high and the heat was moving the mercury up the scale. The brush was high, while dead, fallen rushes made the footing so difficult that, should we see game, we wouldn't be able to

Brush and downed reeds make heavy going for Ken Jeffers and Neil Tarbell in New River bed.



For lack of other game, Tarbell is shown flexing the kinks out by shooting at handy stump.



get a shot. The cover was too good for bowhunting.

We decided to bull our way through the high brush to the bluffs. There were holes in the cliff face that meant squirrels, maybe. Tarbell held his bow over his head and just went straight ahead like a tank. I watched him and figured, if he could do it, I could. I made about ten feet when I hit a bush bigger than I was and down I went. I managed a fat lip from a jagged snag but finally used my head and followed Tarbell's path.

When we got beyond the brush, we scouted the bluffs for game. In that heat, over a hundred, a few doves flew from the edges, but they were safe and knew it. Even too hot for the ever present rattlers.

After two hours of travel on Hiway 80 west, we went along the Sunrise Highway in the Laguna Mountains and passed a sign saying it was 5000 feet elevation.

We tramped the hills and saw one fox, some cows, one or two tree squirrels and experienced a light breeze in the pines.

We pulled up to a gate and, as I opened it, five ground squirrels scrambled for their dens. We broke out the bows and moved together in a line, spooking six rabbits before we reached the top of the hill. I could hear the shafts bouncing on the brush and dirt but less cries of hits.

We moved around the hill and Jeffers took off into the sage after a sneaking rabbit. Tarbell was behind, looking for any that thought they might be safe after we had passed through.

Tarbell and Jeffers were shooting. I had taken a few running shots but I knew the best was still ahead. When we came over the rise toward a little draw I told them to stand by. Rabbits came from everywhere. They went straight up the hill toward Tarbell and he started laughing. One had run right between his legs and he couldn't get a line on it.

I spotted a squirrel on a rock, showing just his head and

part of his shoulders. I came to draw with the shaft I had on the Tarantula, let fly, but the squirrel was gone as the shaft zipped over the top of the rock. I reached to my back quiver for another shaft as a spot of brown appeared on the same rock. I brought the shaft out fast, placed it between the limbs and let fly a fast, instinctive shot, going through the back of the squirrel. We estimated the range at fifty yards.

I saw a tuft of bunny fur under a sage clump, but I had to thread the arrow through a narrow opening in the sage. I came to draw and pinned him to the ground, without a sound.

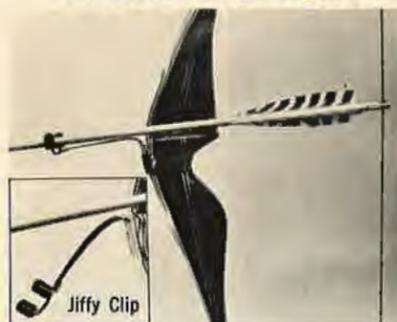
The Tarantula had been kicking around on Tarbell's idea board for sometime. He makes the limbs in one section, then cuts them on special equipment. Made up as conventional limbs, they separated before the handle and tips are added. The twin limbs have thirty-two inches of working length on each side, are balanced in draw weight and afford a four-point balanced pressure on the drawn bow. The handle is four inches high and the mediators keep it in true alignment on the bow, all permanently cemented.

The adjustable arrow rest for the plus or minus spine is a bit different. Some conventional bows have an adjustment, but can't afford a minus factor to the extent of the Tarantula.

Tarbell makes a reasonably fast bow for hunting to give accuracy and the Tarantula offers a full view of the game in sighting, then following the arrow to the hit. You don't have to move the bow or your head to follow the shaft or to see the target. There is a bit of a stringing problem, but Tarbell is including the Dei bow stringer with each bow he sells.

The standard length of the bow is fifty-four inches in any weight, each custom built. They will be made to customer specifications as to weight. ●

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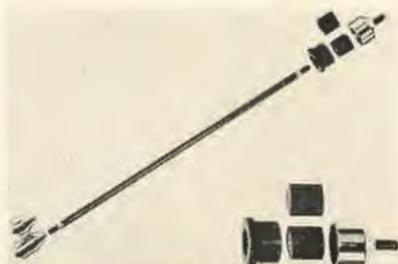
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The coupler consists of two interchangeable, compressible bushings of different densities, a lightweight tubular rod and two interchangeable heads of differing weights. The four possible combinations of bushings and heads allow the archer to tune to his own needs.

At dealers or write Bear Archery Company, (Dept. BA), Rural Route 1, Grayling, Michigan 49738.



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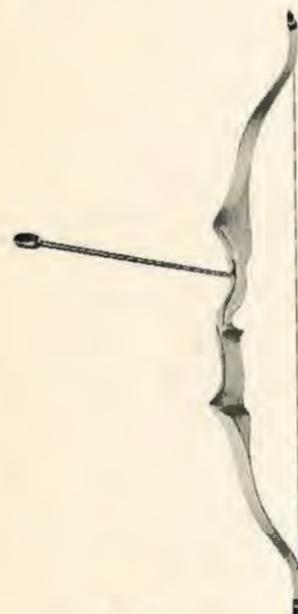


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Continued on next page

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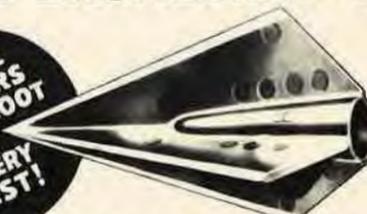
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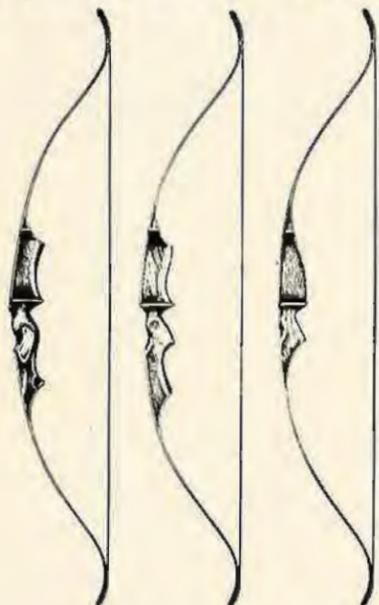
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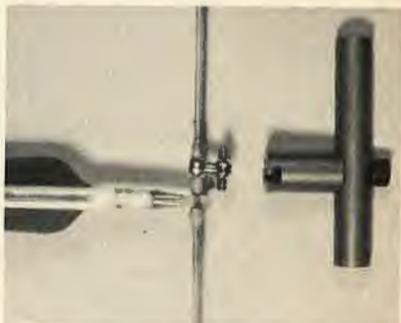
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Produced by the Bianchi Velo Company of Italy, the Avanti is handled by the N. E. W. S. Enterprises, Incorporated, (Dept. BA), 2627 Kipling, Houston, Texas.

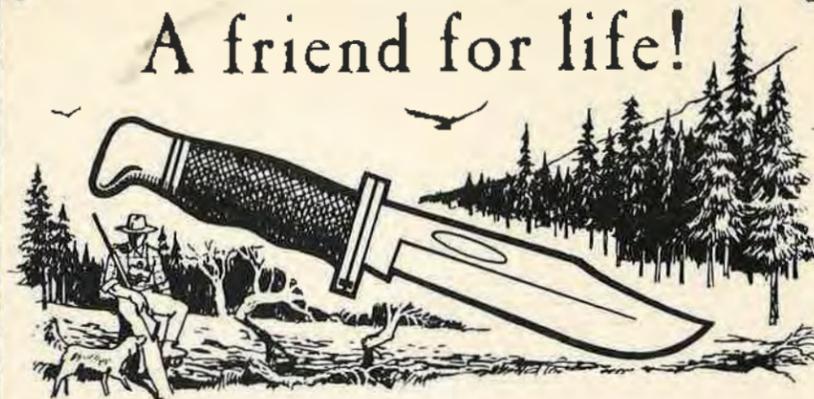


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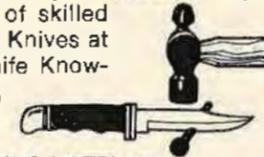
The 1413 now comes in 24SRT-X and Swift, designed to meet the needs of pint-size plinkers. This shaft is fine for the lady archer who has a very short draw or shoots a light bow. It's at your local dealer by Easton or write direct to James D. Easton, Incorporated, (Dept. BA), 15137 Califa Street, Van Nuys, California. ●

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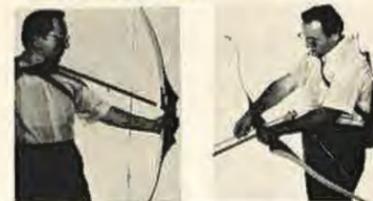
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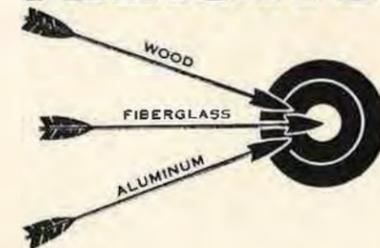
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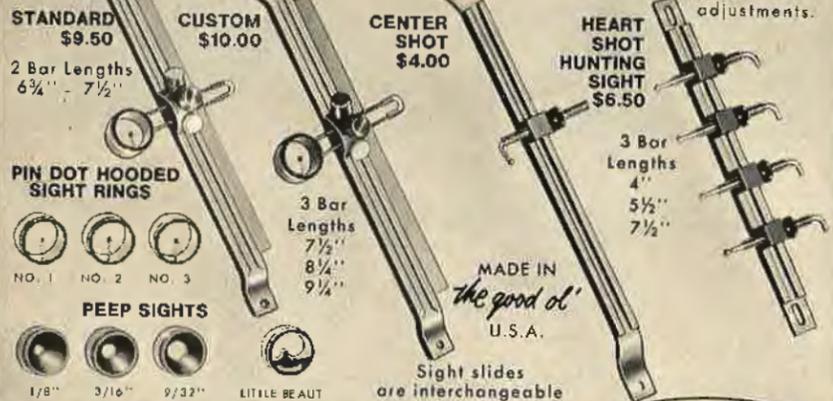
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### TECH TALK

Continued from page 8

must. I only become concerned with the portion of the bowhand directly facing the deer and then to the extent of removing rings which could flash, not in actually camouflaging the hand. I feel many bowhunters are too concerned with camouflage of insignificant details, when they would be better off thinking about the materials of the clothing to eliminate scratching noise, which occurs in moving through the brush.")

### FINISH OF FINISH?

I have had my bow for three years and, although not made by one of the well known companies, I think it is a good one.

My problem is this: through rugged use, the finish has become scratched and large areas of the fiberglass covering, which is black, have worn off and I'm afraid I'm headed for trouble. If the bow can be refinished, can I do it myself and how?

Steve Leverstien,  
Philadelphia, Pennsylvania  
(If the actual fiberglass is damaged, there is no way of refinishing it satisfactorily. If it is just the finish that is chipping, you can remove it with fine sandpaper and steel wool, although it would be better to contact the bowmaker and have him do the work.)

(A new finish of verathane or similar material over a suitable sealer should do the job. See your local paint store for details.)

### SNAP SHOOTER

I have a bad habit of snap shooting. Even before the sight is on the target, my arrows are on their way. My bow weight is too light to have any effect on my problem, but I am afraid that, in using my heavier bow with a forty-five-pound draw, I will lose all accuracy.

David Racz,  
Broad Brook, Connecticut  
(This problem is quite common and, as you say, a habit. One of the best solutions is to shoot an entire round just by drawing your bow with an arrow, aiming and holding, but not releasing.)

(Then try a few targets where you draw, aim and hold on one arrow, while actually shooting the second. If this results in snap shooting again, try another no-shoot round first. All you are doing is starting a new habit pattern. Anytime you find yourself falling back into bad habits, just draw, hold and aim a few arrows... sort of dry firing, as they say in the firearms field.) ●

### BOW CASE

Continued from page 87

a partially drilled bottom section. This drawer is best suited for target or field point arrows.

The compartments formed on either side of the drawer, by extending the six-inch wood section, are made by forming a box with sections extending to the rear, fastened to the base board. The left side is used for storing gloves, tabs, armguards, wax, etc. The right side serves to retain gunstocks, if one chooses to include his favorite guns in the cabinet. As can be seen in Figure 1, the top gun retaining section is attached to the side of the cabinet. The cutouts for guns can be made to retain specific barrels, as required. All joining construction in the cabinet was made with wood screws and glue. This will assure rigidity and useful life.

To facilitate easy removal of the bows, the hanging of all the bows was accomplished by attaching a modified bird cage mounting to the side of the cabinet, and covering it with a corduroy sleeve.

The cabinet door was constructed of full one-by-two-inch stock. To achieve maximum strength and retention of squareness, all joints were full overlap joints, glued and fastened with four wood screws per joint. The full overlap consists of notching each opposing section to half thickness, and joining in a sandwich effect. The center divider is also inlaid into the side members. It is necessary to provide a 3/8 x 3/8-inch groove on one edge of the stock, for seating the two glass panes, prior to notching and assembling the door frame. Approximately one-eighth-inch oversizing of the opening is allowed for glass fitting. The glass is retained by one-quarter-inch quarter-round stripping. After the frame is constructed, the door is fitted to the cabinet, hung with three two-inch brass-plated butt hinges. A cabinet latch is fitted near the center of the door, as is a selected door knob. The same type knob is used for the arrow drawer. If required, a key-lock is fitted at this time.

This cabinet was painted with satin finish black enamel prior to attachment of hardware and attachment to the wall. When attaching the cabinet to the wall, using two screw eyes at the top, and through the plate extending at the bottom, make certain sufficiently long wood screws are securely anchored in your wall studs. ●

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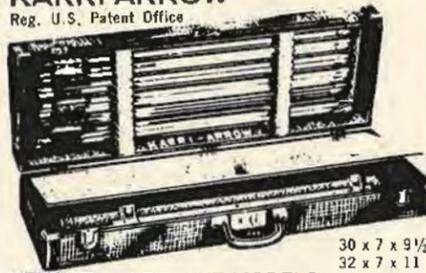
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## books for bowmen



### WHY WE MISS



LT. COL. MILAN E. ELLOTT, (RET.)

**WHY WE MISS AND OTHER WRITINGS** by Lieutenant Colonel Milan E. Elliot (Retired); published by the author; \$2.95; 141 pp. The good colonel, who only recently joined the staff of BOW & ARROW, long has been respected for his knowledge of the rights and the wrongs of archery.

As a result, this paperback volume has much to offer in the way of practical information that can help one to develop an adequate style for competitive archery. Much of the information contained in this book has been developed through trial and error at the Archery College, which Elliot and his wife operate in Georgia.

Ellot uses a somewhat offtrail method of getting across his points, as for example, when he explains that "a target is a circle of 360 degrees. If an arrow misses, it goes to only one of those degrees. On the other hand, a perfect shot can only go to one place. Simple mathematics soon indicate that it is 360 times easier to miss than to hit."

Ellot theorizes that it would be more relaxing for all involved if they simply accepted the misses than to keep trying to hit it in the high-scoring center.

He also frankly admits that his studies of the problems of archers are based upon many of his own faults in the demanding game. And out of all of this comes a lot of good advice; for example, in the matter of choosing a coach, he suggests that you pick one who knows why he, himself, misses. You may not agree with all of his theories, but it should prove a benefit to help in bettering your own scores. — JL



PHOTO BY DEV KLAPP

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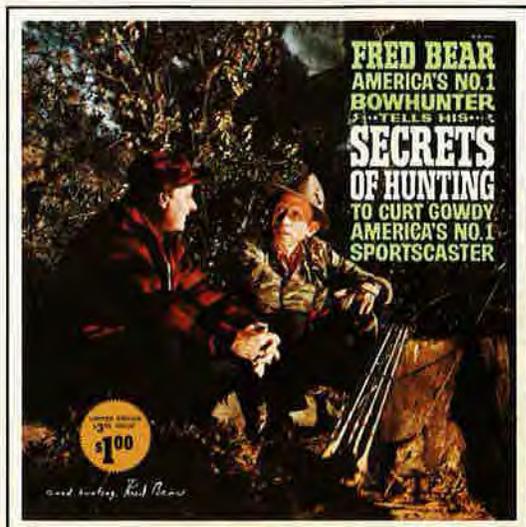
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