HELLO TO ALL IBPF AND BLACK POWDER SHOOTERS: Peter Sheets is our guest writer for the IBPF article for the month of August. Pete lives in North Liberty, Iowa and shoots mostly BENCH and CROSS STICKS. He builds his own guns during the winter months.

Bench Shooting:

Bench shooting is a science experiment. You are rewarded by shooting accurately, knowing you have controlled as many variables as possible.

The Gun:

A light bench gun has adjustable sights, a cant bar, good trigger, and can shoot fast balls. Almost any rifle with a straight or tapered barrel can be fixed up to shoot competitively. .

My favorite type of rifle conversion would be a half stock 1 inch across the flats barrel without a taper such as a Thompson Center Renegade or Hawken. Other brands would also work. A conversion would be to first add a cant bar, and then sights, and eventually a new lock, trigger, and barrel. This can be done as time and funds allow.

The Sights:

Light bench is shot using both Any Metallic Sights (AMS) and open sights. You can use open sights as the AMS but a nice peep sight is easy to use and easier shoot accurately. A desirable characteristic of either peep or open sights is to be able to make adjustments to the sight without any tools. Redfield 85 sights work well for 1 inch barreled rifles and Olympics or Internationals work well for 1 1/8 inch barreled rifles. Redfield doesn't make new sights so you have to find them used. A recently introduced sight is the Lyman 90MJT Target Receiver Sight. It can be purchased from Campion's Choice or Buffalo Arms for about 95 USD. Lyman also makes a front globe sight for about 65 USD. You can also use Anchutz or other front sights.

This sight can be adapted to be either a peep sight or an open sight. Mounts are attached to the rifle with screws so learning to drill and tap the blind holes in the barrel is a necessary skill. Mounts are either custom made or purchased and modified for a muzzle loader. Ask around to find someone with a mill and they will usually make them for you. Look at any light bench or cross stick rifle and you will get an idea of how they go together. Also don't neglect the NMLRA rule book when setting up a rifle. The devil is in the details.

Muzzle Velocity:

The faster the ball gets to the target the less time the wind has to act on it. As Muzzle Velocity increases so does pressure. Eventually the nipple hole starts eroding and that creates varying pressures which reduces accuracy. To combat this you can use a sealed ignition or a platinum lined nipple. The other problem with increased pressure is blown patches. As the pressure increases the ability of the ball and patch to resist the attempt of the powder gasses to blow by the ball is increased. To resist this, a tighter patch ball combination is needed. The tighter patch ball combination deforms the ball to create a larger bearing surface and decreases the possibility of blow by. Some light bench rifles use a false muzzle to ease the ball into the muzzle but false muzzles are not needed.

The Cant Bar:

The more the barrel tips off to one side the less effective the sights are. A cant bar keeps the barrel in the same position for each shot. You can also use a bubble level on the front sight. If you shoot cross sticks you might use both a bubble level and a cant bar. There are many different designs of cant bars. Make one using the materials and tools at your disposal.

Shooting Bench Matches:

Reading the Wind:

Wind will move a 50 cal round ball with a MV of 1800 fps, $\frac{1}{2}$ inch in a 5 mph wind. 5 mph is not much wind. To shoot well you need to

watch the wind and shoot when the wind is blowing the same direction and velocity as when you shot your sighting shots. Wind has a pattern so watch your wind flags. You can learn the wind by watching the good bench shooters and recognizing the wind they are shooting on. On a good wind day the wind drops to nothing periodically so that's when you shoot.

Holding a bench rifle:

High power bench shooters shoot light bullets in heavy guns and touch their rifles only at the trigger. They pinch the trigger and trigger guard together to fire the rifle. They use the front rest and the rear bag to hold the rifle. They adjust the aim using the front rest. NMLRA rules prohibit a rear bag and we shoot light rifles with significant recoil. The rear of the rifle has to be supported by the shooter. No mater how you hold your rifle, how you touch it effects where it shoots. If you pull your rifle into your shoulder it will shoot lower. If you put your cheek hard on the stock it will shoot to the left, if you are right handed. To shoot well you have to hold the rifle the same each time.

Loading:

You need to develop an accurate load for your rifle. The bore needs to be the same each time you load. Shoot a fowling shot then run a wiping patch down the barrel. Put the same amount of powder in each time. Practice at home, weighing each load as you throw it. Check your patch ball combination by picking up used patches to see if some of them are torn, shredded or have a large hole in them. Run a few shots across a chronograph check their velocity and deviation.

FIRST IN IOWA ORIGINAL CHUNK GUN MATCHES: Steve Bookout of Newton, Gary Howard of Des Moines and their friends hold chunk gun matches the last Saturday in August (August 30th) at the Beaver Creek Plainsmen Range. For more information check the IBPF website or contact one of these fine gentlemen. They were the first to hold chunk gun matches in Iowa, later IBPF started holding

matches, calling them State Shoots, thus the name "First In Iowa Original" came about.

LOCATION OF THE IBPF ANNUAL MEETING SATURDAY, NOVEMBER 1ST,

has been changed (from Altoona Public Library) to <u>Pleasant Hill</u> <u>Public Library, 5151 Maple Drive, Pleasant Hill, Iowa.</u> Library is adjacent to the Police Station. (East of the Fairgrounds. Maple Drive is one block South of East University) Meeting time begins at 12:30 p.m.

Check the IBPF website for shoots and scores www.iowablackpowderfederation.net

See you at one of the upcoming shoots Norma Holcomb IBPF Secretary-Treasurer 515-262-4712 cell 515-979-3446 norma.holcomb@q.com 4216 E. Douglas Avenue Des Moines, IA 50317-8020