

Browning Gun Barrels.—1 ounce muriatic tincture of steel : 1 ounce spirits of wine $\frac{1}{2}$ ounce muriatic of mercury ; $\frac{1}{2}$ ounce strong nitric acid ; $\frac{1}{2}$ ounce blue stone ; 1 quart water. Mix well, and allow to stand 30 days to amalgamate. After the oil or grease has been removed from the barrels by lime, the mixture is laid on lightly with a sponge every ten hours. It should be scratched off with a steel wire brush night and morning until the barrels are dark enough : and then the acid is destroyed by pouring on the barrels boiling water, and continuing to rub them until nearly cool. If the barrels are of imitated steel do not dilute the acid so much.

Holding Wads in Place.—Use a good firm, stiff pasteboard wad, under which place a circular disc of cotton cloth large enough to come up over the edge of the same, say from a sixteenth to an eighth of an inch. To load, first lay the disc of cotton over the mouth of the shell or loading tube, a good stiff pasteboard wad exactly on top in the centre and drive it home. Or, fasten your cardboard centrally to the larger cotton or thin cloth disc with a touch of good flour paste. Having thus prepared a lot of them should you prefer a lubricant, take an even roll of them dip the projecting edges in a little melted tallow, you then have a lubricant exactly where you want it to advance of the charge of shot.

Chokebore.—The term "chokebores" means simply barrels whereof the diameter of the bore at the muzzle is less than the bore at some point behind the muzzle other than the chamber, while any barrel constricted at the muzzle to the extent of 5-1000 of an inch may be termed a modified choke. A

full choke is constricted to the extent of 30-1000 to 40-1000 of an inch ; but the larger the bore the greater must be the muzzle. The constriction of the bore must be from $\frac{1}{2}$ to 1 inch from the extremity of the barrel : this constriction if placed 3 inches or more from the muzzle, fails to throw the shot close together, but will give better penetration than a cylinder.

Weather in Bay Bird Shooting.—The most favorable wind for bay snipe shooting in the summer and autumn is one that blows steadily from the south-west. The birds that are coming from the north, and flying against it, lower their flight and skirt the bars and meadows, and use the stools more plainly and decoys much better than when travelling with the wind in the clouds. A wet summer is also found to produce the best shooting, as the meadows afford plenty of feed, and should the birds arrive early in the season, they stop and take the large marshes their home, flying north in the morning and flying south toward evening. This flight may mean all a trade.

Ruffed Grouse Habits.—When alarmed, the ruffed grouse sometimes squats close to the ground, and generally flies and alights on some tree where it remains closely concealed under the branches near the trunk until the sportsman has passed. Their favorite resorts are sides of hills overgrown with hemlock and cedar, with undergrowth of laurel. In level countries they frequent swampy covers and scrub-oak patches, and lie better where there is a tangled and briery bottom. When flushed on a hill-side they generally fly uphill and can be found directly over the summit.