

**Arsenic: Symbol As** — It belongs to the "Nitrogen Family," along with phosphorus, antimony and bismuth. It is widely distributed as small percentages of sulfide ores of many metals. Most As in U. S. and Canada is a by-product of smelting ores of copper and lead. Highly-colored sulfides have been used as pigments since earliest times.

Lead alloyed with As makes harder, rounder shot. As and H can form arsine, a very poisonous gas with a garlic-like odor.

**Arsenious oxide** (arsenic trioxide) is the best known compound — often called white arsenic. It has a sweetish taste and, although extremely poisonous, people can acquire tolerance to it. Mountain climbers in Syria are "arsenic eaters." To gain endurance, they ingest enough arsenic in a day to kill an ordinary person.

As does not accumulate in the body. Skin troubles can result from using dry arsenic mixtures prepared for insecticides and herbicides (its greatest uses). Arsenic in poison baits long was the only way to control many insects. Minute traces of As can be detected in materials by Marsh's test.

It is useful for decolorizing glass. Many complex As compounds are used in medicine, one of which is salvarsan.

Arsenite of soda was used to kill chickweed at Merion Cricket Club as reported in July 1921.

Paris green was familiar to every farm boy who had to help fight potato bugs.

In 1926, Leach and Lipp, in New Jersey, reported arsenate of lead to be successfully controlling beetle grubs in soil. It is useful for reducing poa annua populations in putting greens.

High phosphorus levels in soils render arsenic relatively ineffective. One can substitute for the other in many chemical reactions.

I hit a number of balls to greens from 80 yards out. Sure enough, they wouldn't hold but the answer was in the fairway grass, not the greens.

The non-golfing superintendent, to keep the fairways "lookin' purty," kept the thick Bermuda cut at 1½ inches. The ball sat on top of a "mattress" so that no one could impart control to the ball with the club face. The "balloon ball" floated to the green and kept right on rolling off the back. By lowering the fairway mowers to ¾ inch, we gave controlled shots back to the golfers, the greens held better and were healthier with less water.

I used to walk and hit shots with Al Watrous and the late Horton Smith. One never forgets that their choice of a lie for a fairway shot was on a tight, close-cut piece of red fescue as next best to or on a par with close-cut, dense Bermuda. Most professional golfers agree that the

worst fairway lie is in lush watered bent that is cut too high. Ray Gerber of Glen Oak, near Chicago, and I checked that out years ago when we used to advocate high cutting to "save the bluegrass" in mixed stands. After 15 or 20 8-iron shots to the green the area looked as though the hogs had been rooting in it. Fairway mowers started cutting closer from that time on.

### Exposed Thatch

**Q.** We have C-1 and C-19 bent greens that are about four years old. There is no subsurface drainage. Rather heavy thatch prevented good water penetration so we aerified, verti-cut, mowed and applied fertilizer and hydrated lime, followed at once with water. The weather turned hot (near 90 degrees) and a few greens turned brown. Some said it was fertilizer burn but I am sure that it was not. (Maryland)

**A.** Fortunately I was able to make a first-hand inspection. You may be assured that there

*(Continued on page 70)*