

considered the Clarey statement, the pro working and employment conditions can stand a lot of improving but whatever improvement is effected probably will come as the result of action taken by individual pros rather than action coming spontaneously from a large number of clubs.

Again the suggestion comes that a primary step in the education of club officials in providing merited and fair conditions of employment for pros would be the preparation of standard contract forms to be worked out by the PGA and organizations of club officials. The suggestion has been repeatedly advanced by thoughtful pros and endorsed by club officials and it is hoped in many sections that the PGA eventually will take action and follow through in thus attempting to clarify and correct pro employment conditions.

Portable Oil Torch Busy As Greenkeepers' Tool

By CLINTON K. BRADLEY

Passaic County GC, Paterson, N. J.

MY experience with oil burning torches indicates that the torch is a valuable and frequently useable item of maintenance equipment. I have used successfully two sizes of Aeroil burners, both of which use kerosene as fuel on the plumbers' blowtorch principle and generate temperatures as high as 2,000 degrees F.

On heavy matted growths of weeds one cannot expect control by burning inasmuch as the soil acts as an insulator and prevents heat penetrating deep enough to destroy dense growths; however I have had splendid results on weed control by burning weeds in traps, walks and paths. Poison ivy on trees, walls, fences and at other places can be scorched one day and burned completely the next day. This work should be done by a man who is not susceptible readily to ivy poisoning as the oil vapor may cause a skin rash. The Aeroil burner I use for this is a single flame hand type.

I have found a burner a great help in screening compost with a fine screen while the compost is wet. I set the torch under the screen where the compost first enters from the hopper. Flame goes up through the mesh and the compost and scorches weed seeds so they don't germinate. The screen gets red hot but quite damp compost can be finely screened in this manner and no time is lost sweeping pebbles that

get on the green as in the case of use of coarser screen.

Apparently little detrimental effect come from application of the torch to the compost. I have had tested the compost air dried, slightly damp and torch dried, physically and chemically, and very little difference was revealed. Undoubtedly some soil bacteria are destroyed by heat application, but the bacteria in the green replenish whatever are lost by heating. Apparently, from results at my course, insect eggs and larvae are fairly well destroyed by putting the torch to the compost.

Torch Kills Clover in Hurry

When I came to this course we had on our greens more than 12,500 dense clover patches. This fall we have only about 500 small spots of clover on the greens. Proper fertilization and correction of physical soil conditions were major factors in the clover elimination and control. In this work I made effective use of the torch.

I submit data on the chemical and torch methods as I compared them on two of our greens. Work in both cases was done in the afternoon of bright, sunny days.

By the chemical method on Green No. 1, 9400 sq. ft. 310 matted clover patches:

Mist green with water (20 minutes). Dust sulphate of ammonia dry at rate of 10 lbs. per 1000 sq. ft. on clover patches only (2 hours, 10 minutes). Let burn 4 hours. Soak green (1 hour, 30 minutes). Wait one week, watering frequently to leach out sulphate of ammonia so it won't injure new grass seed. Rake and scarify patches. Seed and topdress entire green 2 days after applying superphosphate at rate of 10 pounds per 1,000 sq. ft.

By the torch method on Green No. 8, 10,300 sq. ft. 364 matted clover patches:

Scorch each patch a few seconds. Scarify patches next day. Apply superphosphate right after scarifying. Wait 2 days, seed and topdress entire green.

Work on No. 8 green required only 2 hours, 30 minutes, and only 2¼ gals. kerosene. Grass seed started to germinate on this green before No. 1 green was ready to seed.

I've also had success in eliminating yarrow from greens by the torch method.

Of course for repair shop work a torch is almost an essential. Around the course for stump burning, for repairs to macadam roads and miscellaneous work, the greenkeeper will find plenty of work to keep his torch busy and thrifty.