Plenty of misery but we worked our way out O.K.

By SYD BLACK
Greenkeeper, Broadmoor C. C.

Broadmoor is situated in the New Rochelle section of Westchester County, New York, adjacent to Winged Foot, Quaker Ridge, Bonnie Briar, and Fenimore, with the new Hutchison River Parkway skirting the course, parallel to number eight fairway. The course was built by Devereux Emmet and opened for play in June, 1926. So far the course has not been the scene of any very important tournaments, but last fall we did have the open champion play an exhibition game, partnered by Tommy Kerrigan of Siwanoy, against Joe Turnesa of Elmsford and Louis Costello, our home professional.

I have quite an extensive program of work mapped out for next season, several items of which I have included as a direct result of lessons learned from the golf course blues of 1928. Throughout our section of the county heavy clay soil prevails, and thereby hangs our tale of woe. The greens at Broadmoor range in size from 5,000 to 8,000 square feet. In September, 1925, I planted all my greens with Metropolitan strain creeping bent, and they got their first top-dressing in the spring of 1926. This top-dressing, consisting of a heavy application of humus and soil in fifty-fifty quantities, was prescribed by the architect. From then on throughout the season, I top-dressed once a month with a mixture, equal parts humus soil and sand, with 15 pounds of ammonium sulphate per green. In October, I top-dressed for the winter with sand.

In the spring of 1927, I was placed in charge of maintenance at Broadmoor. My policy was to adhere to that previously followed, the one difference being that the monthly top-dressings contained only 10 to 12 pounds of sulphate of ammonia instead of the 15 pounds formerly used. On the whole, the season was a good one, though we did suffer, during heavy rains, from water-logged greens. Again in October I gave the greens a winter top-dressing of sand.

Coming to the spring of 1928, I was faced with a discouraging condition on my greens. For one thing, turf growth was abnormally tardy—attributable, perhaps, to the very late spring of that year, when all growth was about four weeks behind schedule. Besides that, however, my greens were hard—a packed condition, I spiked and watered, and in that way set the greens on the road to decent condition. Rightly or wrongly, I attributed the hard condition of my greens at this time to the continued application during the previous seasons of sulphate of ammonia,
Over the hill on the fourteenth fairway, Broadmoor and I decided to discontinue its use for the time being.

**Shows Drainage Need**

My regular top-dressing during last season was accordingly changed to a mixture of sand, humus, and soil, with 5 pounds urea per green. I consider that I saw sufficient improvement in my greens to confirm my opinion that mis-use of sulphate of ammonia can be responsible for hardening the surface of greens. With the advent of the general terrible weather that hit us all last summer, my troubles were, of course, multiplied tenfold, and I did not strive further at that time to establish rules that I could follow in normal years.

Did I have brown-patch? Plenty. Against it, I applied Semesan, and I can say that as soon as the weather gave them half a decent break, my greens came back speedily and well. I consider, however, that the 1928 troubles would have hit my course less severely had surface drainage conditions been better.

At the conclusion of the 1928 season, I found myself firmly convinced of two things. The first was that nitrogen-feeding is good for turf up to a certain point only; that beyond that certain point it is bad; and that if nitrogen is fed to turf in the months of hot suns, it can be positively dangerous. The second was that adequate drainage is an absolute essential to good turf. My chairman and I being in entire agreement on the latter point, we got to work last fall to carry out an ambitious plan to raise a number of our greens. We completed the job on number eighteen green before the frost set in, and this spring we hope to get numbers five and two done before play begins.

Recently I heard a much-respected soil scientist predict marked changes in the generally accepted methods of course maintenance, and many of us are eagerly awaiting a revised system of nitrogen feeding. Possibly, too, some measure of maintenance misery will in future be checked at its source—as it surely would be if, during course construction, wholesome turf-producing materials were imported, in adequate quantities, to regions where unsuitable soils prevail. The cost would doubtless often seem excessive, but would it not amply pay in the end?

**Protecting Trees from Wind Damage**

**A TTRACTIVENESS of golf club grounds depends in no small measure on the number and size of the trees that decorate it, and no club can afford to neglect these most important adjuncts to the landscape. Every storm that destroys a tree, every tree that dies from disease that might have been checked, spells a reduction in the club's assets, even though it is not written off the books.**

If your club has no "Forestry Committee," consider well the advisability of appointing one. Let it operate independently or under the Grounds committee. Let this new committee conduct a survey of all the woodlands on the property, in company if possible with a tree expert; mark for removal all trees found dead or hopelessly diseased; plan to doctor all trees needing surgery or trimming; order the strengthening of all trees found structurally weak.

To be effective, this work must be done correctly and carefully and it is best to turn it over to men trained in the profession of tree surgery. It is comparatively inexpensive and certainly the cost is more than justified as a means of insuring important club assets against the ravages of storms the year around.

Many trees are structurally weak. Usually the greatest danger is with trees which have sharp forks. The upper branches get heavier and heavier as the tree grows older. Finally the weight is too much and during a storm, or even on a still day, the branches will snap or the fork split down, leaving the tree disfigured and permanently ruined as a thing of beauty.