

then the Jinjitas have chosen other scenes for their moonlight sonatas. And it must be discouraging for a greenkeeper to have his carefully nurtured turf devoured in one gulp by a pensive hippopotamus."

Resignation of Mr. O. B. Fitts

It is with regret that we are again called upon to report the loss through resignation of another member of the Research Committee of the United States Golf Association Green Section. Mr. O. B. Fitts, who has been with the Green Section since March 1, 1923, resigned, effective February 1, 1928, to assume charge of a golf course at Washington, D. C. For some time Mr. Fitts, as a part of his duties, has had direct supervision of the turf garden at Arlington Farm. He has also upon request visited many golf courses for the purpose of consulting with and advising greenkeepers and green committeemen regarding their problems. While his services will be greatly missed, the Green Section wishes to take this opportunity to extend its best wishes for success in his new field of endeavor.

Hints on Making Compost

By Kenneth Welton

At this time of the year every greenkeeper will find himself with one of three situations facing him as regards the compost pile. He may have insufficient compost or, worse still, none at all, and will look forward with dread to the day when he will need it, and need it badly; he may have a pile recently made and which will, therefore, need watching during mild spells and thaws to avoid loss of nitrogen, or humus, through neglect; he may have an abundant supply of well-rotted compost as a result of following a regular procedure year after year. The greenkeeper with sufficient compost is to be congratulated. It is likely that he will have his pile under cover, where he can put his men to work now and then during the winter months. Compost already screened will lighten the work in the spring when there are so many other things to do.

In building a compost pile the thickness and number of layers should be governed by the material that is available and the character of compost desired. Ordinarily, with partially rotted manure that is not too strawy, equal layers of loam and manure will do; but if the soil to be used is a stiff clay, the pile should be built in three layers, as follows. Six inches of clay, six inches of manure, and four inches of sand. If the humus is furnished by peat, muck, or leaves, it may be advisable to add 25 pounds of lime to each ton of such material to assist in decomposition and guard against any toxicity that may be present, otherwise lime should not be used. If the manure is fresh and very strawy, the thickness of the manure layer should be doubled. If the available soil is of a light, sandy type, enough manure or vegetable matter and clay should be used in the pile to make the resulting mixture that crumbly garden loam so desirable for use on the green. When the pile has been made up, do not let it overheat. The rain usually takes care of the cooling, but otherwise the hose should be used.

If the compost pile is in the open, a hint as to possible economy in turning the material when ready may not be out of place. Often some contractor has a gas or steam shovel in the neighborhood of the club and will turn the pile at so much per hour or yard, doing it four or five times as cheaply as it can be done by hand. The shovel will move along the pile, dig into it and drop the compost in a large pile parallel to the old one. So as to better spread and separate the material, the operator can swing the bucket as he drops the load. The pile may also be turned with slip scrapers at one-half the cost of hand turning. For piles of four or five hundred yards, three teams can be used very economically. The teams should go up over the old pile to load the scraper and dump so as to build a new pile, thus turning and mixing the compost.

The above methods of turning the pile are mentioned, as the writer has seen the value of many well-built compost piles lessened to a great extent as a result of not being turned at all, or else not being turned at the proper time. This neglect is often due to the time required and labor entailed in turning by hand.

Gypsum (Calcium Sulfate) of Questionable Value for Turf Grasses

Recently considerable interest has been displayed as regards the advisability of using calcium sulfate, or gypsum, on golf courses. This is probably the direct result of the propaganda put out by those interested in selling the product. Some of the benefits claimed to follow its use are to the effect that it increases the acidity of the soil, thereby creating a condition more favorable to the growth of certain turf grasses such as the bents and fescues; furnishes calcium for the plant without increasing the alkalinity of the soil, as happens when ordinary lime is used; liberates plant food; supplies sulfur; and improves the physical character of the soil. Most of these claims are well answered in the Cornell University Agricultural Experiment Memoir 97, issued 1926. The author, M. H. Cubbon, goes into the history of the use of gypsum, discusses in considerable detail a large number of experiments that have been conducted at various times and places, and adds further evidence by describing carefully conducted experiments of his own. While turf grasses have received very little consideration in the tests, the conclusions reached with other crops apply to a greater or less extent in the growing of turf grasses. The following quotations are taken from the discussion and the summary of the Bulletin:

"In summarizing results from the various experiments reported herein, the conclusion must be drawn that calcium sulfate has not proved to be the active stimulant which it has heretofore been considered. Such results, it seems, might have been anticipated from the use of a single material whose constituents may or may not be essentially lacking in the humid sections of the country. Experience seems to show, too, that when a stimulating action is apparent, it is brought about by some unusual soil condition which, very likely, is not connected in any way with the lack of a particular element. It seems, further, that calcium carbonate produces a stimulation in many more cases than does calcium sulfate, and hence it must be