Through Dr. Daniels of Purdue University I was introduced to Mr. Charles Stewart of the CORN PRODUCTS REFINING CO. research staff and the work that was in progress in the testing of several materials for use as fertilizers and one material for soil conditioning. After seeing the potential in these materials I offered to make trial applications on the turf at our club. Mr. Stewart was anxious to see the results under actual practice by the potential consumer, and supplied us with materials for testing. Four materials were furnished about Oct. 1st 1951 and inasmuch as each material is quite different from the others I will report on each one individually.

A.— HEAVY STEEP WATER

A completely organic 4-8-4 fertilizer.

A residue from the boiling process to separate starchs

from the fiber of corn.

Only one application was made last fall. Two rates of application were 1 gallon of 4-8-4 to 10 gallons of water to 1000 sq. ft. and 2 gallons of 4-8-4 to 10 gallons of water to 1000 sq. ft. Neither one was watered in after. Both burned slightly. An increase in growth and color was apparent after the effects of the singe was cut off.

B.— PHYTATE STEEP WATER

Complete organic 4-6-3 fertilizer.

A similar material to the above. Same treatments applied but with no burning. Similar results in growth and color. Some foaming in the spray tank with agitation.

C.— CORN GLUTEN

Protein of hard portion of the corn kernel.

10% organic nitrogen fertilizer ordinarily sold as feed due to high protein content. Test materials have been sent to the following clubs where you may see the tests. Beverly, Glen Oak, Park Ridge and Westmoreland. Applications of ten and 20 lbs. per 1000 sq. ft. have given exceptional results in color, growth and stooling. Test plots at Argo show the longevity to be 4 to 5 months. The odor of malt is present while decomposition is in process. The physical condition of this material is similar to milorganite except for a yellow brown color. Over a hundred pounds per 1000 sq. ft. were used before any burning of the turf occured. The present cost of the material as a feed is in the vicinity of \$100.00 per ton. A slight variation of this material may be available at a lower cost. The thickening or stooling action of the turf treated with gluten is explained by the research department as a hormone reaction. Greenhouse tests showed the same reaction on seedling roots. We have not tested this material under conditions of high heat and humidity as the material has only been under test on golf courses since Oct. 1951.

D.— CORN FIBER

Corn fiber is the outer part of the corn kernel or hull. It contains 1% nitrogen but is not to be used as a fertilizer. Its properties make it useful as a soil conditioner. The fiber absorbs water immediately in the amount of approximately 500%. When added to the soil during construction it has made comparatively heavy clay into a rather resilient soil. About 3 inches of the fiber was covered over the soil and then worked into the upper six inches of soil. Tests of this material on golf turf will be made this Spring.

This report is given with the sole intention in mind that we are organized for the purpose of collection and dissemination of knowledge pertaining to the betterment of golf turf. We need more and more practical research with reports of the findings. Whenever one can make additions or corrections to any of our practical research reports don't fail to notify the BULL SHEET or the research committee. Bob Williams

MIDWEST DELEGATE'S REPORT ON THE 1952 NATIONAL ASSOCIATION ANNUAL MEETING

On Tuesday, February 5th your delegate, in the company of your policy committee members, Bob Williams and Ray Gerber, attended a policy committee meeting at which time, among various other subjects, the question of group life insurance for national association members was discussed. It appeared, thru discussion with delegates from various other districts, as though compulsory group life insurance was to be voted into our national by-laws with very little opposition. Having had no instructions from your local Executive Board regarding insurance, your delegate requested a caucus of the local members present at Columbus in order to be guided by their desires. The conclusions drawn by this caucus was that compulsory group life insurance would not be good policy for the national organization as a whole. Later at informal meetings with other delegates your representative suggested that the subject of group insurance was too vital to be voted on by delegate and suggested a plan whereby the proram for group life insurance could be presented to the entire membership by mail with a ballot enclosed which would afford each member the individual opportunity to vote for, - or to reject, group life insurance. At the annual meeting on Thursday evening, a motion directing the Board of Directors to adopt such a plan, carried by a large majority.

An Amendment creating a new class of membership to be designated as Life Members, for retired members after 25 years of active membership, was

approved

Upon having the pleasure on Tuesday, of again meeting Norm Johnson of Jacksonville, Florida, and formerly your Secretary and Editor of the Bull Sheet here in the Midwest, it occured to your delegate that he would again be a valuable member on the National Board of Directors, with the further idea in mind that he could possibly promote a National Conference in the Deep South in some not too distant year. Having had no direction or instructions from your local Executive Board other than to "use your best judgement with regards to the election", and having made no other commitments, your delegate requested and received Norman's permission for nomination. Then followed a campaign in which it was necessary to make some commitments in order to assure Norm's election. However the committments made were for capable men who would be an asset on the Board, and such action assured us of a feeling of good will and cooperation in the various other local organizations. With one exception, all those we were committed for were successful candidates.

Those elected to office were:

President Malcolm MacLaren, Cleveland, O. Vice President Leonard Strong, Bethlehem, Pa. Directors Norman Johnson, Jacksonville, Fla. Wm. Beresford, Los Angles, Calif. Willis Glover, Falls Church, Va.

Remaining Board Members: Frank Dinelli, John Abott, John Price.

At last reports a movement was underway whereby we might hold a combined National Turf Conference, - Equipment Show and Outdoor Demonstration,and National Golf Tournament, some where in Florida in the not too distant future, possibly 1954.

Respectfully submitted,

Don Strand,

Midwest Delegate.