

become too readily available, should be watched more closely at that season.

7. Over stimulation to foliage development, because of this one-sided fertilization should be classed as one of the major causes for the extent and duration of the fungus attacks. Where the feeding balance was maintained, this over-stimulation was impossible.

8. Deep and rather infrequent watering with the best available sprinkling equipment, with hand watering of the greens edges.

9. Seeding fairways to turf which the soil most easily grows rather than trying to compel it to grow one unsuited to the soil conditions in which it must exist.

10. Another year with the knowledge they now have and with funds available, the webworm will be less of a menace and should be controlled.

These and many more are actual suggestions from greenkeepers I have had the pleasure of hearing this summer. There will be many new problems possibly in 1932, but if they are thinking straight and as directly as they are, we need have no fear of the future so far as their responsibility is concerned.

Ohio Humus Installs Drying Plant

For the past fifteen years there has been a steadily increasing demand for a type of organic matter known as humus (completely decayed vegetation) for the reconstruction of soils and for use by the producers of fertilizers as a basis of all high-grade products.

Many of the best of these organic products are capable of holding approximately 175% of water, and this moisture retaining power has been of the greatest value in the reclamation of wornout soils, especially when decay has advanced beyond the peat stage to the formation of humus.

As the majority of these products on

the market are taken from but partially drained lands, the moisture content of shipments has average from 50% to 75% for each ton of humus shipped. This would mean that the purchaser would pay freight and delivery charges upon 1000 to 1500 pounds of water for each ton received.

The atmospheric moisture will remain at an average of 10%. Should a fertilizer manufacturer use an organic product containing 50% of moisture in the manufacture of a complete fertilizer, due to the average of 10% moisture in the air, his product would rapidly lose weight.



FAN FOR REMOVAL OF VAPORS FROM DRYING DRUM

Within a few months, a 100-pound bag of fertilizer could show a loss of 40 pounds in weight.

To make more economical shipments of this product to the users on golf courses or estate, and to reduce the moisture content to 10% to protect the fer-

tilizer manufacturers, a drying plant has been built and equipped with all modern machinery near Findlay, Ohio, by the Ohio Humus Products Company, utilizing probably the finest hardwood humus deposit to be found in the United States.

All operations must be made mechanical and automatic with accurately adjusted equipment. Hardwood humus, as the name would imply, is wood in an advanced stage of decay but still retaining its original cellular construction. This must be recognized as an almost perfect nonconductor of heat and offers the big problem in drying.

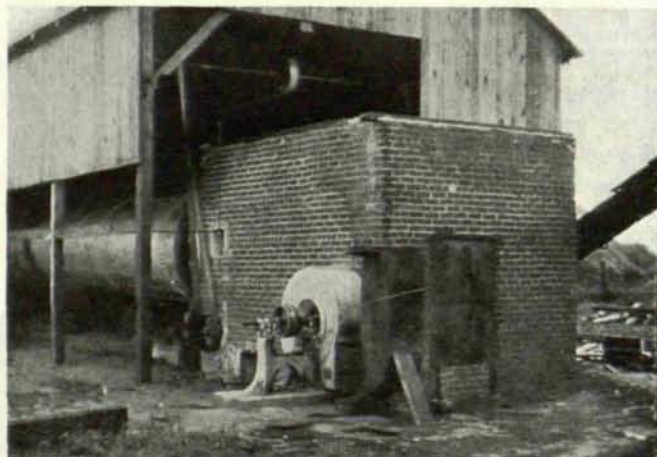
As the humus enters the dryer, it requires a heat of 3000 degrees F to overcome its peculiar power as a nonconductor of heat. At certain stages, without proper heat control, it becomes inflammable. Thermostatic control must protect it at this point and thereafter until it leaves the drying drum and starts on its way on cooling conveyors to storage.

At certain ranges of moisture content, it is susceptible to spontaneous combustion and these ranges must be carefully watched in the finished product. Once thoroughly cooled, it is safe for shipment, thoroughly sterilized against weed seed contamination, and is a perfect medium for use by the producer for our necessary legume bacteria in the farm, garden or golf course.

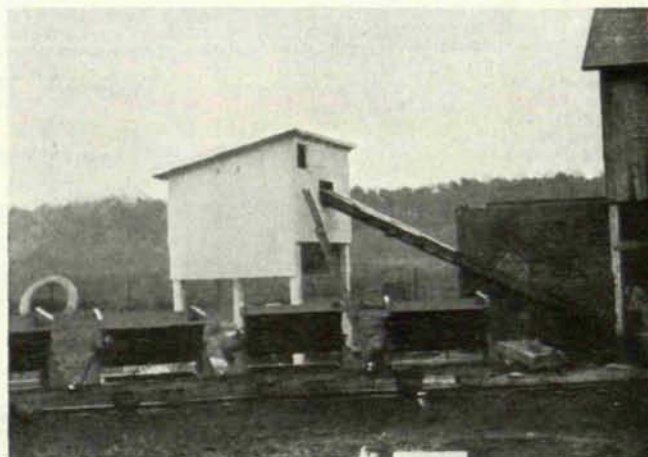
Toro Opens New Office

Toro Mfg. Company announces the appointment of a new Toro distributor in the Cleveland, Ohio, district. His name is Merritt C. Johnson, and he will operate under the name of the Cleveland Toro Company, with headquarters at 2160 E. 28th Street, Cleveland, Ohio, 'Phone—CHerry 5161.

Mr. Johnson will be ready to serve Toro users with a complete stock of equipment and full shop facilities for overhauling and repair.



DUST CHAMBER ALLOWING SLOWING UP OF AIR CURRENTS AND REMOVAL OF DUST FROM FINISHED PRODUCT



STORAGE EQUIPMENT FOR COOLING AND PREPARATION FOR SHIPMENT