



CYCLONE POWER SEEDERS

CYCLONE MODEL S-3 POWER SEEDER (left, above). Does a fast, accurate job, whether used for seeding or applying fertilizers. Spreads up to a 30-foot swath, depending on material being spread. Operates from heavy duty, flexible drive shaft which fits tractor PTO. Double agitator, easy setting rate gauge, and positive shut-off. 1, 2½, 3 and 5 bushel sizes.

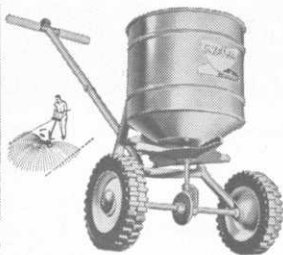
CYCLONE ELECTRIC MODEL M-1 (shown on garden tractor at right, above). Mounts on garden tractor or front or rear of large tractor, truck or jeep. Powered by a self-contained electric motor which operates from the electric system of the vehicle upon which it is mounted. Does a fast, accurate job of seeding or applying nitrogen and other pelleted and granular fertilizers. Resistor available for control of spread width. 1, 2½, 3 and 5 bushel sizes.



THERE'S A **Cyclone** FOR ALMOST
EVERY SPREADING AND SEEDING JOB
ON THE GOLF COURSE



CYCLONE HAND SEED SOWER. Accurately and quickly distributes grass seed . . . also pelleted fertilizer. Exclusive double-oscillating feed. Instant shut-off. 7- to 28-foot spread.



CYCLONE LAWN SPREADER. Famous for speed, freedom from streaks, accuracy. Covers a 6- to 8-foot swath. Ideal for fast, precision spreading of pelleted and granular fertilizers, herbicides, insecticides, seed, ice melters, etc.

See your distributor or write for information

THE CYCLONE SEEDER CO., INC.
URBANA 60, INDIANA

Grau's Answer to Turf Questions

By **FRED V. GRAU**
Does It Wear Out

Q. Does grass ever have to be replaced? Does it get old like people? (Illinois)

A. Turfgrasses that are constantly closely mowed renew themselves. Yes, older blades do die and are added to the residue in and on the soil, but fresh new shoots continually replace the old ones. In effect, this maintains *young* turf. About 85 per cent of the root systems of grass are completely renewed each year.

The residue that accumulates as a result of dead and dying plant parts sometimes is called "thatch" or "mat." Accumulation is lessened when conditions favor active microbiological decomposition (proper pH range, adequate nitrogen and balanced mineral nutrition).

It is well known that fresh young growth is infinitely more disease resistant than older growth. Removal of old growth by "thatching" (mechanical means) permits improved development of disease resistant young growth.

Apron Problems

Q. Why is it so difficult to maintain good aprons in front of the greens? (Illinois)

A. One of the reasons is that this area becomes more compacted than any other because of the concentration of traffic while the green was being built and since it has been in play. Such traffic creates compaction conditions under which few grasses can thrive.

Another reason is that many greens are built so that all of the drainage water comes off the greens directly on to the approach. This creates a condition under which it is almost impossible to grow anything but poa annua and knotweed. On some courses, the problem has been solved by more frequent aerating and by re-designing the green to take the drainage water off in other directions so that only a minimum comes off on the apron. Planting a type of grass that is suited to the condition also is helpful.

Hard Way Scarifying

Q. One of our members suggested, at a monthly round table discussion, that it might be a good idea in the fall to cut all the sod on the tees with a power sod cutter, but not remove the sod. Would this tend to make better turf on the tees because of the scarifying of the earth underneath? (Minnesota)

A. In my estimation, this would be a very foolish procedure. First, in cutting the sod, all of the