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RANGE BALL DISPENSER

Choice of Manual, Electric, Coin or Remote Control
Operation . . .

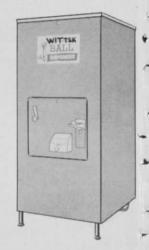
Guaranteed to dispense from 15 to 100 golf balls every seven seconds (indicate number desired)
 Minimum of working parts
 Available in single or double units
 Single unit hopper holds approximately 5,000 balls
 Dispensing mechanism slides out for easy checking, replacement — or for conversion from manual to electrical operation
 Choice of coin slots
 25¢, 35¢, 50¢, 75¢ or \$1
 Water and salt resistant finish

			SIN	NGLE UNITS	DOUBLE UNITS
Manual,	coin	operated		698.00	\$ 992.00
Electric,	coin	operated		798.00	1182.00
Electric,	remo	e control		898.00	1400.00
С	ombir	ation — I	Manual & Electric,	coin operated	1092.00
C	ombir	ation — E	lectric, Coin & Rem	note Control	1300.00

Manual and electric ball dispensing mechanisms are interchangeable and are also available without cabinets — for replacement or conversion:

Manual \$385.00 Electric \$485.00

(All Prices F.O.B. Shipping Point.)



# WITTEK

### GOLF RANGE SUPPLY CO., INC.

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are so quickly fixed and rendered insoluble by soil acids that they are essentially valueless as metallic ions. When they become a part of an organic molecule they are protected from fixation and thus can be absorbed by the plant roots.

Why are soil microorganisms important? Soil organisms are very effective in reducing organic residues to humus. An active soil microflora can prevent thatch formation by breaking it down as fast as it forms. Bacteria produce enzymes and colloids (glue-like material) which cement tiny soil particles together to form aggregates (grape-like bunches) which greatly improve the soil aeration and water absorption. Clay soils may act like sandy soils if the soil microflora is provided with a generous source of energy (carbon) and ample food (nitrogen). High bacterial populations seem effectively to reduce fungus attacks. Also they make available to plants so-called insoluble minerals that are "locked up" in the soil. To be fertile a soil must be plentifully populated by bacteria.

Q. Where does Penncross bent seed come from? I understand that there are three parents involved. What are their names? Is Penncross a hybrid? For how many generations can they take seed from a field before it starts to degenerate?—(Ontario, Canada)

A. To produce Penncross creeping bent seed three parents (vegetative) are planted side by side in cultivated rows. The parents are: 1) Pennlu, a vigorous creeper from LuLu Temple C.C., Philadelphia and 2) and 3) two selected strains from a cross between Washington and Metropolitan. They have only numbers, no names.

Penncross seed technically is a polycross (many crosses), derived from open-field pollination but only among the three selected strains. Yes, it could be termed a hybrid. The seedlings seem to exhibit hybrid vigor. They develop many varying characteristics when grown individually, but produce a surprisingly uniform turf when grown as solid sod.

Certification standards permit a grower to take two seed crops from a field; then it must be plowed and planted to other crops. The vegetative parents that are used to replant, or to plant new seed fields, are grown under certification and must be kept absolutely pure to protect the buyer of the Blue Tag Certified Penncross seed.

Q. Our State Highway department has chosen to run the new Interstate road right through our present course. It will have to build us a new course under our supervision. Where can

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we get a set of specifications or forms, or where can we get information to guide us in drawing up a contract? Where should we send our soil and sand materials for compaction tests?—(Nevada)

A. By all means secure the services of a qualified golf course architect. These men make it their business to prepare specs on the spot, tailormade to the existing conditions. A blank set of specs (outline) would be of little use without someone who is used to developing specs on which the construction outits make their bids.

The architect you engage will have access to soil-testing labs so that the mixtures for the putting greens will be porous, yet retentive of moisture and nutrients.

You are to be commended for seeking this information before starting construction. This department is available to you and to the architect of your choice should questions arise.

Q. We can get soil for topdressing from two sources:

No. 1. Short Haul 45% 35% 20% No. 2. 30-mile Haul 70% 20% 10% Which is the best? Is No. 2 worth hauling

30 miles?—(Indiana)

A. By all means drive the 30 miles and get the best soil. No. 1 has excessive quantities of fines that will become severely compacted. No. 2 is nearly perfect as we see the percentage analysis you sent.

Clubmakers apparently experiment with putters as often as players experiment with putting stances. Of 28 items submitted for rulings to the USGA Implements and Ball Committee during 1963, 10 were putters. Non-conformance with the Rules was found in 18 of the 28 cases.