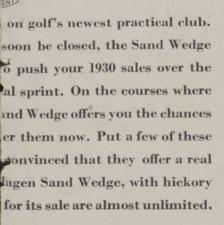
## ALLY BLAST EM OUT

club stops when it hits sand or requires considerable effort to bring it through. The extra weight—the 20 ounces of the Hagen Sand Wedge—the design of the blade itself—all help to carry the club head through with greater ease. An ordinary type stroke may be played from sand with excellent results. The ball is lifted—high and well out of trouble. Though its chief purpose is in playing from sand traps, the Sand Wedge has also been found practical on approaches from mud or very heavy grass. Before presenting the Hagen Sand Wedge, it was first tried out by some of the country's leading golfers to prove its practicability. To these experts who have used it, the Sand Wedge has become an almost indispensable club—a reliable club for trouble shots.







HE 1.68 WALTER HAGEN GOLF BALL has been improved. Its new construction insures maximum carry, at the same time maintaining accuracy—absolute accuracy in the air as well as on the green. When playing the large ball, golfers will insist on using only the best—a golf ball that will give them every possible yard of carry with the greatest possible accuracy. The Hagen ball is the logical answer. Give them every opportunity to enjoy the game more—sell them 1.68 Hagen balls.

THE ADVANTAGES of Walter Hagen clubs will become even more apparent when using the large ball. Hagen wood clubs have large deepfaced heads—properly designed for the large ball. And Walter Hagen "Compact Blade" irons will really come into their own. Though a sensa-

tion this season with the small ball,
"Compact Blades" were primarily
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## DRIVING MACHINE IS O. K., SAY COAST PROS

Hollywood, Calif.-A new, easily installed, compact driving machine which registers on a meter how far a golf ball hit by any club travels is called the Siltop Golf Strokometer. Such well-known golf professionals as Willie Hunter and Olin Dutra endorse the device.

By indicating distance ball is driven, whether straight, hooked or sliced, or for any distance approach shots, this machine is effective for instruction, so it is claimed.



Siltop Golf Strokometer is used in Willie Hunter's instruction

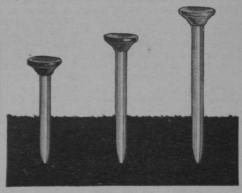
As this machine requires only a little space, many of the miniature golf courses are installing these machines at every hole to pep up the putting game. Other puttputt courses which have put in large batteries report they are as popular as the

putting greens.

The Siltop Golf Strokometer is simply designed. A regulation size golf ball is fastened to a stiff airplane steel cable which is connected with a short pivot pole. When the ball is hit, the pole revolves around its axis, turning bronze gears, upon which raised bronze numerals, from 1 to 400, indicate so many yards per revolution of the ball. The distance of the drive is shown by an arrow on the meter at the base of the pole. The machine can be screwed to any floor in a couple of minutes or staked in the grass or ground in a few seconds. It is handsomely finished in bronze or nickel and in many colors of duco.

# PAG

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## CELLULOID GOLF TEES

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As Celluloid Operators, we can easily give you new sizes and lengths as they are required by new conditions.

There now is ample proof of the popularity of the Celluloid Tee in the size and shape which we introduced under the name "PEG". Next year's improvement will be in finish and package.

Mounting sales clearly indicate that the trend is to "PEG",—the Celluloid Tee that is SO EASY TO USE.

Ask your Jobber for it.

GRANBY MFG. CO., Inc. KEENE, N. H.

## COAST PRO IS INVENTOR OF NEW MINIATURE COURSE

HAROLD SAMPSON, ingenious young Pacific Coast professional, has invented a miniature golf course which is getting a fine play at its initial installation. Other installations now are being made.

The Sampson game has six holes, the layouts being enclosed in wire nettings. The six holes, due to facilities for driving, iron, and chip shots and putting, will accommodate as many people as an 18-hole miniature course, so Harold says. Installation cost is no more than that of a fairly good miniature course, is another one of Sampson's statements.

The player starts off by shooting at a canvas backstop in which there are slots corresponding to the number of shots the player would have to make in reaching the distance of a perfect drive or iron shot. Banging the ball through the center slot means the player passes on to the next compartment for his putt and puts down 1 blow on his score card. Knocking the ball to the right or left of the center slot calls for adding three or two strokes, respectively, to the score.

If the player misses all of the slots he passes along and plays his shot to the green from a sandtrap in the next compartment.

Sampson says that the idea is appealing to the rank outsiders as well as to the golfers. He says that his idea enables the beginner to pick up the rudiments of the game without embarrassment. He cites the case of one player who learned golf in the San Francisco installation of the Samp-

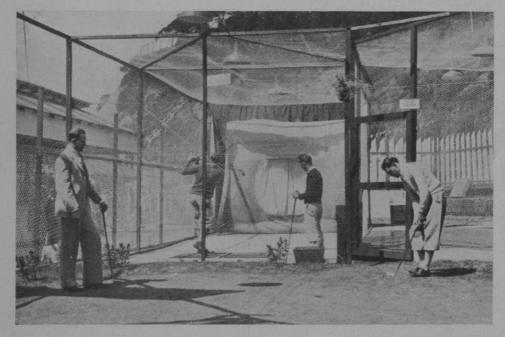


The sand-trap feature of the Sampson course.

son course and broke 100 the first time he ever played on a full length course.

Championship events held on the Sampson course have approximated the scores the same players make on regulation golf courses.

Harold has made arrangements with W. C. Poertner, 1819 Broadway, New York City, to handle central and eastern installations.



Showing the driving and putting features of Sampson's miniature course.

# Meat Buying and Preparing Major Items in Club Feeding

By ROBERT E. LOVE

I N SEPTEMBER GOLFDOM the purchase of fish was discussed. This article will deal exclusively with the purchasing and preparation of meats. The industry of slaughtering and meat packing is one of the largest manufacturing industries in the United States. Likewise meat makes up one of the largest and most costly items on the club menu.

When buying meat, one of the first things to consider is the class and type of people to whom the meat will be served. As a most discriminating patronage frequents the club restaurant, the wise steward or chef will purchase nothing but the highest quality meat products. It cannot be emphasized too much that quality is the predominating factor in the buying of meat. A cent or two more or less per pound may result in a much larger difference in the final yield. Practically every dealer employs a different method for trimming the various cuts, and test scores of these items have proven that by paying several cents more per pound you will realize a greater meat yield from a more closely trimmed one.

The steward must constantly study the desires and choices of the guests as regards meat dishes, and should purchase his meat accordingly. He should ever strive to give them what they want, when they want it.

## Study Meat Storage

Another item of importance is the meat storage facilities in the club kitchen. Adequate storage is essential for the most efficient operation. Care must be taken, however, that there is not too much refrigeration space available for meat storage, or the tendency may be to fill up that space with an unnecessary supply of meat which cannot all be exhausted before some spoils. Therefore it is far better in the long run to have too little storage room rather than too much. In other words, it is best to have just enough space to take care of the daily supply and demand. The

refrigerators must be kept as clean, fresh and neat as possible at all times. The steward should take great pride in his meat boxes, and should be only too glad to exhibit them to visitors at any time.

The temperature of the refrigerator should be carefully watched and checked. A few degrees too high or too low may ruin what was otherwise a fine piece of meat. Each refrigerator should have an accurate thermometer placed where it can easily be seen and read.

As regards the purchase of beef, careful tests have proven that the properly fed steer yields the best eating and most profitable cuts. Cows and bulls are not quality eating, and should never be purchased for use in a high-class club restaurant. The best quality heifers will not measure up to good steers, lacking in the flavor and choice cuts obtainable from the select steer. The best quality steers range in age from one to one and a half years old, and have been corn fed for a period of from six to eight months.

## Beef Buying Pointers

A good average weight for steers runs between 800 to 1,000 pounds. In buying beef the cut should be medium fat. The flesh is light cherry red in color, and the lean meat is fine grained and velvety in appearance. The quality is also judged by the fat layer under the skin, its character and distribution; and by the degree of "marbling" (shot through with creamywhite streaks and specks of fat). These flecks of fat all through the fibers of meat indicate tenderness and flavor. Thin connecting tissue means a tender cut, while thick tissue will result in a tough cut. The meat should have a fresh odor and no dry dark edges or spots. Usually meat well ripened is more tender than fresh meat.

Young beef has bright color and fine texture, while old beef has coarse texture and dark color. The bones should be porous and pinkish rather than flinty white. The finest meat is around the

# Hiring the Right Manager

The Club Managers' Association of America takes pride in the accomplishments of its Employment Bureau in view of the short time it has been organized and the results so far obtained.

We have been able to supply several clubs with managers who have given complete satisfaction to date and we are happy to state that our list of men available for positions has been decreased greatly in the last sixty days.

However, there are still some men who are eager to make new connections and whose records entitle them to consideration for the management of first-class town and country clubs. We should be very happy to submit a list of such men to any club seeking the services of managers or general managers.

The service thus rendered by the Association is not alone beneficial to members of this organization but has been helpful to club officers and this is amply proven by letters in the files of the Association from house committee chairmen and presidents of clubs who have thanked us for our assistance.

The Club Managers' Association is jealous of its reputation and cannot afford to recommend any but the very highest type of material for managerial positions. This, then, is the assurance to club officers that by making their selection through the list of available candidates furnished by this Association the Club's best interests will be served and that the Association will recommend only such men as it feels sure will bring credit upon the organization.

Club officers seeking competent managers, club managers seeking positions and non-members of the Association who wish to take advantage of the Association's many worthwhile facilities should address their inquiries to

HENRY R. DUTTON
National Secretary
CLUB MANAGERS'
ASSOCIATION of AMERICA

% Boston City Club, BOSTON, MASS.

backbone, which is the least exercised part of the steer. Test scores have demonstrated that a 36- to a 38-pound rib, and a 38- to a 40-pound short loin, when properly cut and trimmed, are the most profitable. However, again it must be emphasized that the greatest of care must be exercised in the selection of these cuts as quality is the major point.

In purchasing loins and ribs, which are probably the two items used more extensively than any others, the following should be sought: The clear white fat or covering should be uniform and around one-half inch thick on the ribs, and good proportion to the lean in the best loins. The feeding can be judged by the marbling or the mixture of fat through the lean. The form of the ribs and loins should be concave instead of convex, which is known as perfect conformation.

## Buying Veal Correctly

In regard to veal, it should be almost white in color with a delicate pinkish tinge. The body should be broad and compact with full-meated loins, ribs and legs, while the entire carcass ought to be covered with a coating of light baby fat, and the kidney covered with an abundance of brittle white fat. The flesh of veal is not so firm as that of beef. The fat is white with a slightly pinkish tint and firm. The breast bone is soft and red.

The leg of veal furnishes good quality solid meat, with very little waste. It can be used for roasts, and steaks (called cutlets). The heart may be baked, stewed. or braised. The rump makes a high quality roast, while the brains may be sautéed, scrambled, or creamed. The loins and ribs furnish excellent quality chops and roasts, while the breast makes a good roast or stew. The kidneys are usually broiled, stewed, sautéed, or used for a meat pie. The shoulder gives good quality solid meat for stews or roasts. The shanks are mostly bone and gristle, and little meat, therefore are used for stews or soup stocks. The chuck, including the shoulder, neck and breast, is good quality meat for roasts or steaks. The liver may be sautéed, braised or baked, the tongue corned, boiled or smoked, and the sweetbreads creamed, broiled, braised, or used in salads and so forth. However, loins and ribs are the prime cuts and should be so purchased and used.

As veal does not contain very much fat, it needs long, slow cooking. Therefore broiling or pan broiling is not recom-

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One of the smaller machines at work

## "FRIEND" GOLF COURSE SPRAYERS

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mended as a method of cooking any veal cut. A meat thermometer removes the guesswork from roasting.

In general the cooking of meat may be summed up in three ways, as follows: (1) By the application of intense heat to keep in the juices (roasting, baking, or broiling); (2) by placing the meat in cold water and cooking for a long time at a low temperature (boiling), and (3) by the combination of the two processes-first searing and then stewing the meat. essential point is to first sear the surface, thereby hardening the albumin on the outside so as to prevent the escape of meat juices: then cook at a fairly low temperature until done, so that the albumin on the interior of the meat will not be hardened.

Meat while being cooked, whether by roasting or baking, must be basted often (the melted fat, which has run from it, must be poured over its surface with a ladle to prevent roast from drying or burning). The roast should be ready at least half an hour before being carved in order to allow the albumin inside to set. One way to tell when meat is done is to press on outside, and if done it will rebound at once. If overdone, it will scarcely yield at all.

Both flavor and texture of beef are improved by "hanging" (being kept as long a time as possible before using). Hanging allows the skin to dry, thereby hardening it and closing the pores so as to exclude the germs that cause decay, and it also allows the muscle fibers to relax and soften. A discussion of the purchasing and preparation of lamb, mutton and pork will be covered in a later issue of GOLFDOM.

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## Answers Questions They Ask About Fairway Watering

By WENDELL P. MILLER (PART FIVE)

UR recent articles on irrigation have brought inquiries for more information—seasonal water requirements, lower cost irrigation construction, and the benefits of fairway irrigation. We will answer these requests as far as space will permit.

## Seasonal Requirements.

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Seasonal requirements for golf courses depend upon the amount and distribution of rainfall, and upon the soil. Seasonal requirements vary much more widely than the daily requirements, not only from course to course, but also from season to season. On the other hand, clubhouse requirements are fairly uniform from year to year.

Records of the water consumption of clubs are conspicuous by their absence—and the few records available do not separate the house consumption from the course. Seasonal requirements are substantially lower than indicated by the daily requirements (multiplied by the number of days). Further, the figures, actual or calculated, for any past year will not hold for the coming years—as no one can accurately predict the rainfall for any one

year and hence the water required for artificial irrigation.

During the past summer we have obtained actual meter figures on an 18-hole course on Long Island (Pomonok). From May 5 to September 13 the actual consumption for tees, greens, and fairways, was 16 million gallons, with a probable total for the year of 18 million gallons.

At Des Moines, Iowa, we have estimated the annual consumption for 18-holes (tees, greens, and fairways) on sandy type soils at 28 million to 30 million gallons. At Chicago, the courses on the heavier soils can get along nicely on 16 million to 18 millions. The requirements at other courses with which we are familiar range from 15 million gallons on tight soils to 30 millions on loose soils, for all purposes except clubhouse. These figures can be taken as limits until the further development of fairway irrigation and the use of meters, will supply more definite information.

#### Low Cost Construction.

We have previously given the cost of permanent irrigation construction using the best of materials and the best of engineering practices—installations costing



Hoseless irrigation for the putting green of irregular contour. The three sprinklers are permanently installed, and controlled by one valve.

\$20,000 and up. Now, for clubs which cannot spend so much as \$20,000—but whose courses are as badly burned this year as those of their wealthier friends. Accordingly, we outline the prospects for clubs with \$10,000 to \$15,000.

## Cost of Water Supply Important.

An all important consideration in developing low cost construction is the cost of the pressure pumping plant. Few clubs have available ample water supplies at above 50 pounds effective pressure, (at lower pressures the labor cost for operations is excessive), hence for economical operation a pressure pumping plant is necessary. A reasonably good plant of adequate capacity but without automatic control can be installed for \$2,500. True, a plant can be installed for less-but cheaper installations operate at such excessive cost for labor, repairs, replacements, and depreciation, and are so lacking in dependability that their construction cannot be wisely advised.

There will be additional outlay where wells must be used. Each well situation is a study in itself and comparative figures on well installation are useless.

### Isolation of Clubhouse Water.

We generally find the clubhouse and golf course water systems connected. raising the golf course water pressures to 60, 70, even 100 pounds, or more, it is necessary to "isolate" the clubhouse on a separate source of supply, if possible; otherwise, the clubhouse plumbing must be protected by pressure reducing valves. The clubhouse supply is frequently complicated by the necessity for shutting down and draining the golf course water system during the winter months-and again by the underwriters requirements. The clubhouse water supply is usually involved with golf course supply, is often complicated, and must be satisfactorily and economically disposed of particularly if we are to have low cost construction.

#### Makeshifts.

Makeshifting is possible under favorable conditions of water supply and is facilitated when the existing piping is substantial. The difficulty with makeshifting lies in the waste due to abandonment of makeshift construction and equipment. Only under the most shrewd and careful planning is it possible to adopt makeshift construction which will have any permanent place in the water system. Again, makeshifts are either costly to operate or woe-





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fully inadequate, or both. Makeshifting cannot be recommended except in unusual cases where fairway irrigation is a real necessity, and funds are lacking for proper construction.

## Use of Existing Piping.

In some cases it is possible to work the existing piping into the fairway system and save something against the construction cost. Recently we encountered a situation at Des Moines, where the club wanted to utilize existing three, three and onehalf and four inch piping to good advantage, saving several thousand dollars thereby. In this case it was possible to use all of the existing tee and green system piping but only part of the mainsbecause the matter of isolating the clubhouse supply was involved. Frequently is it possible to "cut" the new system into the existing tee and green system to provide higher pressure for existing outlets. The average club should not plan on using existing piping until an investigation demonstrates conclusively its condition and the wisdom of incorporating it in the new piping construction.

## Low Cost Piping Systems.

The fairway piping system, disregarding the tees and greens, can be installed for as little as \$10,000 to \$12,000, if the course layout is compact and if the soil is tight or has a high water holding capacity and further provided the club is willing to face replacement of the piping in 12 or 15 to 20 years.

Some further reduction might be made by installing common black steel pipe but the life of this pipe is very short under most soil conditions—therefore its use would prove very costly and wasteful indeed.

## Range of Construction Cost.

Thus we arrive at a minimum of \$10,000 for an 18-hole fairway hose piping system without tees and greens, and \$2,500 for the pressure pumping plant, if the water and electricity are available. These figures do not include the necessary hose and sprinklers, another \$800.

Above these bed rock figures and running into permanent construction, automatic control for the pumping plant, and on into hoseless irrigation, there is an intermediate type of construction to fit every club's finances. It is practicable to plan a combination of 100 year, and 12 to 20 year construction, with the installment method of developing hoseless irrigation, so that