Bamboo poles.-Two advise 10020 -foot poles for cleaning tees, greens, ete.

Work shop and equipment.-Advised by four. Two advise 1 lathe, 1 drill press, pipe and other wrenches, hatchets, hammers, and axes. In addition, the following are advised singly: 1 or 2 vises, 1 breast drill, 1 brace, 1 sledge hammer, shears, 1 plane, 1 hack-saw, 1 sphere level and square, 1 tape measure, chisels, punches, files, nuts, bolts, serews, nails, hose couplings, hose menders, pipe cutter and dies, 12 oil cans, 1 blow torch and soldering material.

Sundry equipment.-The following are advised singly: 1 good-sized shed for storing compost, 1 underground gasoline tank with pump, 6 mole traps, I scale, brush hooks, pruning shears, I good level on a tripod for green building and leveling greens, hand weeders, 1 set of tee boxes, 1 set of tee benches, and 2 sets of tee markers.

Oils, etc.-Two call attention to the season's supply being necessary, one detailing it as follows : 4,000 gallons of gasoline, 50 gallons of motor oil, 50 gallons of harvester oil, 50 gallons of special oil, and 30 pounds of grease.

## Measurement of Golf Holes and Placing of Tees

Alan D. Wilson

There seems to be a lack of uniformity in the methods of measuring the length of holes, but apparently the most generally accepted plan and the one which is based on the soundest theory is to measure from the middle of the tee to the middle of the green. If the figures on the score card represent this measurement, it is very easy for the player to judge the playing length accurately when the disks are moved forward or back from the center. Unfortuwately, on a good many courses holes have been measured inaccurately, and often from the back of the tees in order to give a fictitious idea of length, for we in this country seem to have a mania at the moment for long golf courses. Sometimes, in addition to this, a number of yards are added on just for good measure, and the result of this practice is not only to give the stranger a totally wrong idea of the hole but to teach the club members themselves a false standard of distance. Would it not be a good plan for clubs throughout the country to standardize this matter by measuring from the middle of tees to the middlle of the greens and put absolutely accurate figures on their score cards?

Many very fine holes need several tees in order to preserve the value under varying wind and turf conditions, and this even for the same class of player. Long two-shot holes which under normal conditions are a fine test of the first-class player become levellers against a heavy wind and on soggy turf, when no one can get home in two strokes, but the second or thirdclass player can reach them in three and the first-class player can make a bad shot and often be as well off as the men who have played them perfectly. If a hole of this sort could be shortened say 20 or 30 yards, under such conditions, its value would be retained, as a first-class player could get home in two properly played shots, while the second and third-class man would require three or more.

All courses need different tees even under like weather conditions to make many of the holes suitable for the various classes of players, and this feature has been seriously neglected on many American courses. If more attention were paid to this we believe it would not only increase the pleasure but improve the golf of a majority of the club members. As it now stands, the poorer players on many courses have no chance to make many of the carries, are constantly in trouble even when they play their best shots, and are generally taught the game of playing safe and never trying for anything, which certainly decreases their pleasure and does not tend to improve their golf.

Unfortunately, it is not the easiest thing in the world to arrange courses so that this will not be true, as there are many difficulties, both physical and psychological. Where it is simply a question of variation for wind and hard or soft ground, the long, low tee constructed with easy gradients to the fairway level so that it can be mowed with a fairway tractor machine is the practical answer. It is cheaper to maintain than the small tee which must be cut by hand, and grows grass better than the high rectangular effects we so frequently see. It makes no allowance for the different classes of players, but answers perfectly for certain types of holes, such as one-shotters and the two-shotters of say from 420 to 450 yards with no severe carries and with no punishing bunkers just short of the green. Holes of this latter type make good two-shotters for the firstclass player and satisfactory three-shotters for the rest.

This method is not successful however on holes with long carries from the tee, say from 155 to 190 yards, or on holes where the green is closely guarded in front. Diagonal bunkering helps somewhat, but usually for the mediocre player such holes take most of the fun out of golf. He is either continually in trouble or constantly playing short. If we could give him a shorter tee he would at least have a chance to make the carry on the drive, and, if he succeeded, another chance to make the second carry to the green: In other words, he would have a chance to try to make the shots and really to play golf within his limitations. In practice. however, this is not as easy as it sounds. If the ground is level, the two tees may not be one in front of the other, for in such case the people playing the back tees will be driving into the benches and sand boxes of the tee in front. Where the front tee can be put on a lower level, as at the 5th, 9 th, 14 th, and 18 th at Pine Valley, it is quite simple; but usually these shorter tees must be laid considerably to one side or the other of the line of the back tee, and this takes both space and ingenuity.

The most serious difficulty, however, is the psychological one. If you build three sets of tees and call them the long tees, the short tees, and the ladies' tees, obviously no "he-man" will play from the ladies' tee; and in practice it seems to be found that either from a sense of vanity or due to the fact that hope never dies, very few of the people who ought to use them will play from what are designated the short tees. They seem to feel that if they do they are not playing the game and so continue to play from long tees which utterly spoil the hole for players of their caliber. We believe that some of this difficulty could be remedied if the tees were known as the championship tees, the regular tees, and the ladies' tees, as
the ordinary player would probably feel that it was not necessary for him to consider himself in the championship class and struggle from tees designed only for competition purposes. We think, however, that the very best way to handle this matter is to refer to the tees by color rather than name. Let the tees be called red, white, and blue, or any color you will, and let it be known that the red, we will say, is for championship purposes, the white for regular play, and the blue for ladies. Let the disks be painted accordingly. Of all the courses which have come under the writer's notice, he believes that the National at Southampton has giver this subject more thought and has reached a better solution. It is a long, difficult course from the championship tees, with some very severe carries, and from these tees the ordinary player could get little pleasure out of the course, notably at holes such as the 2d, 7 th and the 17 th, but from the middle tees, which are placed either at different levels or well to the side, it becomes a course of moderate length with entirely reasonable car ries and one which it is a delight to play even for a golfer who can not pretend to anything that approximates a good game. They use the color scheme suggested above, and it is interesting to note that the great majority of players at the National use the middle tees as a matter of course and only the men who play exceptionally well attempt the long carries from the back tees.

## "Bent"

## C. V. Piper.

"Bent is not a hazard. R. and A."; note under definition 6 of the Rules of Golf. As not one American in a million knows what is referred to by "bent," it would seem as if it should make very little difference whether or not bent be a hazard or an assurance of safety: But of course every golfer should know the rules even if he have trouble in defining what they mean; he certainly needs education as regards "bent."

Bent is an old Anglo-Saxon word, according to the dictionaries, akin to the German word binse, a rush. Originally the word bent seems to have been applied mainly to stiff-leafed grasses, but by extension has come to be attached to a diverse medley of species, and even to sedges and rushes. Botanists think of it as applying mainly to the genus Agrostis, which includes creeping bent, velvet bent, Rhode Island bent, and many others. But the word is also used for grasses of the genera Nardus, Elymus, Ammophila, Andropogon, Calamagrostis, and others. Of course only a botanist knows all these grasses, but among them are some coarse and 8 feet tall, and others fine and delicate and only a few inches high. In short, the word "bent" is now widely inclusive of very different grasses.

There are however other meanings attached to "bent," namely, "a place covered with grass; a field; uninclosed pasture land; a heath." There are also the adjective "benty" as used for a place covered with bent, and the noun "bentiness" signifying the state of being benter. Finally, "benting" denotes the act of collecting bent or bent stalks. These words are manifestly derived from the grass or grasses called bent.

Which is the grass that gave origin to the decision that "bent is not a

