

★ ★ Before Bobby Locke came to America he was introduced to the Dunlop Maxfli Golf Ball in South Africa, and the results were so outstanding that he has played it ever since.

His choice is the choice of pros everywhere, and of amateurs too. They have found that in the uniform compression of these balls lies the real secret of perfect control. Not only are they tested at every step in their manufacture but before each ball is painted it undergoes a final test for compression. If it is not up to standard it is rejected.

With the Maxfli-you can depend upon it. The ball is right.





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wrist action would be delayed until the hands were approximately opposite the wrist. Also, do you recall that the slowmotion pictures showed Bobby Jones well up on both toes at the impact?

Today, thanks to the low-cost home movie equipment, we not only can study the swing of the top-notch golfer, but what I think to be of much more importance, we can see ourselves in action. Thus, many teaching problems can be solved. However,



Movie shows Nelson's compactness . . .

this method is not a cure-all. Like every shiny, new gift, sensory devices may dazzle one into all kinds of wishful thinking. Visual materials must be understood in their relationship to teaching as a whole and to the learning process as a whole. Unless the instructor grasps this relationship, he can scarcely expect to make intelligent or fruitful use of this technique.

It is a common belief that photography, next to printing, has become the greatest of all educational factors. If this medium, through which the most adequate learning is fostered, is so effective, why not make it a part of our teaching method? Those of us who have used this type of instruction realize its value. Inasmuch as the pupil's mind is impressed much more by seeing than by hearing, this method of teaching makes for a surer grasp and realization of significant errors often misinterpreted through the verbal imagery the pro endeavors to create.

#### Football Use of Movies

It was in my freshman year at college that I first learned the importance of the movie camera in relation to visual instruction. Jim Pixlie, my old football coach, knowing that I was "camera-happy," and also a permanent fixture on the bench, gave me a less hazardous job than trying to upset a 250 pound fullback on the loose. My mission was taking 16 mm. movies of the players in action. Eagerly I went for this because my 135 pounds, which was only a practice dummy anyway, was once and for all time out of danger. Also I was thoroughly convinced that the men on the squad could improve their method of play by carefully watching and studying their actions in slow-motion, half slow-motion and normal speeds.

This, without question, improved that football team. That was the year they upset Auburn 19 to 7. Incidentally, "Tuffy" Leemans, the former New York Glant's great backfield man, was on that 1931 George Washington university squad; Bob Considine wrote the sport column for the university paper, and Al Jolson's son was a cheer leader.

Many people are frightened away from this fascinating field of pictorial instruction because they believe a moving picture camera to be a complicated device, and that a series of complex and intricate accessories are essential. This is not the



... and hip rotation.

case. A great deal of good and serious work can be accomplished with simple and ordinary photographic devices. As in any other specialized branch of photography, it is neither the expense nor the design of the equipment that counts—it is the intelligence with which the materials on hand are used. Some of the best results are often obtained with the simplest equipment. Simplicity of materials and operation are the best guides to obtain effective results.

Anyone can project the finished picture on the screen, but some careful thought must go into the making of this film, and also as to the type of camera and film needed for this specific purpose. First of all, the essential equipment must be purchased, and secondly, a definite method of handling it must be learned.

#### Movie Equipment for Pro

Before purchasing your materials you must definitely know your needs. Other-



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61/2 ft. high and 10 ft. across with wings open, it provides ample netted area even for the inaccurate shots of beginners ... yet it is so compact it fits into limited space of basements, garages and attics.

Ideal for pro instruction, club practice facility or players' back yard.

Of finest, most durable materials, the new Ederer Portable Net will stand continuous use by golf's most powerful hitters, Amazingly light — complete with target back-drop, it weighs under 23 lbs. In two minutes, it can be easily set up for action.

No other golf net offers the handy accessibility and full shot golf practice and so completely answers your own and your players' need for a compact, easily portable practice net. Its modest price means many sales to your members, at a fine profit to you.

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Write for literature and prices.





#### QUICK TO SET UP OR TAKE DOWN

It takes less than two minutes to unfold the Ederer Portable, lock the side wings and hang the target back-drop. It folds just as quickly into a compact unit 3 ft.  $x \frac{6}{2}$  ft. x5 in. Its shipping weight, in carton that serves for storage, is 25 lbs.



wise you may come out of the camera shop with enough gadgets to set up another studio in Hollywood. It is only natural that the photographic salesman will endeavor to sell you everything from a series of filters to a telephoto lens.

Those of us who are familiar with movie devices will agree that any standard 16 mm. camera with at least three speeds and an f/3.5 lens will serve the purpose. A camera, such as the Cinklox model 35 can be purchased for approximately \$75.00. The projector is of little value unless it is equipped with a device to stop the film on the screen in order that a certain slowmotion strip can be analyzed. The Keystone 160-16 mm. has this feature and can be purchased at Willoughleys in New York for \$119.50.

In addition to our camera and projector we must purchase a screen. This will not be in excess of \$15.00. Another one of our problems is choosing the proper film. As many of our shots will be taken in slowmotion, it is absolutely necessary that we use a fast film such as Eastman Super XX or its equivalent. This type of film captures the image quickly, giving us a clear, sharp, detailed picture. The cost of this film ranges from \$4 to \$6 per 100 ft.

If a slower film is used the subject will be blurred. Of course the slower film should be used when taking the picture at normal speeds. The professional photographer prefers to put speed in the lens, but we amateurs will find it safer and more economical to buy the film with the speed already there.

After you have familiarized yourself with your camera, you will find that 25 feet is sufficient to make a series of pictures of your pupil. It is best to take the first few shots at normal speeds so that the subject can see his swing as it actually is; then take the slow-motion shots at all angles—front, rear, and right and left side. You should know the number of waggles the pupil makes before you start the camera. There is no use wasting film on the preliminaries that lead up to the actual stroke.

Before taking the picture, be sure your subject is standing between the camera and some stationary object such as a tree,

## EVERYBODY LEARNS TO PLAY GOLF



Alex McKay noticed at Holston Hills GC, Knoxville, that there were too many non-golfers in the families of the club's members. Other pros will see that too as they observe the number of women who play cards and eat at the club but who don't play golf, and the number of non-golfing youngsters brought out to the club for meals.

So Alex has made a big thing of his free class lessons for women and children. After they know enough about the game to be eager to play Alex gets paid off for the free lesson time in the sale of equipment. He starts them with good open sets of clubs so the first cost won't discourage them or have them putting the bite too strong on Daddy.

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post, or house, so as to determine any improper movements of the head or body. And, too, should you be inclined to be a little more technical, you can make chalk lines on the ground with a lime marker which will indicate the actual arc of the club-head on its backward and forward motion. Experimenting with inexpensive film will, of course, save the beginner a lot of high-priced film in the long run.

#### For Slow Motion Analysis

It must be remembered that when taking your picture in slow-motion the film races through your camera 64 frames per second, which is four times the normal speed. Therefore, the lens must be opened one to two full stops to prevent underexposure. At this speed the camera approaches the slow-motion so often seen in the theatrical sport subjects. "Approaches" is used advisably, since professional slow-motion pictures are made with special cameras, and at somewhat higher speeds than most amateur cameras will operate. Yet, even 64 frames actually stretches one action second into four visual seconds, and is adequate for nearly all, if not all, the amateur requirements.

After you have finished the task of making the pictures of your pupil's swing, and the processing has been completed and ready for projection it would be wise to view these films yourself before showing them publicly. Should you have a few bad shots they can be cut out with your \$6.50 splicer. Also, while doing this you may, if you think it necessary, supplement a slowmotion of Nelson or Hogan by way of comparison.

You will find that there are not so many problems in this type of photography. It can be simplified by studying the photography magazines and books on the subject, but most of all by experience with a dash of common sense and intelligence. Remember, all the necessary equipment for your visual instruction has been mentioned in this article. Of course as time goes by and you become a par photographer, then you can add to your equipment—increased knowledge necessitates additional devices.

The possibilities of the professional golfer being a good amateur photographer are almost endless. He can develop his own technique, create interest, and actually prove the statement that the picture, if used properly, is superior to the spoken word. In exercising his initiative the professional golfer has advanced a step up the ladder in his profession.

#### National Caddie Championship, Columbus, O., Aug. 23-27

Sponsored by newspapers, golf associations, city recreation depts., private golf clubs and individuals all over the U.S., the Third Annual National Caddie Championship gets under way Aug. 23 at the Ohio State University golf course, Columbus, O. Winner of the tournament will receive a four-year scholarship (\$1,500) to any school of his choice. The runner-up will receive a suitable award and a two-year scholarship (\$750). Merchandise awards will be given to other winners.

To be eligible, entrants must be bona fide caddies under 18 and approved by the golf professional at his home club. There is no entry fee and entertainment and partial expenses are provided by the National Caddie Assn. Entry blanks must be obtained from E. Hugh Davis, Executive Director, N.C.A., Room 232, City Hall, Columbus, O.



Some of the Minnesota pros and peddlers gather outside Cooke Hall, University of Minnesota, between sessions of the Minnesota PGA's annual spring business clinic.





#### Lake Arrowhead Reopened

Lake Arrowhead (Calif.) G&CC again presents its beauties after being re-opened by John T. Skelly and associates. Skelly, formerly pro-mgr., Jeffersonville (Pa.) CC is pres. and pro of the Arrowhead outfit which represents a \$300,000 investment.

#### Beltsville Turf Day

Second Annual Turf Field Day at USGA Green section turf garden, Beltsville, Maryland, sponsored by Mid-Atlantic Association of Greenkeepers and USGA Green section, will be held Oct. 15.



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#### **Keeler Heads Writers**

O. B. Keeler, famed golf writer of the Atlanta Journal, was elected pres., Golf Writers Assn. of America, at its annual meeting. Keeler succeeds Russ Newland, San Francisco AP sports writer who reorganized the association and revived it so it now has 145 members. First vp is Kerr Petrie, N.Y. Herald-Tribune. Sec.treas., re-elected, is Charles Bartlett, Chicago Tribune. Golf writers plan to vote on admissions to Golf Hall of Fame, suggested by Joe Looney, Boston Herald.

#### Missouri Begins Research

Turf research work begun at University of Missouri, Columbia, under direction of Dr. E. Marion Brown, Dept. of agronomy. Al Linkogel heads committee of St. Louis district greenkeepers collaborating in the work. About 70 strains of Bermuda collected from state sources, Green section, and Michigan State college for study of production of superior fairway turf.

### "Golfscope" - Shot Distance Calculator

A new device, based on the same principle employed in surveying instruments, has been developed to take the guesswork out of shot distances to the pin. The "Golfscope" is a tubular sighter, 21%



June, 1948



Famous pros first used Gauztex for non-slip grip. Now golfers everywhere keep the Sports Tin handy in their bags. Gauztex, the self-adhering gauze, is perfect on hands to prevent blisters ... on clubs to prevent slipping.

This summer you'll sell more Gauztex than ever before. Prominent Sports Tin ads are reaching millions in the Saturday Evening Post and Golfing. And, of course, that's in addition to the regular Gauztex year-round campaign.

Gauztex now pays you bigger dollar profit ... and the new Sports Tin display adds a powerful *plus* in sales appeal. Get your share of Gauztex profits!



by 7 in. made of durable plastic, at the far end of which is a scale which enables the player to accurately calculate at a glance, and without adjustments, the correct distance between the ball and the flag. The "Golfscope," checked by steel tape in field tests, with both normal and impaired vision, shows a correctness within one yd. on distances up to 100 yds. and one to three yds., up to 200 yds. Figures on the scale reading are big and easy to read. The standard model sells at \$10; the larger Special Scope at \$15. For complete details and pro prices write The Golfscope Co., 426 S. Spring St., Los Angeles 13, Calif.

**Cotton Goes Visiting** 



Henry Cotton on his latest trip to this fair land made a point of inspecting American golf manufacturing plants. In two of the plants the press agents' photographers caught him. Above: Henry and Mrs. Cotton pause in an inspection of the MacGregor plant while Toney Penna tells Henry facts of life of MacGregor clubs.

The other picture shows Cotton at the Wilson Sporting Goods Co. plant discussing the fine points of Wilson golf equipment with J. Victor East, head of the Export department and Mike Behrendt, supt. of the golf club factory.



## BENT SOD NURSERY

#### (Continued from page 72)

be applied with about a yard of good topsoil per 5,000 feet of nursery. Brush this mixture into the turf with a steel doormat dragged over the grass and water well. Keep the grass cut until frost stops the growth. After the ground is frozen an application of a mercurial fungicide should be applied to give protection from snow mold. The rate should be 3 ounces per thousand feet of turf, using enough damp sand to provide the bulk needed to insure uniform coverage.

The following spring when grass starts to grow apply one and a half pounds of sulphate of ammonia per thousand feet to start vigorous growth. The fertilizer can be applied dry mixed with sand for bulk and need not be watered in. In fact fertilizer should be applied before the danger of freezing water pipes is past. This amount of sulphate will not be strong enough to do damage to the turf at this season. Just as soon as the soil is dry enough roll the sod with a heavy water roller. This is an important operation and should be done as soon as possible after the frost is out of the ground. It is essential that the grass plants be pressed into firm contact with the sandy soil before they have a chance to dry out and die. Roll in two directions. Start the mowing program just as soon as the grass is long enough to cut.

#### Spring Topdressing

After growth is well started in the spring (latter part of April in Massachusetts) topdress with a yard of loam to which has been added 100 pounds of 8-6-2 fertilizer to each five thousand square feet of surface. Other fertilizers may be well suited to this program. The only reason for mention of 8-6-2 and sulphate of ammonia is that these are the materials which were available for my use. I have used Milorganite in place of 8-6-2 with satisfactory results in a season when the 8-6-2 was not available. I have not had the chance to try Milorganite exclusively over a period of time.

A light liquid feeding of sulphate should be applied about two weeks after the first topdressing. The second topdressing should not be as heavy in loam as the first. Velvet bent requires lighter dressings than other turf because of its fine leaf blades and greater number of plants in a given area. The only suggestion I can give on this is to apply as much loam as the steel door mat will brush into the grass without leaving a visible layer of soil on the surface. The second dressing, including the same quantity of fertilizer, should be applied about mid May. During the hot months

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... says Bob Hamilton, former P.G.A. Champion



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"That's what I'm getting on my drives," continues Bob Hamilton, shown here with the New Orleans Open Trophy he captured this year using his new Reynolds Aluminum "Woods."

These new clubs offer many advantages in added durability and playability, but their outstanding feature is the simple device by which the balance can be adjusted to fit the player's swing.

Already 1948's club sensation ... available exclusively through Pro Shops.



Screw Plug in Sole carries weights of 1/16 oz. each. Put in as many as needed to give the club head the right heft. Weights lock firmly in place.



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For further information write to REYNOLDS METALS CO., Sports Division, Louisville 1, Kentucky June, 1948

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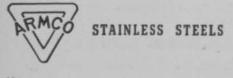
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But this is not all. These stainless steel clubheads are solid rustless metal... No plating to wear off. They resist nicking and scratching. And, finally, they're easy to clean up and keep spotless.

We'll be glad to give you the names of clubmakers now supplying clubs with heads of ARMCO Stainless. Write Armco Steel Corporation, 254 Curtis Street. Middletown, Ohio.



topdress lightly each month but without fertilizer. Some supplemental feeding with sulphate will be required through the summer. The rate and frequency will depend upon local conditions.

Remember that frequent light watering will be necessary all the season. How much and how frequent each greenkeeper must decide for himself.

The height of cut will be governed by the use of the sod. For golf greens not over one quarter of an inch, for lawns three quarters of an inch. Turf for greens should be mowed at least three times a week, and the clippings should be caught and removed. If lawns are cut twice a week the clippings may be left on the grass without damage or disfigurement, but clippings must be removed when mowing is but once a week.

If the turf is not lifted in the fall two feedings (September and October) of 8-6-2 will be considerable help in maintaining a healthy piece of turf over the winter.

After the turf is lifted soil preparation for the next crop is very simple. It is not necessary to disturb the base, simply scratch it lightly with a steel rake, level with the "pusher," roll, and proceed as described for a new nursery.

#### Seed Production Methods

When the nursery is to be used for seed production mowing should stop after the second time in the spring. Two mowings in the spring will help make the stand of seed bearing stems more uniform in height, reduce their length and help eliminate weeds. This makes less bulk of vegetative material to handle at harvest time and helps to prevent excessive "lodging."

Seed production takes more fertility from the soil than any other form of grass crop, therefore fertilizer for the nursery is necessary both spring and fall. Spring fertilizer requirements should be the same as for other nurseries except that the phosphate and potash content should be a little higher. Probably the sulphate feedings, except the one early in the spring, should be omitted. No topdressing will be required. Watering must be maintained.

The usual harvest time in Massachusetts is the first week in August. Weather conditions will cause some variation in the date. It will vary from the last week in July to the first week in August. The development of the seed heads must be watched at this time to determine just when to cut. (The seed is quite fine and hard to see without the aid of a glass.) The change from green to ripe seed can happen overnight. When the time is right to cut a delay of one day will mean the loss of considerable seed by shattering before the crop is under cover.

Harvesting is a very simple operation