

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 under-exposure. 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 slow-motion 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 sub-

ject, 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.