

A Walter Hagen miniature golf course at Detroit. The screen in the foreground is to keep pitch shots from going out of bounds.

Miniature Golf Now No Field for Pikers

By J. EDWARD TUFFT

to stay. It provides recreation at nominal cost and it provides the thrill that comes from competition. However, only those courses with the most attractive features and properly built at the beginning can hold a steady patronage as the players *become more and more discriminating."

The speaker is O. W. Chisum, foreman for the Bhend Electrical Construction Co., Pasadena, Calif., who has done the electrical construction work for several of the most attractive courses in that city of wealth and leisure.

"The man contemplating the installation of a course must look carefully to the future. When the vogue was new anybody would play any place but as the number of courses multiplies naturally enough

business competition will depend upon the same feature upon which it always depends eventually in any line—it will depend upon service, equipment, attractiveness, etc.," says Mr. Chisum.

"The man installing a golf course should first of all look well to his system of illumination. Co-operating with men putting in the miniature courses here we have urged a high system of wiring so that there might be proper illumination and proper distribution. We never string our messenger wires lower than twenty-five feet above the ground. The lamps used are aided by deep dome reflectors and 750-watt bulbs, clear glass, and are placed on the strands at intervals of 40 feet. The strands can be lowered by a pulley arrangement to permit re-lamping.

"Courses with inadequate or annoying



Photo Bartlett Service

One of the Pasadena miniature courses showing the elaborate construction work and maintenance work involved.

lighting facilities will not be able to compete as the players become more and more discriminating.

Must Give Life to Course

"The man installing a golf course of this kind must be sure at the beginning to give 'life' to his course. This can be accomplished by means of running water more readily and more economically than in any other way that I know of at the present time. We have installed motor driven water pumps which furnish plenty of water movement for miniature mill-wheels, miniature water falls, and artistic little rivers and rapids. Not only do these provide hazards but they give atmosphere. Especially do they give an atmosphere of coolness.

"Running water lends itself very readily to colored illumination both through the medium of flood lights and Neon lights placed under water.

"The presence of trees on the grounds also give opportunity for attractive lighting effects and in several instances we have decorative lighting, a real illuminated Christmas tree appearance being produced.

"These are but a few of the things that have come under the observation of a wir-

ing contractor in relation to miniature golf Naturally, since we are intercourses. ested in the illumination of golf courses of this kind we play ourselves in order to make contacts and learn through conversation where other courses are likely to be installed. We find that as we play more and more we become more and more discriminating and already we have eliminated from our list, automatically I believe, a number of courses that no longer in the light of comparison can make an appeal to us. We are becoming fastidious as I assume all players are rapidly becoming.

"In the Los Angeles area in the last year literally hundreds of courses have gone in. The average income, I am told, for each course at the present time is about \$87 per day with a maximum for an especially well located and well equipped course of \$900 per day.

"Among the courses we have provided with illumination I might say those with the best design and maintenance are maintaining their average income the most easily in the face of a competition growing more rapidly than seemed possible a couple of years ago.

"The business apparently is a good business, but like every other business it will not yield permanently without proper investment."