

New Guides for Bait-Casters

By Robert H. Moulton

ROUTING THE FISHING GUIDES

ONE of the beneficial results of the war was the stimulation of American manufacturers to provide substitutes for countless products which formerly had been imported from other countries, notably Germany. In the majority of cases these home-manufactured products were just as good as the imported products had been, while in not a few instances they excelled them by a wide margin in point of merit and the cheapness and speed with which they could be turned out. One of the latest illustrations of what American enterprise and ingenuity can accomplish has just come to light in the announcement that a Chicago lapidary has perfected a method of manufacturing agate guides for fishing rods which are not only far superior to those which formerly came from Germany—that being practically the only country to make them before the war, but which can be turned out in a fraction of the time required by the German methods.

Fishing rod guides made of agate have long been considered by expert fishermen to be the best for the purpose; they give a fine appearance to the rod, are practically indestructible, and permit of such smooth finish that the wear on the line is reduced to a minimum. The Germans were the first to discover these merits of the agate guides and soon had a virtual monopoly of the trade throughout the world. Once having established this, and after creating the belief that good agate guides could not be made in any other country, they grew less particular about the quality of the goods they turned out. As a matter of fact, during the last decade they were unable to keep pace with the demand in this and other countries where fishing is much in vogue, because of the very slowness of the methods they employed.

The guides were all made up in the mountain country of Germany, where it was really a family proposition, a whole family drilling and grinding guides during the winter months by the crudest hand methods and then in the spring selling their winter's output to the commercial buyers, through whom it finally reached America. Uniformity of size and style, and uniformity of finish and degree of accuracy could not be maintained by so many different hands of more or less experience, especially under pressure of a large demand, and the result was that much inferior work began to be foisted upon the American market.

To hide the inferiority of their workmanship and the many blemishes in their guides, the German makers dyed them a deep dark red color by boiling them in an iron solution. This practice also enabled them to slip through many imitation agate guides, which were made of nothing but hard glass, and this was the more easily done because buyers had been led to believe that genuine agate guides should be red in color.

This was the situation when a Chicago lapidary of many years' experience, whose father and grandfather had been lapidaries before him in Amsterdam and familiar with the German methods of making guides, turned his attention to their manufacture on a modern scientific basis. The result of his efforts was the development of a remarkable cutting drill by means of which he is enabled to turn out large quantities of mechanically perfect guides in a comparatively short time, each guide being left the natural color of the raw agate.

This drill not only works with absolute precision, but will bore a hole of any desired size through a one-fourth inch slab of agate in from fifteen to twenty minutes. As against this, it took the German guide makers from fifteen to twenty hours to bore a similar hole through a piece of genuine agate, using for this purpose a so-called "bow" drill. This drill was operated entirely by hand and consisted of a stout piece of wood bent into the shape of a bow by means of a leather thong, which in turn, was wound several times around a wooden spool four or five inches in length and half an inch in diameter.

In the lower part of the spool was



DRILLING THE RAW AGATE



OLD-BOW DRILL USED BY THE GERMANS

fastened the drill which did the boring, while the upper part of the spool was fitted into a hole in a horizontal piece of wood three feet long and two inches square. This piece of wood was clamped at one end to another upright and stationary piece of wood, while the other end was held by the left hand of the person drilling and pressed against his chest. With his right hand he worked the bow in such fashion as to cause the spool to rotate back and forth, a few turns at a time, thus working the drill and eventually making a hole through the piece of agate. Only through long practice could a perfect hole be drilled in this manner, and the process, as may be imagined, was very tedious and involved much labor.

Agate is an exceedingly hard mineral and the hardest variety comes from certain volcanic regions in Uruguay. It is imported to this country by the Chicago lapidary through the American consul, who has it boxed and shipped to Chicago, the raw stone, traveling some 6,000 miles before they reach the end of their journey. One box will contain ten thousand dollars worth of agate.

When a shipment arrives the guide maker examines each piece of stone through a magnifying glass to locate any flaws and determine the best and most economical way of cutting it into slabs. A revolving circular steel knife is then used to cut the piece of agate into slabs about one-fourth of an inch in thickness. These slabs are then cut up into smaller pieces about an inch square. The small pieces are then fitted into the machine for drilling, the size of the drill used depending upon the size of the guide to be made.

When a hole is finally bored through a piece of agate it is next ground by a circular shape on a grindstone by hand. This grinding takes but a few seconds and the circular ring is then given a more exact shape on another grinding machine. The next step is to bevel the sharp inner and outer edges of the agate ring. Finally the rings are polished and mounted in metal holders, either as guides or tips, ready to be fitted to fishing rods. The finished product is a delight to the angler's eye.

The guides on a rod, as all bait-casters know, are an important part of its makeup. Fishing, as bait-casters fish, is in no small part a matter of mechanics. Rod, reel, line, leader, lure and hook are all essential parts of a delicate machine which the angler handles according to his skill—and luck. This delicate machine is no more efficient than its poorest part. And rough, untrue, undersized guides can play the mischief with the efficiency and durability of this intricate machine.

Bait-casting, aside from the playing

of the hooked fish—and backlashes—is an endless repetition of throwing out from 50 to 100 feet of line and reeling it in. So the line must run freely from and to the reel through the guides and tip. Friction makes for imperfection and inefficiency and damage. Friction means lost effort in the cast, greater strain on the rod, more wear on line, and maybe the loss of a fish—the biggest one always—and of a favorite lure.

Possibly the most important part of the bait-caster's machine—because it is the connecting link between the angler and the fish—is the line. This line is a beautiful and delicate thing. It is made of braided silk because it must be small, supple, smooth and strong—small and supple, to lie compactly in the reel; smooth, to run with the least amount of friction through tip and guides—and leave the skin on your thumb; strong, to hold one of Dixie Carroll's old "he-whops."

This beautiful delicate line must be cared for by the angler—not so much because it costs good money as because care is the price of safety. The bait-caster who knows his business and attends to it does not let his line dry on the reel to mildew and become rotten; he dries it in the air. He turns his line every few days, end for end. He carefully tests the casting end each day for strength. The enthusiast even keeps his pet lines in air-tight cases during the closed season.

How, then, shall a bait-caster, with a joy-forever bamboo rod and a reel built like a watch and a pet line and a favorite lure, put up with guides and tip that are open to suspicion? He just can't be expected to do it, that's all.

"Other greivies the angler may not have," writes Dame Julianna Berners, "sayings but yf any fische breke away after he is take on the hoke or elles that he cathe nought, whyche ben not greivous."

No; it is not greivous to "cathe nought," for "catching fish is not all of fishing." And part of the other delights of fishing is using a casting-rod—with perfect guides.

Have Faith and Fear Not.

This world is largely what we make it. Destiny, environment, hereditary tendency—these things sink into insignificance beneath the power of our wills; and the possibilities within our souls. The universe, with all its riches, all its privileges, all its joys, is ours for the getting. It waits to be conquered, but it waits for the master hand. Formidable is everything worth while to the fearful, to the doubtful, to the weak in spirit.

To these every obstacle is magnified. To the brave in heart there are no obstacles. They wade through them and use them as stepping stones. They are impelled by hope begot of their faith; they are sustained by courage begot of their hope; they have strength and endurance, begot of their courage. Therefrom emanates success and therein lies the antidote of worry.—Exchange.

Subject and Story.

Redd—They say that a fish never stops growing.

Green—Well, it hasn't anything on a fish story at that.—Yonkers Statesman.

mination always to keep up the standards in thought, or in whatever we do in life, whether it is hoeing corn, mending shoes, or making laws for a nation—something that gives an upward tendency—an inspiring quality, that is lacking in the character of the groveling man with low ideals. There is, in the upward struggle involved in giving one's best to what one is doing, something that enlists and develops the highest faculties and calls out the truest and noblest qualities.—Orison Swett Marden, in Chicago News.

back. The chief events of McKinley's administration were the Spanish-American war and the acquiring of the Philippines, Porto Rico, and Guam, the annexation of Hawaii, and the expedition under General Chaffee in the Boxer Insurrection.

Pays to Give One's Best. There is a great difference between going just right and a little wrong—between superiority and mediocrity—between the fairly good and the best. And there is something in the deter-

SPORT LOVERS MUST HELP OLYMPIC FUND

President Kirby of Committee Appeals for Money.

At Least \$150,000 Must Be Raised by Popular Subscription to Pay Expenses of Athletes Expected to Compete at Antwerp.

If the United States is to send a team to the Olympic games at Antwerp next summer the expense will have to be borne by the sport lovers of the nation. This was made clear yesterday by Gustavus T. Kirby, president of the Olympic committee of the United States, when he issued an appeal for a fund of at least \$150,000.

From 150 to 200 athletes will make up the Yankee team and, according to the estimate of F. W. Rubien, secretary of the A. A. U., it will cost \$1,000 per man.

"To compete for fun may be fun," Kirby said, "but to compete to win is not only fun but accomplishment, and when the winning is bringing honor to one's country the accomplishment becomes a triumph."

"For America to succeed she must have, as always, men and money; athletes to the number of 150 or more and money to the amount of \$150,000 or more, all a voluntary contribution to the furtherance of world knowledge and world peace through amateur sport."

"Let every sportsman who loves sport for sport's sake, let every patriot who would see his country triumph, put his hand in his pocket and donate generously toward the expenses of America's participation in these games."

BASEBALL NOTES

Cuddy Murphy, Dartmouth pitcher, is looking for a big league job.

The Phillies are in the market to make trades. They need a whole new ball club.

Benny Kauff led the Giants in driving in runs, even if he slumped a bit in his hitting.

Lee Magee was a failure in the American league, but he seems able to hold his own in the National.

Horace Milan, brother of the veteran Washington outfielder, will be in the Western league again this year.

Tris Speaker is signing a lot of kid pitchers in the hope that he will get one able to fill a big league role.

Third Baseman Fred Graff, veteran of the Chattanooga team, lets it be known he is done with professional ball.

McGraw has signed a right-handed pitcher by the name of James C. Garten. The youngster hails from Tulsa, Okla.

Gold lapel buttons have been awarded the members of the 1919 Cincinnati world's championship baseball team.

Herb Hall, member of the Kansas City Blues' hurling staff since 1917, has announced his retirement from the game.

Joe Gedeon had a good season with the Browns last year, and expects to have a better one in the coming campaign.

Baseball promises to have a big boom in the South this year. The leagues there all see signs of prosperity.

Manuel Cueto of the Reds will be purchased by Sacramento of the Coast league and will be used as a third baseman.

Seattle is still waiting for the major league ball clubs to come through with players promised the Puget Sound club manager.

Fritz Maisel, back in Baltimore, where he started toward the big league, promises to finish his baseball career there.

Baseball bugs in Wichita, Kan., will see the first exhibition game this spring as early as March 30, when the Cards visit the city on the plains.

Detroit writers are clamoring that the Tigers need added pitching strength if they are to garner the American league gonfalon this year.

Infielder Fred Brainerd, who played with Milwaukee a part of last season on a loan from Providence, has now been sold by the latter club to Columbus.

If Pat Moran takes Joe Schultz from the St. Louis Cardinals it will be the fourth National league club the blonde infielder-outfielder has played with.

George Gray, a southpaw who has made a fine record with independent teams in northern Illinois, has been signed for a tryout with the Little Rock Southern league club.

AMERICANS ENJOYING GOLF GAME IN CUBA



The photograph shows a party of Americans at the fifth hole of the Havana Country club golf links. Left to right: C. R. Pinney, driving; Miss Marianna Ogilvie of New York; A. D. Boyle and Miss Martha Kelly of Springfield, Ohio. Boyle and Pinney are officers on the British warship New Zealand.

INTERESTING SPORT PARAGRAPHS

Harvard has eight veteran players for this year's nine.

Paul Chip is the latest member of the Chip family of boxers to enter the milt game.

Reginald C. Vanderbilt has been re-elected president of the American horse shows.

Soon the big-time basket and volley ball season will have to give way to the dead quiet of baseball, golf and tennis.

Bob Martin, it is reported, received \$1,680 for defeating Arthur Polky in their recent boxing contest in St. Louis.

Training quarters for the Toronto baseball team of the International league have been arranged at Columbus, Ga.

Eddie Shevlin, the Boston boxer, has taken up his duties as instructor of the manly art among Dartmouth college students.

University of Pennsylvania wrestlers will engage Iowa State college matmen in a dual series of bouts at Ames, Iowa, April 2.

The Marquis of Queensberry is in the bankruptcy court, where the proceedings are not according to the famous rules of his ancestor.

F. E. Beaurepaire, the Australian swimming champion, defeated Norman Ross of San Francisco for the half-mile swimming championship at Melbourne.

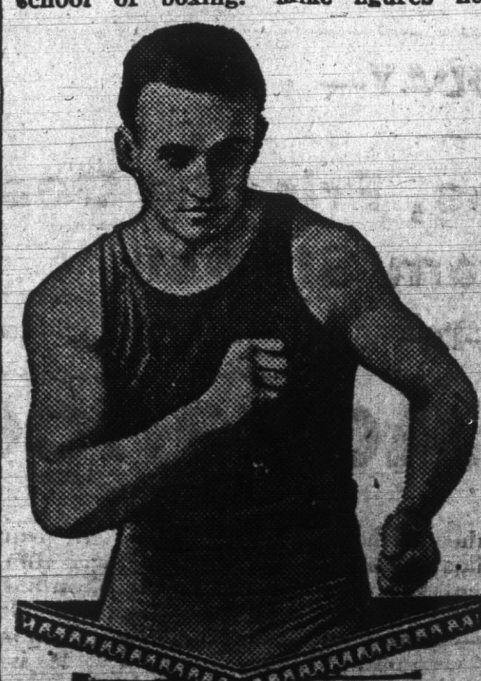
Now the woman referee appears on the horizon. We thought that was one job that was immune from the feminine invasion, but it looks as if we didn't know our book.

A combined University of California and Leland Stanford soccer team will tour British Columbia next June, playing four games in two cities, one in Victoria and three in Vancouver.

GIBBONS WILL TEACH BOXING

St. Paul Exponent of Manly Art Will Establish High-Class Correspondence School.

Mike Gibbons plans to establish a college of boxing at his home in St. Paul, and announces that he is working on plans for a correspondence school of boxing. Mike figures he



Mike Gibbons.

can outline a high-class course at a modest price, which will prove beneficial to young men and business men who need exercise.

HEARTY WELCOME FOR JONES

Yale Undergraduates Enthusiastic Over Return of Coach—Will Assist Doctor Sharpe.

Informing the Yale undergraduate body that T. A. D. Jones would return as head football coach, the Yale News said:

"The university welcomes back the creator of Captain Black's great 1916 team and the famous Exeter teams of 1913, 1914 and 1915 with open arms."

The News, further analyzing the change, said:

"This change will enable Doctor Sharpe to focus entire attention on directing Yale's general athletic policy,



Coach Tad Jones.

'more men engaged in athletics and a place on a team for every Yale man.' This was the original conception of Doctor Sharpe's position as director."

FOOTBALL IS PAYING SPORT

Yale Treasury Enriched to Extent of \$50,000—Overhead Expenses Were \$80,000.

Fifty thousand dollars is the amount Yale cleared on football during last season.

While the 1919 meetings with Harvard and Princeton were not highly auspicious from a scoring point of view, reports show they were the best ever held from a financial standpoint. The Princeton match gave Yale approximately \$61,000 and the Harvard game netted about \$50,000 for each team.

From the contest with Brown Yale got \$8,000, and from other home games played about \$5,000 each, bringing the grand total for the season to \$130,000. Overhead expenses cut into this amount, however, to the extent of \$80,000.

SORROW FOR FORMER TIGERS

Fred McMullin of White Sox and Ira Flagstead of Detroit Are Slated for Utility Jobs.

Tacoma (Wash.) fans mourn the fact that two former Tacoma Tigers, Fred McMullin and Ira Flagstead, will warm benches in the big time this year. McMullin is at present a member of the White Sox and Flagstead is with the Detroit club. Both are slated for utility jobs.

PREPARATIONS FOR REGATTA

Columbia Varsity Crew to Leave for Its Quarters at Poughkeepsie to Begin Training.

The Columbia varsity crew will leave for its quarters at Poughkeepsie, N. Y., on June 7, to begin preparation for the intercollegiate regatta. Coach Jim Rice says the reduction of the course from four to three miles will not shorten the training period of the Blue and White.

President McKinley

On the 29th of January, in 1843, William McKinley, twenty-fifth president of the United States, was born at Niles, O. It was during McKinley's second term as president, on September 6, 1901, that he was shot at the Buffalo exposition by Leon Czolgosz, an anarchist. The president died eight days later from a wound made by a bullet which penetrated his stomach and lodged in the muscles of his