

AMERICAN VS. BRITISH CLUBS

By John Duncan Duane

IT is a matter of common report that the greatest sporting-goods concern in America is about to manufacture golf clubs in Great Britain, to be sold through their London house. This marks a new era in golf-club making. It is particularly interesting to me, as I have been predicting for nearly five years the success that would attend the making of golf clubs on the other side with American improvements.

It is strange that the making of golf clubs in Great Britain should have remained in the hands of small professional club-makers for so long. At one time there was a golf-club manufacturing company in Edinburgh, which ran for a while, but its material and work were so poor that it soon went out of business.

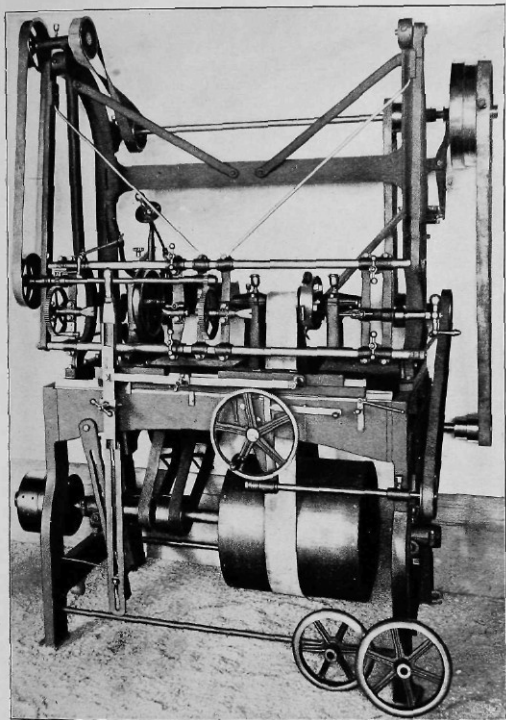
Capital and a constant endeavor to turn out the very best article will win out in the long-run. The large American-golf manufacturing companies invest thousands of dollars in choice wood, and then lay it aside to season. Small club-makers cannot afford to do this, and timber merchants never trouble to season wood. Of course the larger club-makers on the other side keep a stock of seasoned wood; I mean such men as Forgan, Tom Morris, and McEwan. But they will have to adopt many American labor-saving devices if they want to keep in business.

Let us now consider the making of a modern golf club from the time it is in the tree. The best time to cut the wood is in the winter, for then the sap is in the butt. The best persimmon grows down South, as far as South Carolina,

while some of the choicest hickory I have ever seen comes from Rhode Island. It looks as white and as close grained as ivory, and is of good weight, too. The sawing out of both hickory and persimmon requires a great deal of experience. Unless hickory is sawed out parallel with the bark, cross grain is the result. Persimmon heads must have the grain running up the neck. Many people say that the best driving is only possible off end wood; in other words the grain must run across the head. I have not found that this is at all important in clubs I have experimented with; in fact, I have noticed that end wood frayed out, and did not last nearly so long as when the grain ran from, say, about the heel end of the lead to the nose.

After the heads are sawed out, the noses are dipped in glue to prevent checking. They are then put in sheds to be air dried. After they have been in the sheds about six months, they have a few moments case-hardening in a kiln; but do not confound this with kiln drying, which is most injurious, making the wood corky by taking out all the substance from it. Shafts are seasoned in the square, being tied in bundles so tightly they cannot warp, and wedges are put in under the rope they are bound with to secure a uniform pressure. Shafts go through the same process of air drying and case-hardening as do clubs.

The next operation is to turn both heads and shafts in lathes. The head lathe is something on the order of a shoe-last lathe, as may be seen in the illustration. A "former" is an iron casting in the exact model you want the head to be,



GOLF-CLUB-HEAD TURNING-LATHE.

and it is held firmly in position between two spurs, while the rough block of wood is secured between two other spurs, and connecting rods run between. A wheel

revolves round the "former" with a constant hard pressure, and a circle of chisel-like instruments, exactly the dimensions of the wheel, revolves round the wood,

shaping it just like the "former." So exact is this process that the minutest change on the "former" will show on the copy. The machine can be adjusted to make the heads smaller or larger, left hand or right hand, all off the same "former."

"Formers" are made by taking an impression of the original head in plaster of Paris. This is then baked in an oven and molten iron run into it. On small orders it is possible to use the original wooden head as a "former," but when turning out thousands of heads even the iron "formers" quickly wear out. It is possible to turn out about two hundred and fifty heads a day on a lathe, and any model can be duplicated exactly, which is next to an impossibility with hand-made heads.

The machine-made heads are just as good as any that can be made so far as their playing quality is concerned, and it doesn't require any mechanical knowledge to figure out that this method of making golf-club heads is an advance on sawing and rasping by hand out of the rough block. Another decided advantage of the machine-made head is that when you break one you can get another just like it.

After the head comes from the lathe it is buffed on a wheel, another improvement over the old form of fine filing. Instead of sawing out the mortises for the lead and horn, and then digging them out with gouge and chisel, it is all done in one operation on a machine called a universal miller. This machine is infinitely more exact than hand-work, because there is a dial for gauging the size of the hole for the lead in accordance with the weight of the head. There is no guess-work about it at all. The tool for cutting the place for the lead is like a tapered gouge. It revolves vertically, and, as with the lathe, it works

on much the same principle as the pantograph for copying drawings. The socket hole, peg holes, lead holes, and lead-tap holes are all drilled by machinery; even the hickory pegs are turned in the same way as the shafts. No man does more than one operation, so that he becomes very expert at it. The manufacture proceeds on the order of the sausage factories, the wood coming in at one room and going steadily along till the handle wrapper is put on.

British golfers ought to give drop-forged iron heads a fair trial. Conservatism is all right in its way, but this is a progressive age, and the fact that Tom Morris has commenced to sell socket clubs shows a step in the right direction. I suppose that Carruthers's patent will soon run out, and we will next hear of his short socket irons becoming universal on the other side. Another great improvement in American clubs over British is the gluing on of the grips. Grips on British clubs are always coming loose. I was also behind the scenes in the club-making business in England and Scotland, and know that our "pawky" friends tell their customers that the trouble with glued-on grips is that it is difficult to get them off when you want to cut a club, but anybody can see that is a lame sort of excuse. The whole secret is that a loose grip means an easily earned sixpence.

I do not assert that there is no room for improvement in factory-made clubs; on the contrary, there is a great deal of room for betterment in the making of a really first-class club. Good players will agree with me that if they want a club for their own use they either have to have it made to order or else put in the best part of a day choosing one out of stock, for the great majority of clubs have about as much balance as the leg of a chair.

Then again, each year there will be some difference in the style of clubs, and it requires all of an intelligent and experienced golfer's time to keep posted as to these changes. Every year golfers are improving, and of course becoming more particularly about the clubs they use.

I also observe that beechwood is losing its popularity with British golfers, if one may judge by the club-maker's advertisements recommending persimmon as their specialty. And I don't wonder at the change, for persimmon is a much better wood. It drives as far as beech, and lasts ten times as long. American iron heads are put on with a solution which absolutely prevents the heads ever becoming loose. It is a sort of cement, and that is another sixpence gone wrong with our transatlantic friends. The iron heads are finished off with a lacquer which prevents rusting and preserves the clubs in a much more saleable condition than British clubs. When I

was last over on the other side I dropped into a large golf-goods store in Cannon Street, London, and found the whole staff laboriously cleaning rusty iron clubs. Even the stamping of American clubs is rolled on with a machine, not whacked on with a hammer. British ball-makers still lead the field, but I think it is only a question of time before Americans will get on to that too.

The varnish used on American clubs is really weather-proof. It takes a whole day to dry, unlike the quick-drying, and therefore brittle, shellac used by British club-makers. It is strange that on the other side irons are more expensive than wooden clubs; while here, where the wood grows, wooden clubs are dearer than irons. Hickory and persimmon don't grow in Europe. Another strange thing is that clubs made of American wood retail in Great Britain for exactly half what they retail for in this country. Is it only the tariff that makes the difference?

A HAZARD OF THE GAME

By E. L. Sabin

THIS is a hazard of golf I met
 Half-way out on the emerald links—
 Never a hazard encountered yet
 Proved more cunning a lure, methinks:
 Passing high—just a subtle height,
 Exactly reaching, you see, my heart!
 All with crimson and green bedight.
 Fashioned rounded, petite and smart.

Eyes of a tender and roguish blue.
 Errant locks by the breeze beguiled.
 Mouth like a strawberry brushed with dew.
 Checks that dimpled and bloomed and smiled.
 Ah, this hazard that crossed my course,
 And lent a spice to my random play—
 I pressed straight to it, without remorse,
 And there was I wholly content to stay!