

THE CHOULETTE

Jeu de crosse is played with an elliptical wooden ball (in Belgium also with a nylon one), the so-called 'choulette' or 'soulette', the diminutive form of the words choule and soule.

We did not find conclusive information about why and since crosseurs played their game with an elliptical ball. We did not come across any pictures or descriptions of stick and ball games, using an oval ball. In 1885, Emile Zola is the first to mention an 'egg-shaped ball', when he describes a crosse match.

Initially, most stick and ball games were played with wooden balls ('Games for Kings & Commoners', Geert & Sara Nijs, 2011, chapter 'Knocking wooden balls around'). Through the centuries, the colvers and golfers started to use also leather balls, filled with hair or feathers, as used by jeu de paume (hand-tennis) players. Jeu de paume was probably the most popular game in western Europe. There must have been many leather ball makers, who probably also produced leather balls for colvers and golfers. Moreover, jeu de paume was very popular in the French/Belgian jeu de crosse region.

Crosseurs must have known the leather balls as colvers and golfers did. Why didn't they switch to these balls but continued to play with the wooden balls? Were these balls too vulnerable for use in jeu de crosse? Was it too complicated to produce leather balls in an elliptical form? Were these balls too expensive for the crosseurs, mainly farmers and workers, who could not afford to play with the expensive, vulnerable leather balls?

In the accounts of the court of Hainaut is recorded that on the 8th of June 1332: "Le comte Guillaume de Hainaut dépense 8 deniers pour achat d'estues pour la paume, et 6 sols 10 deniers pour estues à choler" (count William of Hainaut spent 8 deniers for buying balls for jeu de paume and 6 sols 10 deniers for buying balls for 'choler'). (Theo Mathy, 1995)

In the 14th century, 1 sol consisted of 12 deniers. So, the count spent 8 deniers for hand-tennis balls and 82 deniers for 'balls à choler'. Unfortunately, the account did not mention the number of paume and choler balls.



Boxwood is one of the hardest woods that was abundantly available in the ancient county of Hainaut.

The oldest known ball in the crosse game is the elliptical boxwood choulette.



Hand-tennis balls were leather, rather expensive balls. The count probably bought one or two; not many balls would get lost or damaged in this game.

Choler in the 14th century meant stick and ball games, like ancient hockey and jeu de crosse. Ancient hockey was a very aggressive sport at that time, often causing casualties. It is doubtful that counts engaged themselves with such a game. When playing jeu de crosse, one will quite easily loose or damage the choulettes. It is therefore understandable that the count bought more choulettes than hand-tennis balls. A conclusion could be that nobility and men of means played with leather balls, while commoners stuck to the wooden balls.

Theoretically, the choulette is not egg-shaped or ovate, but elliptical. An ovate form is more pointed on one side and more rounded on the other side. The elliptical ball is similar in shape. Playing with elliptical balls is fairly unique. Crosseurs of today experience the following advantages in playing their game with these balls:

- ◆ they encounter less air resistance, so they go farther
- ◆ to make a straight hit is more difficult with a spherical ball than with an elliptical ball
- ◆ an oval ball can be hit somewhat easier out of the heavy rough, because the player is allowed to place the ball upright, facilitating to come under the ball with the clubface.

Charles Deulin (1873) describes the ball as a 'cholette ou boule de cornouiller' (a choulette or a ball made of dogwood). He does not mention whether the ball was elliptical or not.

Boxwood choulettes

Since the earliest beginnings of the game of crosse, the choulettes were made of boxwood. This wood is relatively solid and resilient. Such properties are ideal for balls to be hit with a club to achieve maximum distance. Depending on the player's physical strength and the technical quality of his swing, he can hit the boxwood ball between 80 and 100 metres.

At a late 19th century longest drive contest in Maubeuge, the winner, Louis Bosseau, hit the ball over a distance of 134 metres, a world record for a boxwood ball hit with an original crosse club ('Vivre à Maubeuge à la fin du XIX^{ème} siècle', 1999, Jack Guillemin).

The choulettes were made from the branches of the box tree or shrub. From these branches, that had seldom diameters of more than 40 millimetres, the ball makers turned the choulettes on a turning lath in an elliptical shape. The diameter of a boxwood ball was between 30 and 35 millimetres, with a height of approximately 35 to 45 millimetres. Its weight was some 20 grams.

The hand-cut shallow cavities (dimples) or the turned shallow groves or ridges improved the ball's distance and stability in the air.

The balls were not expensive because the box trees were abundantly available in the region.

Development in France

The ball used in the crosse game in France is different from the balls used in Belgium. The proliferation of choulettes of other material, sizes and weights, disturbed many French crosseurs. They preferred to safeguard the original jeu de crosse as much as possible to be played with only one oval wooden ball, as it was played since time immemorial.

After lengthy discussions with the 'progressives', who believe that you cannot stop progress, the 'Ligue régionale de crosse-golf' defined the standards of the choulette:

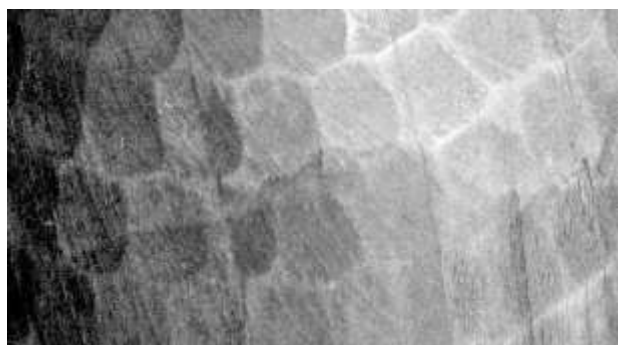
- ◆ with an elliptical ball
- ◆ made of hornbeam
- ◆ with a size of (approximately) 4.4 x 3.6 centimetres
- ◆ a weight of 27 grams
- ◆ the surface should consist of five flat spheres.

The Ligue appointed one woodturner to produce these choulettes and surveyed its distribution. When the contract had run out, the Ligue assigned a new supplier.



The golf ball, included in this picture and most of the following ones, gives an idea of the size of the showed choulettes. The crosse balls were equipped with hand-cut shallow 'dimples' or turned lines, ridges or points on the lath, depending on who produced them. It is unknown which of such balls performed best as for distance or flight characteristics.

As with Scottish golfers, the French and Belgian crosseurs recognised long ago that an uneven surface would improve the ball's flight characteristics. With a pocket knife or a razor blade, crosseurs cut approximately 200 flat 'dimples' on the surface of the choulette.



The surface of the choulette has five shallow grooves to improve flight characteristics. They are made of hornbeam (*carpinus betulus*) because it is hard, strong wood, difficult to split.

When producing choulettes on a turning lathe, it is much easier to apply shallow grooves to improve flight characteristics than to cut hundreds of shallow dimples with a pocket knife.

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In 2002, the official producer of the French choulette was Jean-Pierre Dumesnil at Felleries, Avesnois, France. He produced approximately 4,000 balls annually, mainly for the French crosseurs. The French choulette is 4.4 x 3.6 centimetres (height x width).

We all know hornbeam, used for wooden hammers, pulleys, agricultural tools, butcher's blocks and last but not least, for choulettes.

These choulettes withstand the continuous blows of the crosse club rather well.

Hornbeam has an additional advantage for the crosseur.

When a *déchouleur* hits the ball in the water, it floats; the *chouleur* can retrieve the choulette and hit the ball from dry land, albeit with a penalty stroke. However, when he does not mind going into the water and risking wet socks and trousers (and many players do not mind), he can hit the choulette out of the water. He has a reasonable chance of success by using the 'pic' face of the crosse club and hitting the water 4 centimetres in front of the choulette.

French wooden choulettes deform when they have been wet too long. Crosseurs paint the balls white or in bright colours to make them more recognisable in the rough fields.



Development in Belgium

Pressed mine wood choulettes

In the last century, coal miners in the Borinage found out that the wood of the mine shoring structures was compressed and, therefore, became much harder. When applying the same force and swing technique, choulettes turned of this wood flew 30 to 40 metres further than the boxwood balls.



These new balls had the same production process and were only slightly larger than the boxwood ball. These so-called 'choulettes de stape' also had shallow dimples, lines or ridges.

The introduction of the 'stape' ball did not mean the end of the boxwood choulette. As in golf, crosseurs use as much as possible the same swing. Hence, the 'stape' ball became a standard for the démarrage and long-distance hitting in the field. When a shorter distance was required, the boxwood choulette came into play again.

In the years, inventive players used hand-made press devices to press wood gradually to an even larger specific gravity than the shoring wood. Choulettes made of this 'hand-pressed' wood added more distance again when applied in the field and on the tee.

As all golfers know, long-distance playing is not the only criterion for a good game; variation in the distances is also essential.

Different layers of pressed wood (usually three) can be stuck and pressed together. Sticking a thicker layer on top of a thinner layer will significantly reduce the ball's deformation in wet conditions.

Furthermore, it became possible to combine layers of different woods, for example, hornbeam, plane, willow and cork. Such combinations permitted to make larger balls, used for shorter distances and to play out of the heavy rough. The smaller choulettes were made from one piece of pressed wood.

The mine wood or later the artificial pressed wood choulettes generally had the same size as the boxwood ones, but the weight was significantly higher. The bigger resilience made the ball fly several dozens of metres further. – By courtesy of Freddy Gallez

A home-made device, obsolete for quite some years, to press wood for the artificial 'stape' choulette.





The crosseurs who could afford them handled these precious little celluloid balls with great care. It is said that during matches, players engaged schoolboys to retrieve the expensive choulettes in the field. However, it is certain that due to the characteristic smell of celluloid, dogs could find the choulettes when stuck in rich soil.

Celluloid choulettes

In the 1930s, a new choulette appeared in the crosse fields: the celluloid choulette or the 'courcelle', named after Louis Courcelle, a young chemist from Frameries, who invented the ball. He had the idea to turn the massive cylindrical rods of celluloid into hard choulettes. The dimensions were the same as the initial boxwood balls, but its weight increased by some 30%. These balls with increased resilience give another 10 to 20 metres of distance.

Sheets of different coloured celluloid were stuck together with acetone. These beautiful, sometimes multi-coloured or translucent balls were so expensive that the happy few who could afford them kept the ball in their pocket instead of in their string bag. They played them only in those field conditions that the balls easily could be found. Crosseurs used the 'courcelle' principally for the démarrage and less in the field. With these balls, the first spherical balls came into play, for there was no specific reason anymore to make the choulette ellipsoid.

The hardness of celluloid deformed the face of the club, so it was necessary to reinforce the club head. Further, the joint between the curved shaft end and the club head was too vulnerable when hitting the 'courcelle'.

Nylon choulettes

Sometimes history repeats itself. Some twenty-five years after the introduction of the small colourful celluloid choulette, a new ball came into play in the 1950s: the nylon ball. The metal industry in the French town of Feignies used this polyamide material, shaped in cylindrical rods.

The many crosseurs from the Belgian Borinage who worked here realised that with these rods, they could make extremely hard choulettes to achieve more distance than ever before. This new ball became very popular. In the 1960s, several garage dealers offered nylon transmission rods to the crosseurs.



The nylon choulette is so hard that the crosseur can achieve distances of 200 metres.

The distances achieved with these nylon balls surpassed the 200 metres mark. The 'world record' (1957) with this ball stands at 234 metres, achieved by Louis Baton, a robust 2 metres long lad, 25 years of age.

Depending on the size of the rods available, the dimensions of the balls varied, but almost all of them were larger than the previous choulettes. The nylon ball served mainly for the démarrage.

Because of the use of a sort of tee (moist sand) again, there was no need to make these balls ellipsoid.

The nylon ball had a great disadvantage. The impact on the club head was such that the face became severely damaged, and the joint between the curved shaft end and the club head became even more vulnerable than when using the celluloid ball. Significant changes in the design of the crosse club were necessary.

When comparing the games golf and crosse, it is interesting to see that:

In golf, the player chooses out of fourteen clubs, each standing for a certain distance and use in specific situations on the course, such as bunkers, trees and rough, using only one ball.

The Belgian crosseur chooses out of several choulettes for different distances and specific situations in the fields, such as hedges, molehills and swamp, using only one crosse.



The introduction of the uncommonly hard nylon choulette had quite some impact on the crosse game. Distances up to 200 metres could be achieved. The composition of the crosse clubs had to be changed, and for the first time, 'mutilated' golf metal woods came into the crosse fields.

As the golfers developed clubs for different distances and specific situations on the course, the Belgian crosseurs developed a variety of balls in size and composition.



Also the Belgian crosseurs paint their balls in various colours to find them in the rough fields and to recognise them as their property. The finder of a choulette is not automatically the owner, which is different from golf. If possible, the finder will return the choulette to the owner.

Crosse en rue choulettes

About 1900, in Péruwelz 'en rue' was played on the Sunday before carnival with small elliptical choulettes, made of boxwood or hawthorn roots. These choulettes had a diameter of 4 centimetres and a length of 5 centimetres. The crosseurs always carried one to two dozen spares during play.

(*'Le Jeu de Croches en Wallonie', 'Revue de Folklore français', Tome X, N° 1, January–March 1939, Louis Schély*)

The 'crosse en rue' (street crosse) choulettes used in France and Belgium on Shrove Tuesday and Ash Wednesday are made of white wood, such as Italian poplar, lime, plane, acacia, but also of willow because the pruning period for this tree is close to carnival.

There are no rules concerning shape and size. We have seen round and elliptical balls of all sizes. We played in Pommerœul, Belgium, with an oval ball of 9.0 x 6.5 centimetres, weighing 150 grams.

Today several town councils in 'en rue' area have forbidden playing with wooden choulettes and are only allowing the use of soft plastic or tennis balls; the traditional choulettes end in flea markets.

In the crosse en rue (street crosse) variant of jeu de crosse, players use wooden 'chambots' in various sizes; also the choulettes vary in size and form.



Ball makers

We have seen in the accounts of the count of Hainaut that in 1332 he purchased jeu de paume and 'choler' balls. So there must have been someone, perhaps a woodworker, who produced balls for the market.

It is not known who made the choulettes in ancient times. It is for sure that not every crosseur carved his own balls.

We did not find out if these ball makers were part of a guild, as they were in the South and North Netherlands.

Houtaing

Before the Great War the village of Houtaing, 3 kilometres west of the city of Ath in the Belgian province of Hainaut, was a home craft centre for the production of choulettes. In the evening hours neighbours who had a job during the day, joined together to make choulettes. The tools used were simple but very ingenious. A chopping block was mounted on a tripod, called 'blo' or 'baudet'. The tripod was equipped with an iron ring and a bench vice.

The tools consisted of an arched knife with a handle on each end. A second fixed knife had one handle; the hook at the other end was fixed onto the iron ring.

A band of cloth, called 'manoque', protected the hands of the ball maker.

The ball maker put a piece of wood in the groove of the chopping block. With the fixed knife, he cut the wood in a cylindrical form with the required diameter. With the arched knife, he cut the ends of the cylinder into the elliptical shape. Along the width of the choulette, a wide flat band is cut.

Ball makers also produced choulettes on a turner's lathe and finished them off by hand.

According to Mr Rochart, an inhabitant of Ath but Houtaingeois by origin, there were fifteen to twenty 'soule' makers. His father could produce approximately fifty 'fines' (choulettes of average size) in one evening.

Wholesalers from the Borinage came to the village to purchase the entire production, wrapped up like eggs in packing units of 25 pieces.

Ath et le Pays des Collines-Mémoire de Wallonie, Roger Cantraine et Jean-Pierre Ducastelle – Brussels, 1991

At the turn of the 20th century, practically every woodturner was a producer of choulettes. In an article in 'Hainaut-Tourisme' of Mai 1968, Jean Pierard reports that the woodturner Monsieur Maison in the small village of Frameries south of Mons, specialised in the production of choulettes, sold more than 250,000 choulettes annually.

Jean Lefèvre confirms in 'Traditions de Wallonie', 1977: "The soule is originally made of wood. Around 1900, 250,000 choulettes were produced annually because many balls were not retrieved."

Since the decline of the popularity of the crosse game in the 1960s, practically all 'ébénistes' (artisan woodworkers) stopped the production of choulettes.

In 2002, we met the then appointed supplier of the official French choulette: the 'tourneur sur bois' (woodturner) Jean Pierre Dumesnil in the village of Felleries, south of Maubeuge. He produced approximately 4,000 balls per year and sold them at € 1 each.

José Fagot, president of the Comité Crossage at Chièvres, Belgium, is one of the crosse en rue ball makers. Regrettably, today more and more local authorities object to the use of these wooden balls.





Jean-Pierre Dumesnil, explaining the process of making the official French choulette to the co-author.

In Belgium, some crosseurs make a wide variety of choulettes for themselves and their co-players in their garage or shed. The freedom of the Belgian players to use whatever ball they like is a serious danger. Traditionalists wonder when the first golf balls appear on the Belgian crosse fields. The golf ball is not elliptical, but there is no rule that such a form is obligatory. And will that not be the end of almost 1,000 years of jeu de crosse, the last surviving relative of Scottish golf?