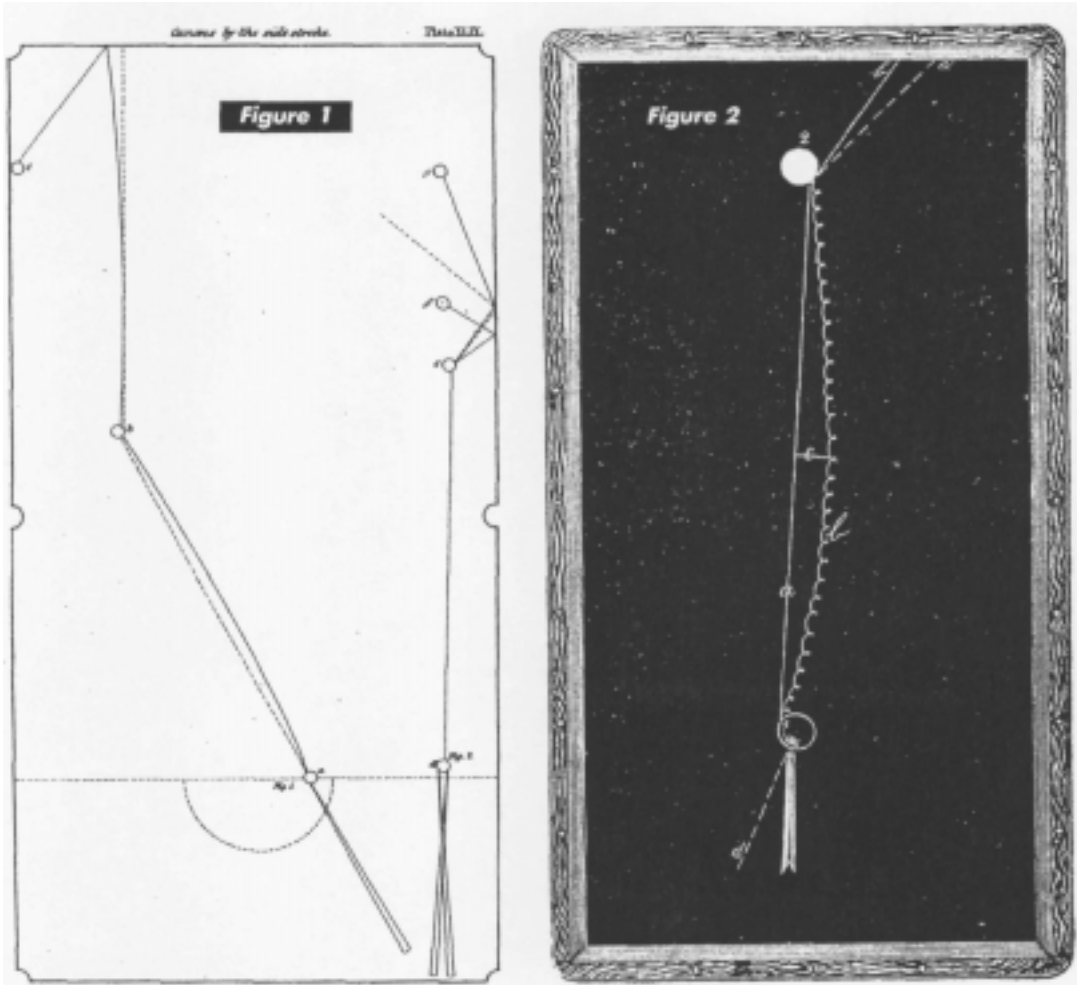
Bob Jewett

Squirt a Review

A new look at this old friend.

Squirt has been the topic here a couple of times in the past. It stirs passions among some, often because it is not well understood. Recent revelations about the mechanism that causes it have prompted me to try a more complete review. (Briefly defined, when sidespin is used, the cue ball "squirts" off somewhat to the side away from the tip. More on the definition later.)

There are some who don't believe that squirt exists, or if it does exist, they think it isn't important. When cue ball deflection — or squirt, as I prefer to call it — comes up on the Internet, one of the most common remarks of the non-believers is, "Why haven't we heard about this before, if it's so important?" Well, I looked around a little at what has been said before, and found several treasures.



In Figure 1 is a plate from *The Game of Billiards* by Edwin Kentfield, which was first published in 1839. Yes, over 160 years ago. The leather tip had been in use for only about 25 years, although the use of chalk was somewhat older. Cushions weren't yet rubber, and most table beds were not yet slate. But here we see clear demonstrations of both squirt and swerve.

The shot on the left shows how to play a billiard or carom (canon, for the British), from one ball to the other, by using heavy sidespin. The text says in part: "The dotted lines in this plate are introduced to indicate the direction the ball would take if struck in the centre; for, as it has already been observed, *the ball when struck, on its side, does not take a direct line."* [Emphasis Kentfield's.]

The shot on the right shows two different cases. When the second object ball is near, reverse or right sidespin off the cushion is needed, but running side is needed when it is farther down the table. Again, he shows the straight-line path, but notice what the cue stick does. For right English, it is pivoted to the right, while for left English, it is pivoted to the left. This shows roughly the amount of squirt compensation that Kentfield thought necessary on this kind of shot. We'll talk more about this technique later.

In Figure 2 is a plate from the American standard, *Modern Billiards,* which was published by the Brunswick-Balke-Collender Co. beginning in 1891. Shown is the path of the cue ball with extreme left sidespin. The 1908 version says: "When "English" or "twist" is applied to the cue-ball in its course, it is forced from a straight line and diverges to an extent that it will pass around a ball placed in a direct line before it. ... The dotted line d shows the direction in which the ball is forced by being struck on the side, but the ball rotating in the opposite direction to that which it is impelled, in consequence of the twist and draw imparted, aided by the resistance through friction of the nap of the cloth, serves to bring it back to the original point of aim, as shown by the curved loop-line, L, which denotes twist."

Sadly, the knowledge in *Modern Billiards* seems to have been lost in the U.S. by 1941, when Willie Hoppe's *Billiards As It Should Be Played* was published. Hoppe warns against "spineless" cues, and has a diagram of a cue ball going off at an uncertain angle while the spineless cue quivers

back and forth, but no connection is made to problems with using sidespin. Neither of Mosconi's books (1948 and 1965) describes squirt.

Figure 3 is from Joe Davis' book *How I Play Snooker*, which was first published in England in 1949. Davis dominated English cue sports — both billiards and snooker — for over 20 years. The diagram shows a ball played straight up the table with right side, and is mostly intended to warn the beginner away from English. In the text, Davis makes the point that if struck softly, the cue ball has time to recover and may cross over the original line, while if struck hard, it will not have time to return to the original line of aim.

In 1978, Robert Byrne's *Standard Book of Pool and Billiards* warns of the problem especially when shooting hard. He gave it the name of squirt, which seems to have been coined originally by a player from Napa, California named Jack Leavitt. You may see other authors call the "jumping away from the cue tip on sidespin shots phenomenon" by the name "deflection," but there are lots of kinds of deflection, and "squirt" invites less confusion. We'll see later that technically, it's the cue stick that deflects and not the cue ball.

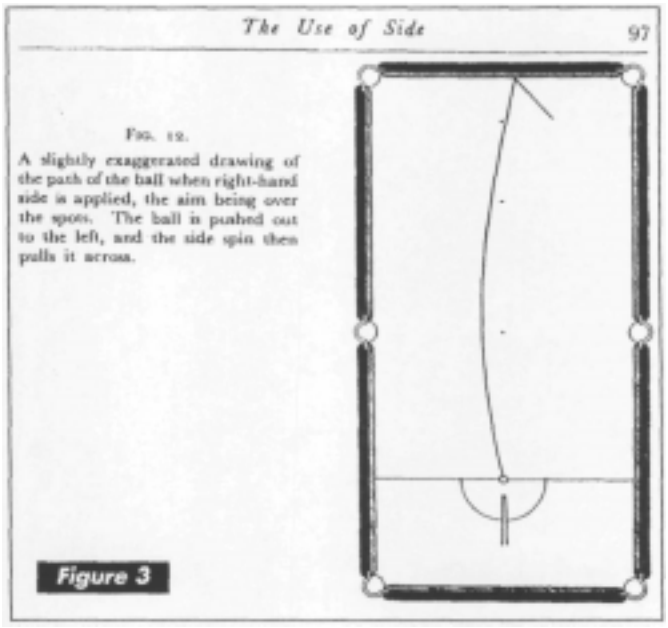

The Use of Side 97

FIG. 12.

A slightly exaggerated drawing of the path of the ball when right-hand side is applied, the aim being over the spots. The ball is pushed out to the left, and the side spin then pulls it across.

Figure 3

More recent texts have gone into more detail on squirt. Phil Capelle's *Play Your Best Pool* has four pages on the subject, including tables of experimental results and several example diagrams (pp 92-96). Ewa Mataya-Laurance's *Idiot's Guide to Pool and Billiards* has several pages on it (pp 198-200), and makes the important point that knowing squirt is present will help you make the necessary adjustments faster, even if those adjustments have to be made by feel gained through experience. She also points out that sticks vary significantly in the amount of squirt they produce, which is a factor to consider when buying a new stick or borrowing one from a friend or the wall. In *Precision Pool*, Gerry Kanov and Shari Stauch point out that most players — even top players — have only a fuzzy notion of how much squirt enters into play. For them, unconscious compensation is the way to go.

Next time, I'll go over the mechanism behind squirt and give you some suggestions on how to deal with it. In the mean time, if you know of a shot mat requires squirt — that is, could not be made with a squirt-free stick — please send it in.