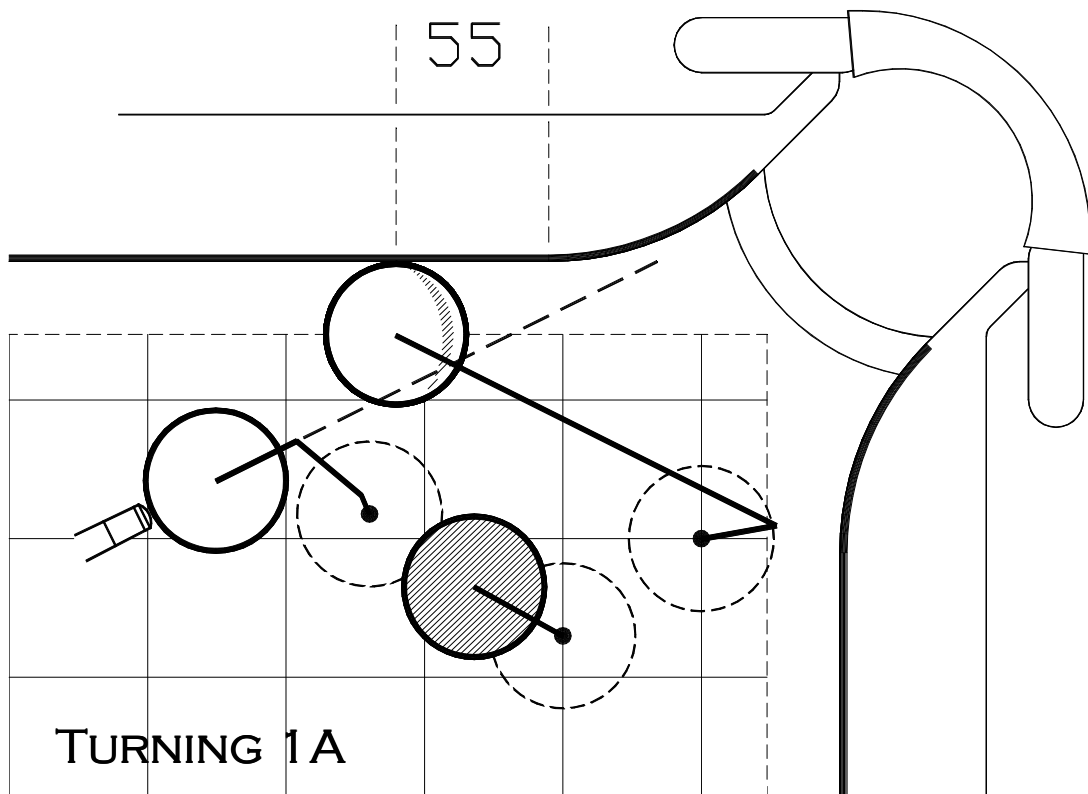


TURNING THE CORNER

Most billiardz books mention a few wayz of turning-the-corner in nursery cannonz. *Murt* sed that he had made drawingz of **31** ways. Unfortunately, Murt's drawingz were **sold** after Murt went back to New Zealand, & they ended up at the **tip** during a garage clean-out. Let's see how many we ken kum up with. We firstly hav a look at **4** well known wayz of doing a controlled turn.

KISS-OFF TURN

This iznt the best sort of pozy for a turn -- u wouldn't set it up intentionally -- but it duz kum up. It iz an eezy turn -- if u know about kiss-offs. U karnt do it if the red iznt well out of the yellow'z path -- the yellow hazta cross over to the other cushion. We aim very thick on yellow, & hit hardish, & it crosses over perfikty. And we cannon on red & place it perfikty too.



THINKING

Here'z what we were thinking.....

- We ken see that the pozy of the red iz so good that we don't need any side-spin or soft-screw. A plain ball kiss-off the yellow will allow the qball to contact the red almost full-ball, & send it on a nice line to meet the yellow.
- We know that the red looks too wide, but it iz perfikt, it alwayz looks too wide.
- We know that the contact on yellow duznt affect the kiss-off-angl of the qball. This iz about 40° (8 in 10) for all kiss-offs (when the qball-to-yellow angl iz 40° or less). So we know that we will contact red full in the guts no matter how we contact the yellow.
- About the only way of stuffing the shot up iz to hit the red too hard, in which case it will go ahead of the yellow & leev us in troubl az far az nurseryz go. We are aware of this trap, & we know that we havta aim thickish on the yellow, to keep the red quiet.

- After the doubl-kiss, the rebound-angl for the yellow iz sometimez az narrow az 5 in 10, no matter how thick or thin we contact the yellow. So this givz us a free hand for the contact on yellow.
- Koz we need to send the yellow a long way (150mm), & koz the red haz to go only 30mm, we need to hit yellow almost $\frac{3}{4}$ ball.

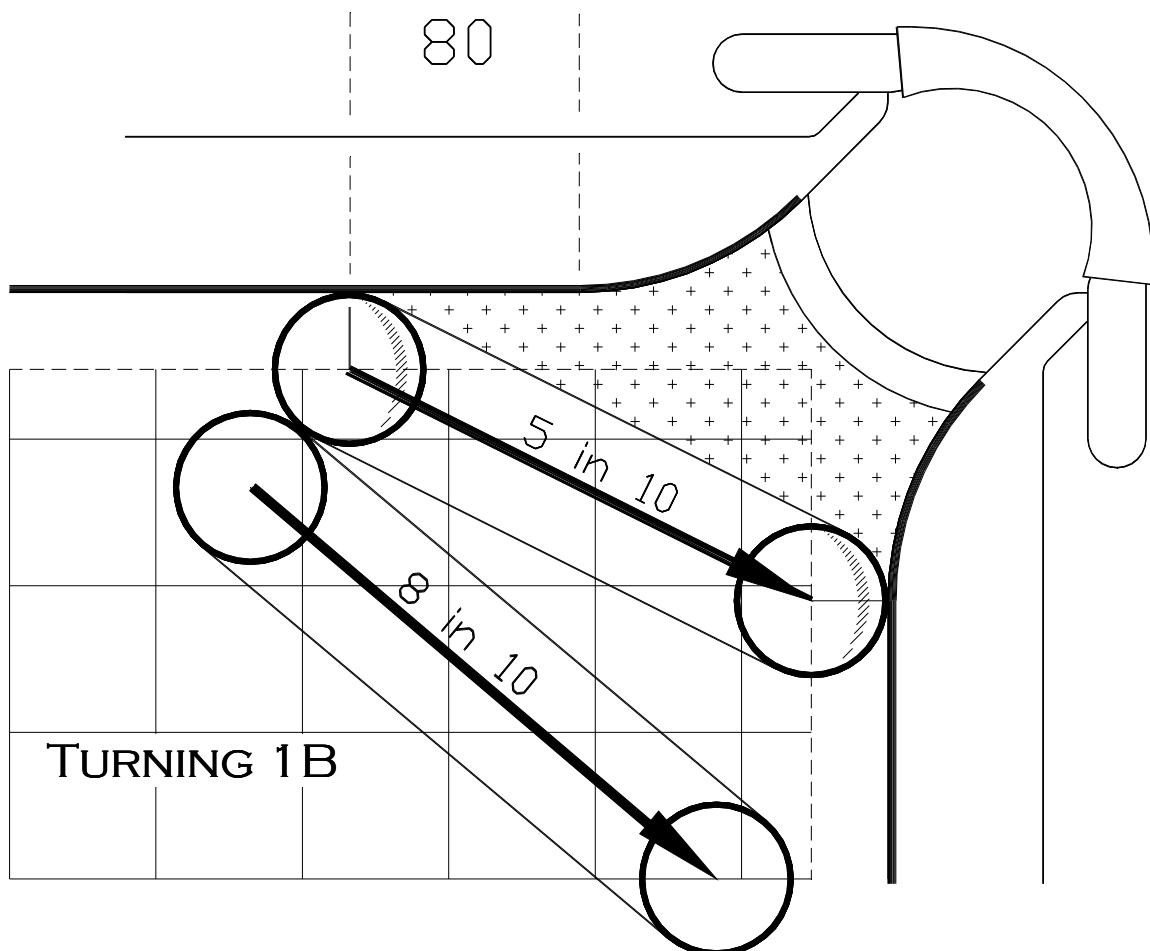
LEEV

The leev woz good -- patly throo luck -- the yellow caught a bit of the right-jaw, which threw it back a bit. Actually, the yellow woz only 55mm from the left-jaw (center of ball to end of kurv), which it appearz woz too close -- we got away with this, but we will havta beware next time. We should hav turned a few mm earlyr, ie further from the left-jaw. In 1A, the qball ken be placed almost anywhere, and/or the yellow ken be placed 3mm off the cushion, with littl difference. In most pozzyz the yellow ken be 5 or 10mm off the cushion & one will still get an honest doubl-kiss etc, az per 1A, with littl need for compensation. In the grid shown in 1A, each square iz 50mm.

KISS-OFF TURN ZONE

Here we analyz the pozzyz we had in 1A. We show that, to miss the right-jaw, the yellow haz to start at least 80mm before the left-jaw, koz of the 5 in 10 rebound. So we should turn before the yellow encroachez into the cross-hatched area.

The red (not shown) should be sitting just next to the qball'z kiss-off-line (8 in 10), so that the qball bumps the red towardz the yellow.



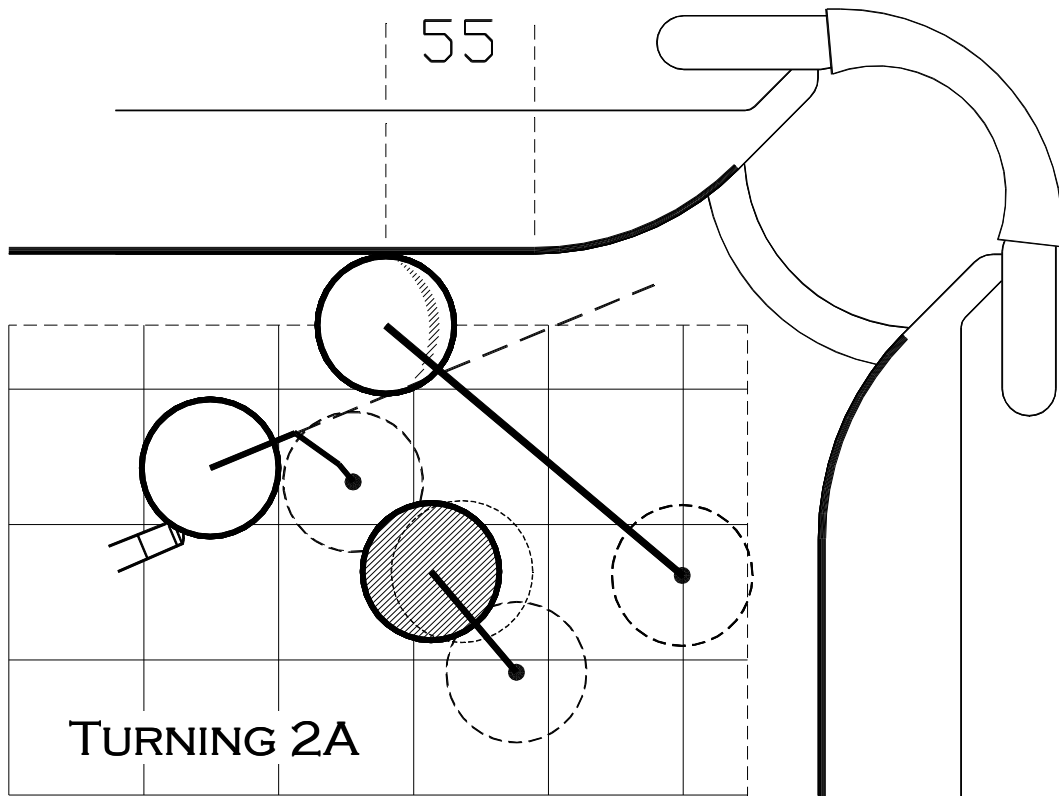
SCREW KISS TURN

Here we hav the 1A pozy, xcept that the red iz on a bad angl, about a quarter-ball left of its 1A pozy (dotty ball shown).

So now the red iz wider than the friendly (8 in 10) angl that we had in 1A. So the standard 8 in 10 kiss-off-angl iz not enuff to bump the red into good pozy. The simplest way of getting the qball to kum off yellow at the wider angl iz to uze some soft-screw (plus running-side). We are lucky to be this close to yellow, koz a hardish screw would send the yellow too far.

But there iz a bonus. Koz we are uzing screw, the qball duz not get a full doubl-kiss (perhaps nil) on yellow -- hence the yellow won't take a 5 in 10 rebound-angl -- it reboundz wider. This iz good newz, koz it makes sure that the yellow duz not catch the right-jaw (az u ken see).

But we hav to be careful, now that there iz no doubl-kiss the yellow will rebound much quicker, so we hav to hit it softer than u would think (much softer than in 1A).



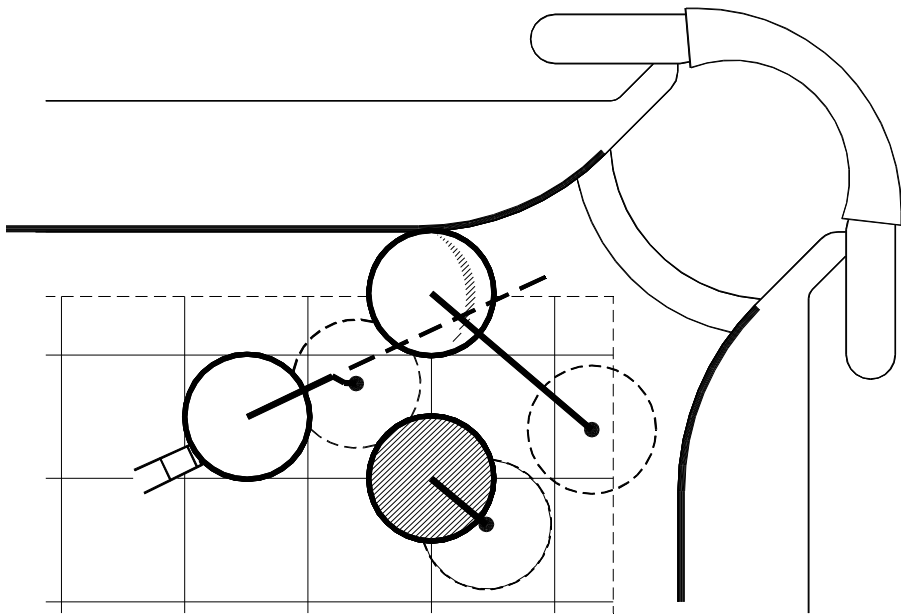
This sort of soft-screw iz interesting. In fact, we could hav uzed it in Turning 1A, to miss the jaw, & we would hav gotten an almost identical leev az the leev in 2A. So, if the yellow iz inside the 80mm a soft-screw ken save the day.

Just koz u uze screw duznt meen that u get a much wider kiss-off-angl, ie much wider than 8 in 10. But, the yellow'z rebound-angl ken be much wider. Koz when u uze screw u lessen the amount of kiss-off effect, & so u widen the yellow rebound-angl. Instead of 5 in 10 it ken be much more, depending on how much kiss-off effect iz robbed.

YELLOW'Z REBOUND

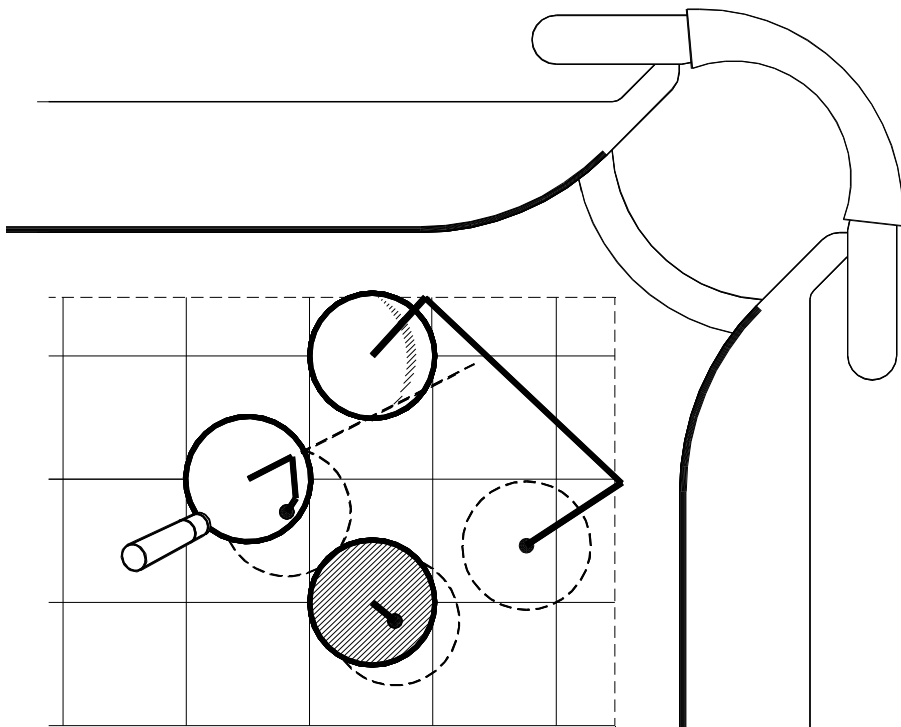
Refer to the chapterz on Kiss-Offs &

Kiss-Backs -- especially 63/10. When the qball-to-yellow angl iz less than 40° the yellow'z rebound-angl ken be widened (uzing screw) for a similar inkreec in the qball'z kiss-off-angl. And, when the qball-to-yellow angl iz more than 50° , the qball'z kiss-back angl ken be much widened (uzing screw) for zero inkreec in the yellow'z rebound-angl.



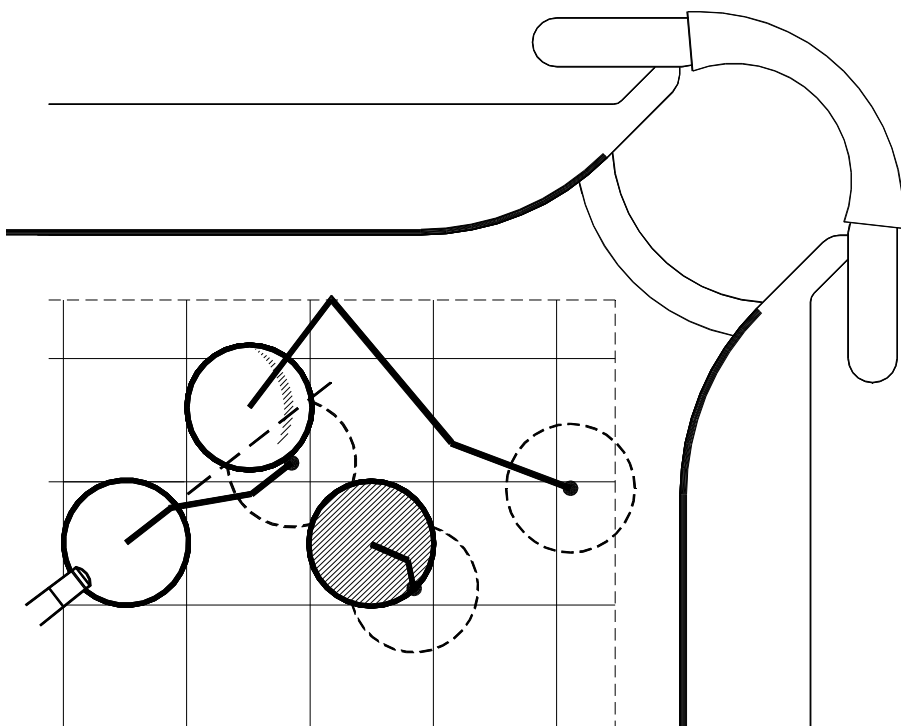
SCREW TURNING 2B

This showz how soft-screw ken bring the yellow out to useabl pozzly, even when it iz a littl inside the left-jaw. Here we hit at 5 o'clock & contact the yellow three-quarter ball. The soft-screw actually endz up being soft-stun, but that iz enuff to rob much of the doubl-kiss on yellow, & thus giv it a wider angl to escape from the jawz.



PIQUE TURNING 2C

Here we ken use soft-screw to get a fair leev in one shot (not shown). But a pique' givz a better leev (shown) with less effort & less risk. Hit down at a 45° angl. U don't havta hit much below center, but a littl right-hand-side seemz to help. Actually, the pace iz eezyr to judge with pique' also, strange az it seemz.



FOLLOW TURNING 2D

I only put this pozzly in koz i had some space at the bottom. Here we play three-quarter ball on yellow with lots of topspin. The leev would hav been a bit better if the yellow hadn't kissed the red.

What most of these turnz show, iz a general principl. To best prepare for a turn its best to open up the gap between the red & yellow. And usually best to hav the ball in between'em.

CHECK SIDE TURNING 3

Here the yellow is in 2A pozzly, but the red is even further west, & the qball is further from yellow. A soft-screw (as for 2A) is possible, but difficult. Koz of the long-range, the yellow would have too much pace.

So here we play thickish on yellow, onto the cushion, with lots of right-hand-side. The yellow goes to nice pozzly off the side cushion. But in fact, here, we can put yellow almost anywhere we want. Koz there

is no double-kiss. So, the thicker we contact yellow the wider its rebound-angle from the cushion. For example, if we hit the yellow three-quarter ball, the yellow would go directly to good pozzly without touching the side cushion -- but the qball wouldn't reach the red unless you put the yellow into orbit.

This cushion cannon can be played when the yellow is a little, or a lot, off the cushion -- no need for more drawings of such pozzly. The only real difficulty here in Turning 3 is that koz of the angle you have to reach-out-&-back -- remember to chalk-up. Actually, as it happens, you can play this cushion cannon in 1A & 2A if you want, and, if you care to look, it is probably on for lots of other pozzly. But it is always more difficult to judge & control accurately so you should only use 3 as a last resort.

RED-FIRST TURNING 4

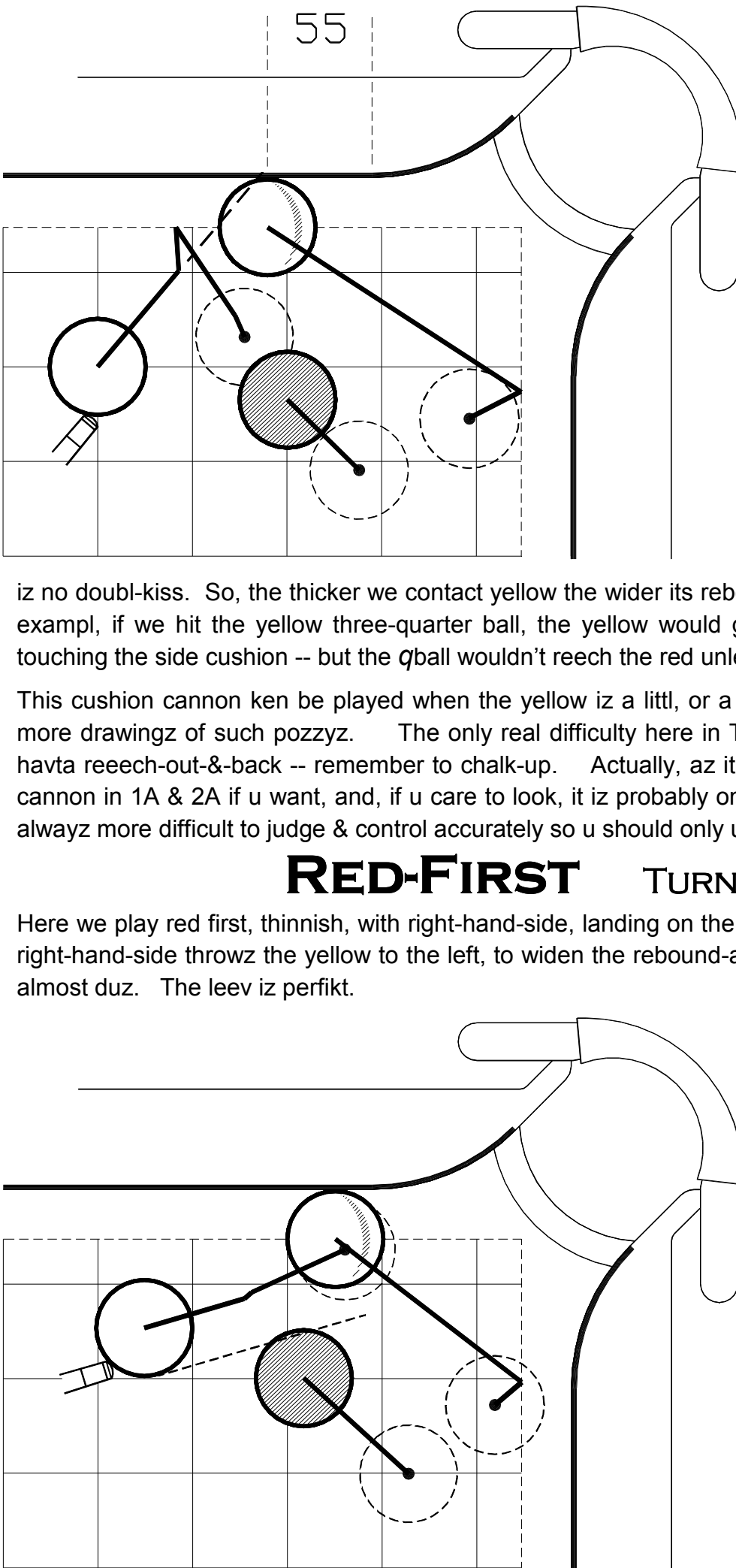
Here we play red first, thinnish, with right-hand-side, landing on the yellow as thickly as possible. The right-hand-side throws the yellow to the left, to widen the rebound-angle, to miss the right-jaw, which it almost does. The lev is perfect.

There aren't many variations to this pozzly -- but it's often on -- if only you see it.

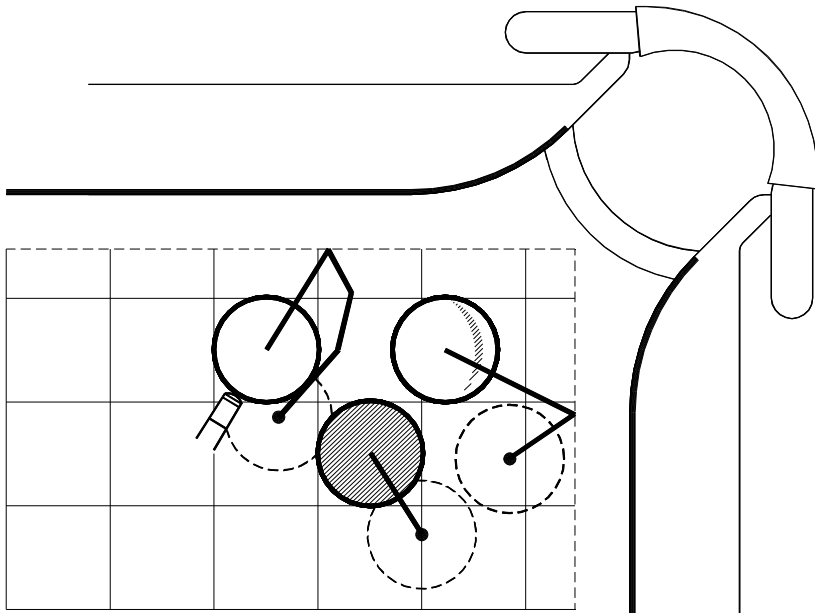
If you set 4ish pozzly up, you might see 2 optional (more difficult) ways of turning,

(a) just hit yellow first, with lots of right-hand-side, just missing the red on the way, the qball then hits the red, &.....

(b) the same shot as (a) but using screw instead of side.



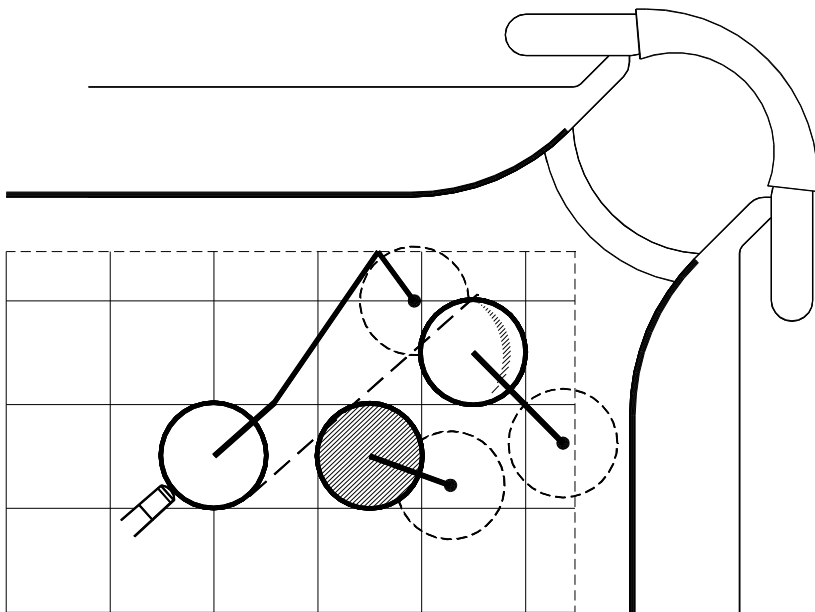
I think that the first four wayz of turning the corner are the most useful. The next four perhaps would be accidental, arizing from some mishap. I havta start digging deep into old diaryz here. Arithmetic might help. Let's see. We hav dunn YYR, YR, YCR & RY. We could add CYR, RCY & YRRYYR. Ok let's go.



CUSHION-FIRST TURNING 5

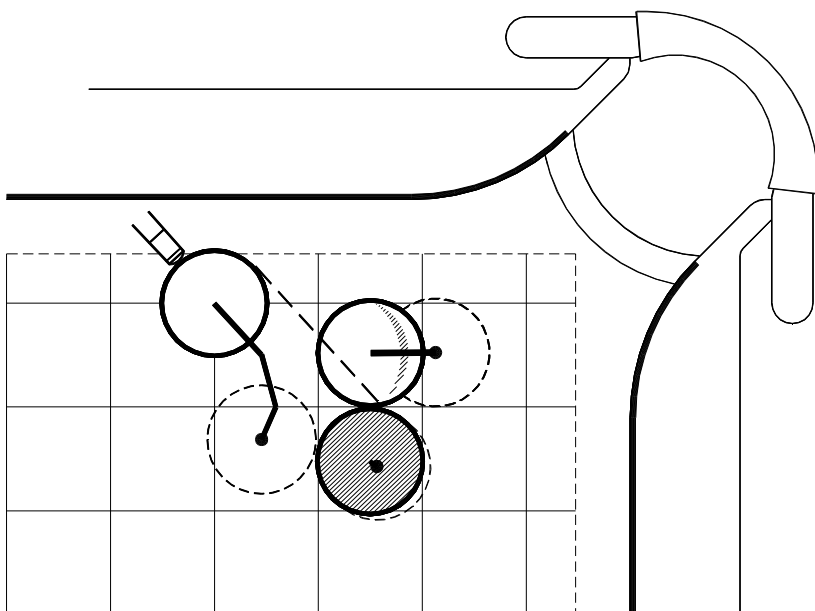
Here we play the cushion first cannon. This sort of shot iz hard to judge. Here it iz about the eezyst pozy u will ever get. We play it hardish & get a perfikt leev.

In reality u wouldn't take the risk. U would play the same shot but softish & then take another one or two shots to herd the ballz to about this leev.



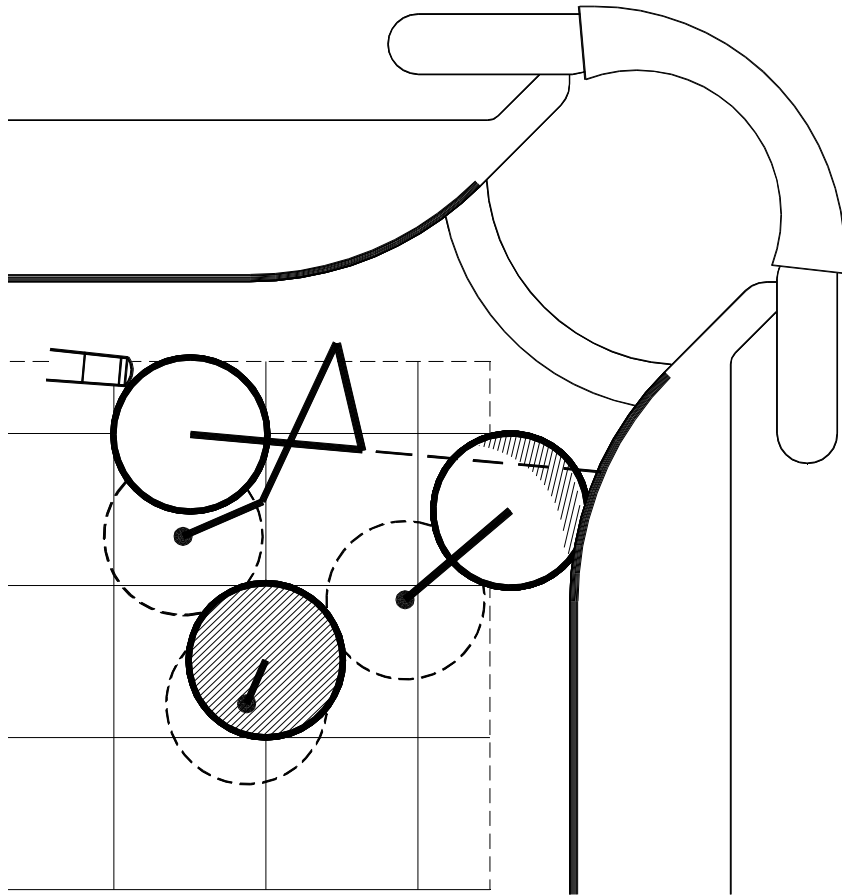
CUSHION-2ND TURNING 6

Here we play red-cushion-yellow. This sort of shot iz hardish to judge. But 6 iz about the eezyst verzion we ken get.



HERDING TURNING 7

There iz no rule saying u havta turn in one shot. All the Turnz shown in books are 1-Shots. But 2-Shot & 3-Shot turnz might be all u hav when the pozy iz poor. Here we play quarter-ball on yellow, to land softly on red, to leev another thin shot, red to yellow. After that we ken play yellow to red again, by which time we should hav good pozy. Or we might havta throw in another red to yellow. So we slowly herd the ballz to where we wantem. A clumsy shot might leev a cover, in which case we would need a cushion-first cannon. In 7, if the red & yellow weren't touching, we could simply run-throo yellow, to get good pozy in one shot.

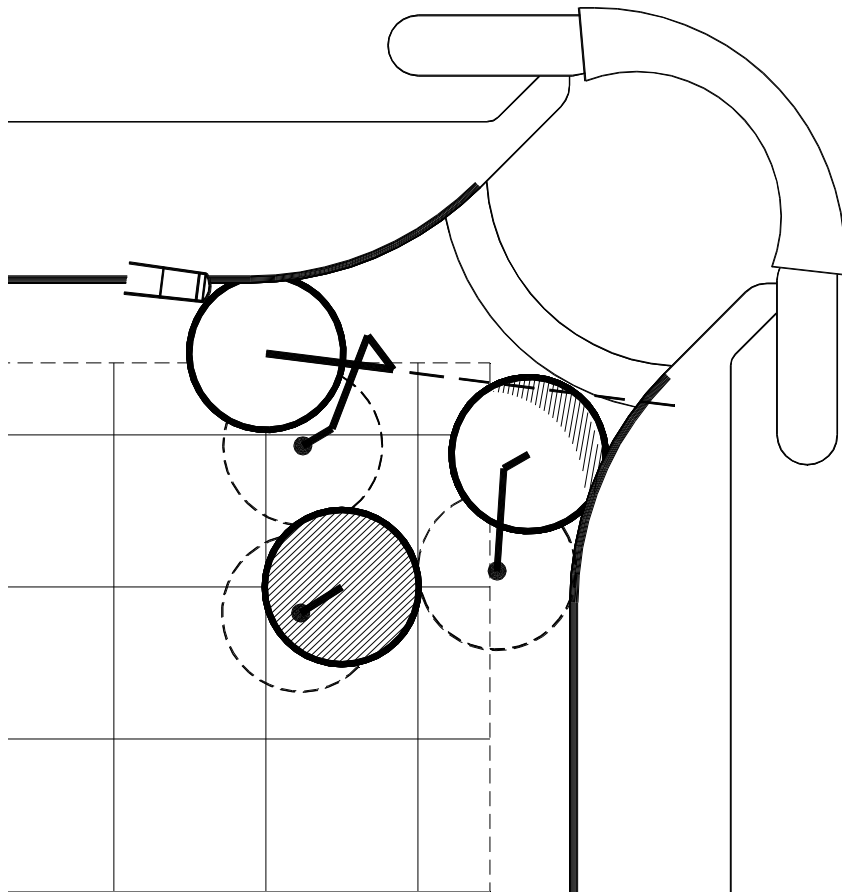


TROUBLE TURNING 8A

Here's a pozy where the yellow is in trouble in the jaw. Uken play a looser if u want.

A three-quarter ball contact on yellow, to double-kiss, with lots of left-hand-side, will bring the yellow out to a better pozy, as shown.

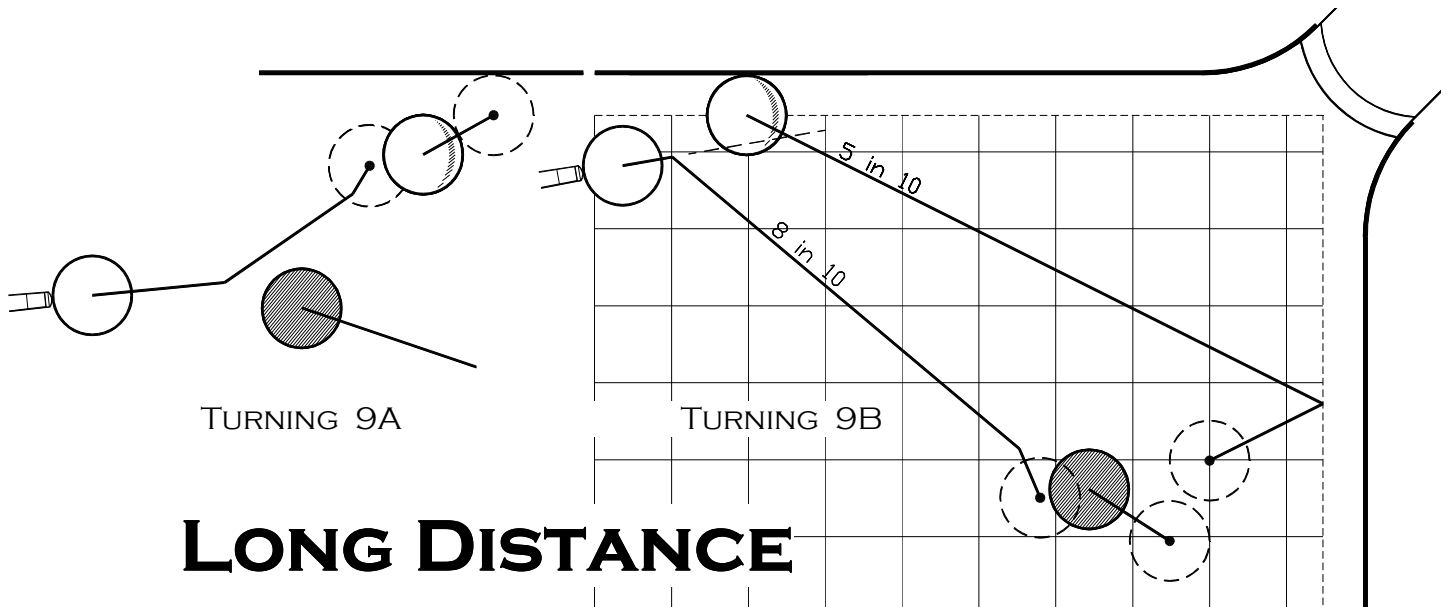
Sometimez the yellow kissez the red -- this usually leedz to a poorer pozy -- but it might be unavoidable. Usually uken keep this kiss to a minimum by aiming thicker on yellow.



DEEP TROUBLE TURNING 8B

Here the yellow is in deep trouble in the jaw. A looser is a good option.

But it's amazing how a thick half-ball with maximum left-hand-side can still bring the yellow out to good pozy, as shown.



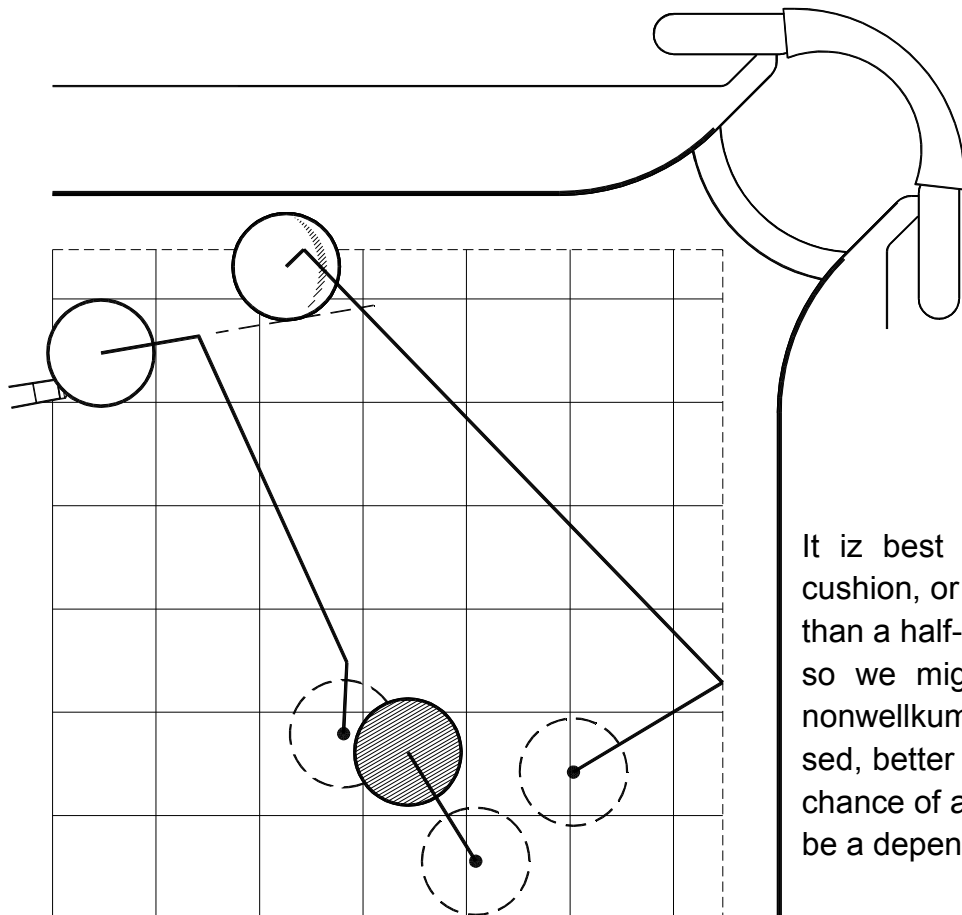
LONG DISTANCE

It iz often not difficult to turn the corner from the quarter point of the top-cushion -- a kiss-off gather makes it eezyr. Sometimez a turn iz almost forced -- the best way to reinstate nurseryz.

9A This iz the pozy left after a poor attempt at a gather. Here we see the opportunity to set up a **gather--turn**, so we play a thick half-ball on red to leev the pozy shown in 9B.

9B This turnz out to be the ideal leev, ie the red iz perfektly placed for the standard kiss-off-angl from yellow. We play a very thick half-ball on yellow, to giv it enuff pace to kum off the side-cushion. On this angl, a half-ball on yellow would leev the yellow behind. A thick half-ball would rezult in the qball & yellow going along shoulder to shoulder.

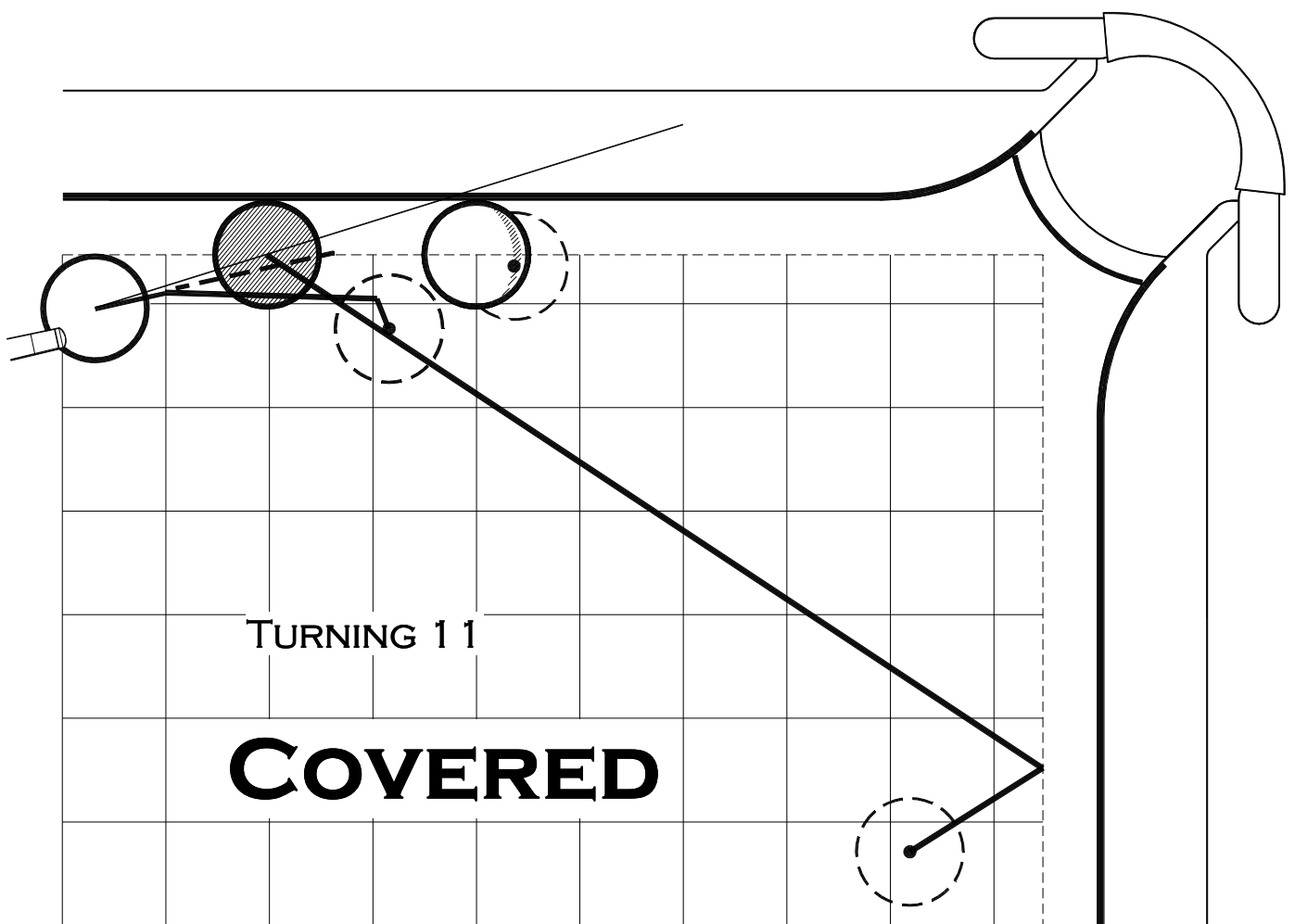
While playing 9A, we were careful not to leev the angl from yellow to red in 9B too narrow. If it iz wider than the natural kiss-off-angl, we ken uze some stun -- but if it iz narrower we are stuffed. Also, it iz best to keep the qball close to the cushion, not too cloze, not less than a half-ball off. And not too far off the cushion, the attack angl on yellow should be less than 45° . The yellow iz best frozen to the cushion, but up to say a quarter-ball off iz ok.



SCREW GATHER TURNING 10

In this pozy we hav set up a Gather--Turn needing a half-ball screw-gather. It iz eezy to judge theze sorts of shots, az long az the range iz this close. Some running-side helps.

It iz best if the yellow iz frozen on the cushion, or well off the cushion, ie say more than a half-ball. Here it iz a quarter-ball off, so we might get a slight doubl-kiss. A nonwellkum kiss might spoil the leev. Az i sed, better to be well off, so that there iz no chance of a kiss, or frozen, so that there will be a dependabl part-doubl-kiss.



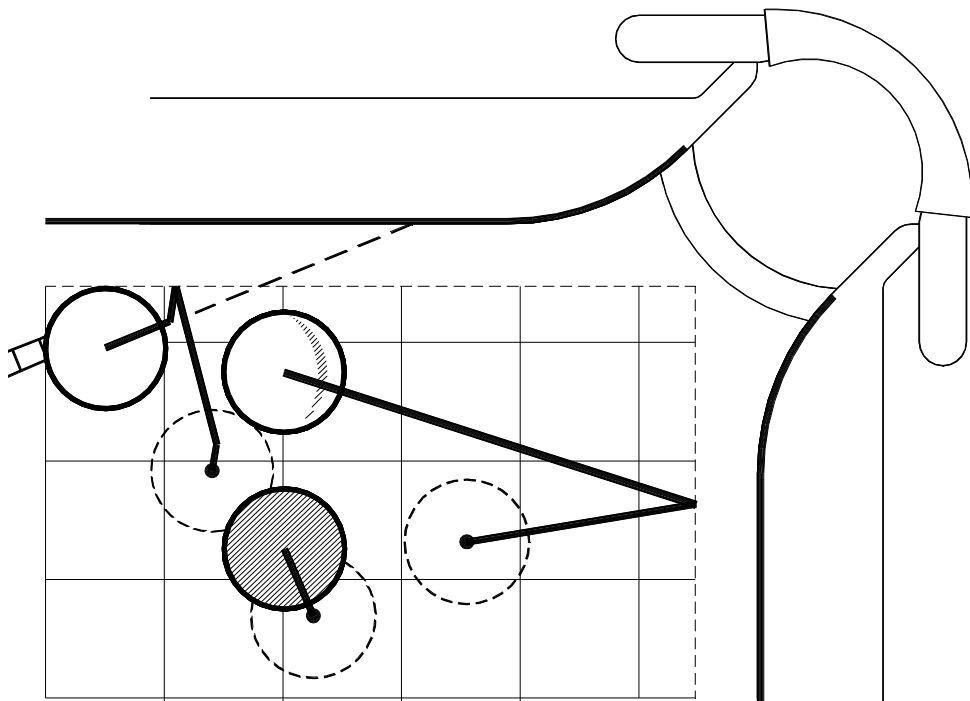
Here we are covered. But the pozzly iznt az bad az it looks. Not only ken we score the cannon very eezyly, but there iz a chance of a turn-gather next shot.

When the red iz frozen on the cushion, az shown, it will rebound at a wider angl than otherwise. Here the thin long line passez throo the center of the qball & red, & it passez not very wide of the yellow. But if u hit the red firmly on this line, it will not hit the yellow az thickly az u might think. It will hit the yellow thinnish & the yellow will not moov far. So, if we hit the red right-of-center it should miss the yellow.

Here in 11 we aim just right of center on yellow, with top & right-hand-side, & we get the leev shown. The right-hand-side givz the red a widish rebound, & i think that it killz a littl of redz pace, & i think that it reducez the ball-to-ball friction & thus let's the qball follow throo more eezyly (when i say it reducez the ball-to-ball friction, i meen the component of friction affecting follow).

This sort of shot haz to be played much much harder than u might think, koz we need to bump yellow ahead to giv some space for out next shot, which will be a turn-gather. This turn-gather will uzually need screw or even pique'. In fact, u karnt xpect to leev a nice friendly turn-gather for ya next shot if the ballz are nearer to the pocket. The red would rebound too far west. It might leev something else, but not a friendly turn-gather. So, the pozzly shown iz about az near to the pocket az will allow.

The red-to-yellow gap shown here iz one ball. Uken get a follow cannon of this sort when the ballz are closer together, but, koz of the angl & contact needed, the red will go into orbit. And a similar shot & sequence ken be ok when the red & or yellow are off the cushion also.



SCREW

TURNING 12

Here we use some screw & left-hand-side.

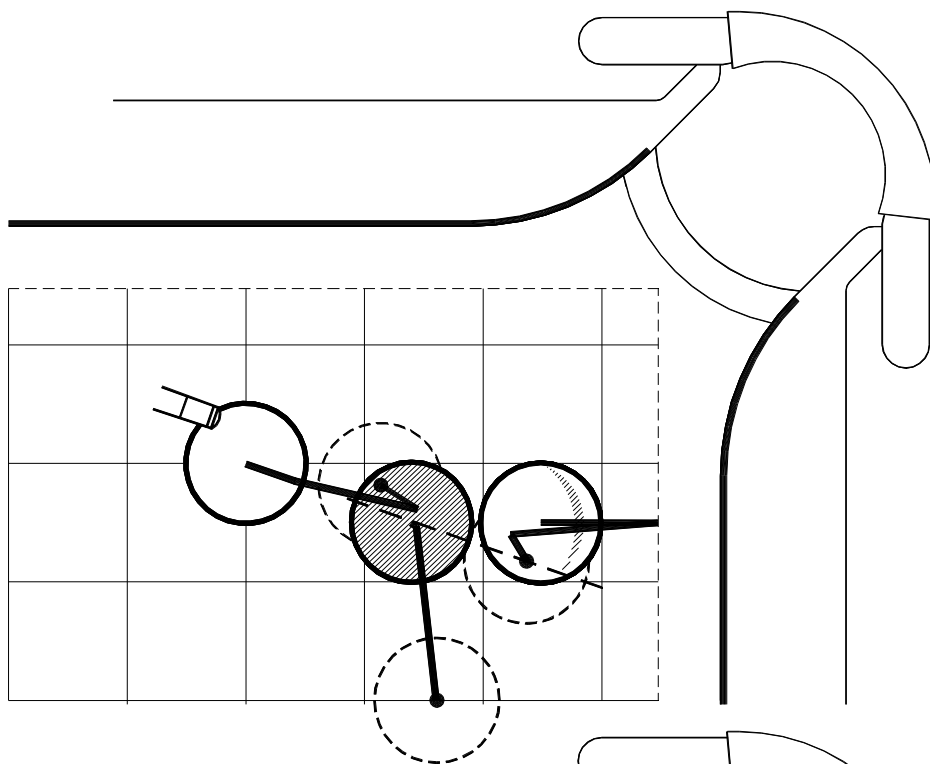
PLANT

TURNING 13

Here we stuffed-up a turn. A cannon off the top-cushion iz eezy. But here we show the optional plant-kiss cannon. Its not really a turn, koz we hav already turned -- its more a repair job.

We use left-hand-side to clear the red away.

Its worth practising variationz of this pozy. The key iz to make sure that the red clearz away -- not too far -- but don't get too cute koz the red ken block the cannon.

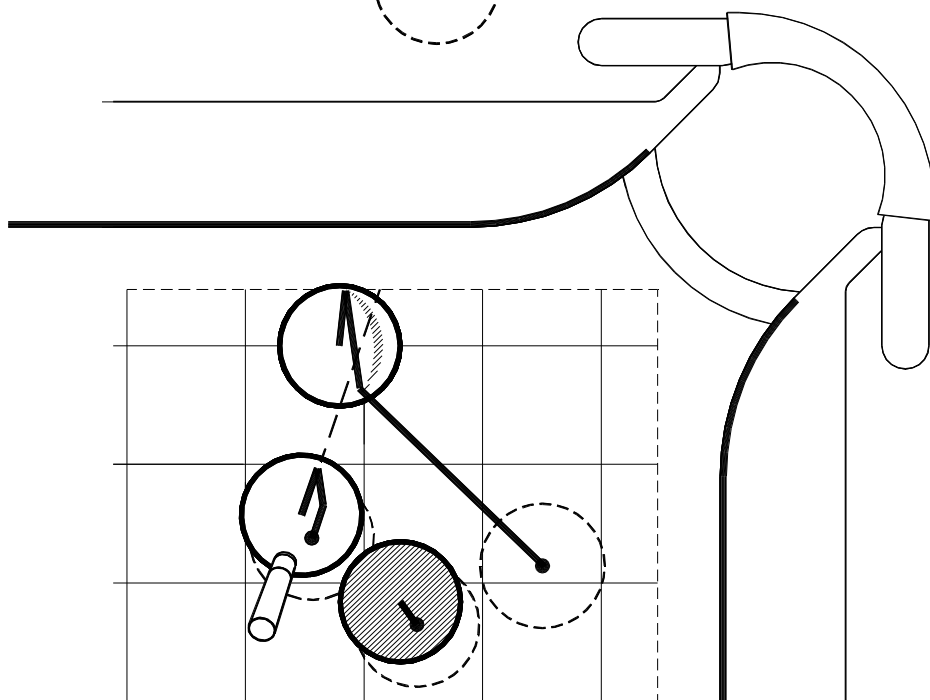


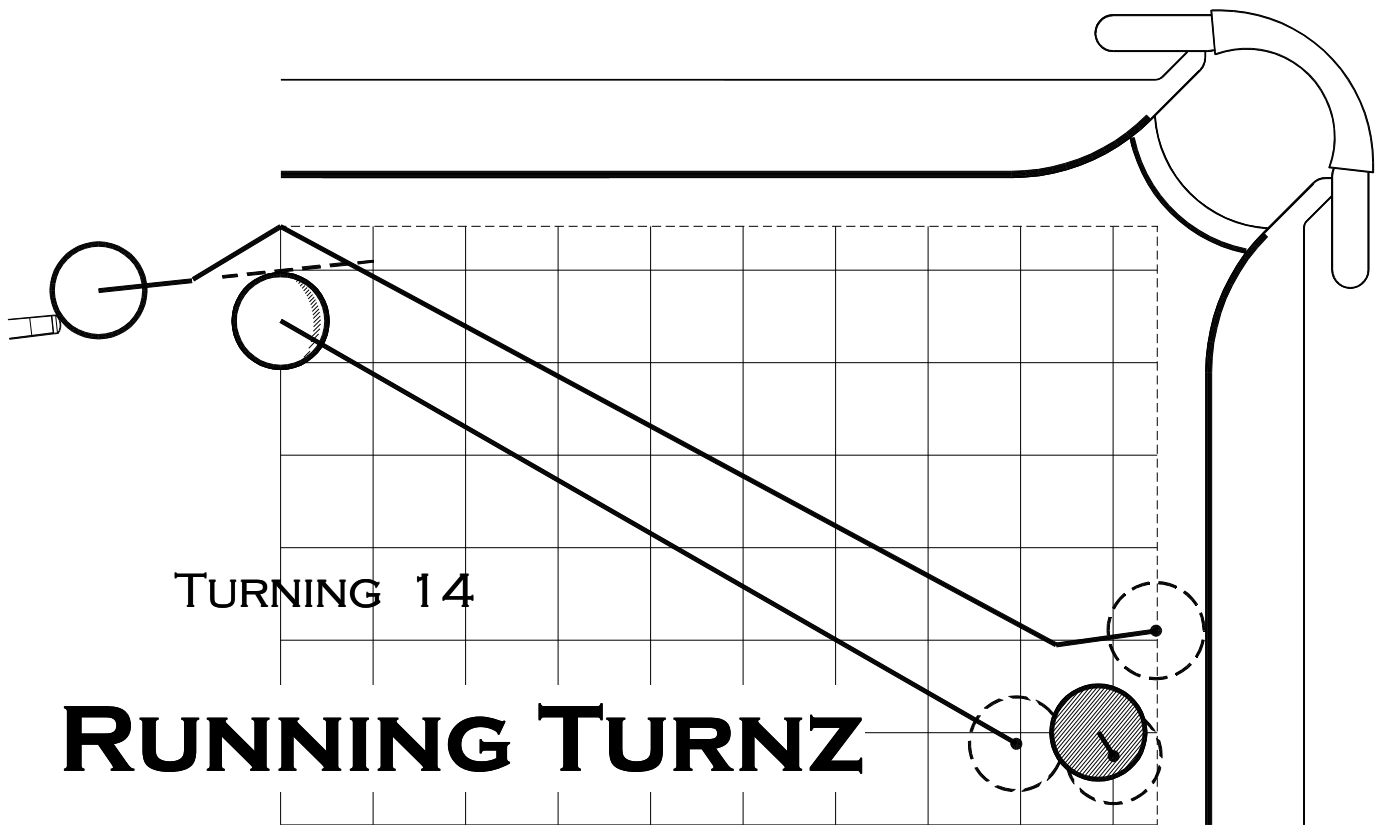
LINE NURSE TURN

TURNING 14

Further to Turning 2C. I hadta play a variation the other day, so i stuck it in my diary, & here it iz.

I played it like a Line-Nurse, uzing the qbball to shield the red from the rebounding yellow. I played a pique', but u might uze soft-screw if the pozy iz a bit eezyr. The second kiss on the qbball also helps to steer the yellow into nice pozyr.





Further to Turning 9 & Turning 12, i woz practicing doing a circuit of the tabl, & i woznt going very well, az uzual. But, i woz pretty pleezed, koz i had turned 3 cornerz well, & i had passed one middle-pocket well. I made a mess passing the other middle-pocket, i bashed the ballz just to get past, & i woz left with pozzly 14 abov, xcept that the ballz were actually much further apart. I almost picked the ballz up, but then i saw the abov shot, & to my surprize i got it first pop (it woz much more difficult than this). The 3 ballz were left in some sort of cluster, next to the top-cushion, but i karnt remember whether the leev woz very good, koz i woz already rushing to my diary. Here in 14 i hadta uze tonnez of right-hand-side, to help the running of the qball, to avoid having to hit the yellow too hard. The window for this sort of shot iz not huge, but uzing running-side to the maximum ken help. The necessary contact on yellow iz the key, this will determin whether a good gather iz on. The cannon itself iz eezy.

My effort must hav been a new world'z record -- a middle-pocket pass, followed by a corner-turn next stroke -- both ovem long-range mongrel bashez.

MANCHESTER GUARDIAN, 5 DECEMBER 29.

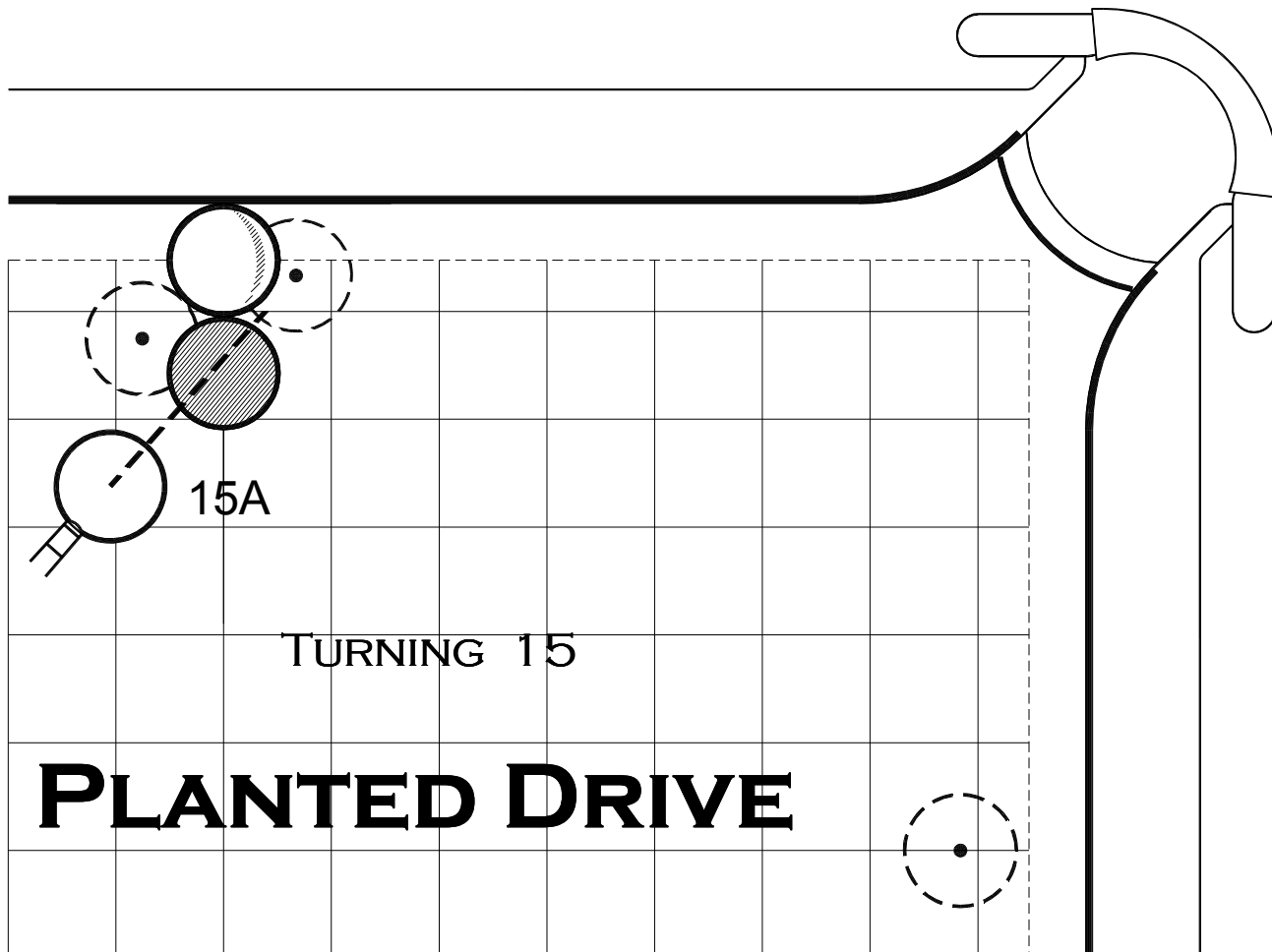
The laughter comes when Lindrum gets the three balls almost touching at the top-of-the-table & proceeds to make cannons almost as fast as the referee can count.

The whole journey of his ball is often not an inch. It touches the other two so delicately that you scarcely hear it & they scarcely move.

On he goes along the top of the table half an inch or an inch at a time while the score mounts -- 51-53-55-57-59-61-63, on and on so that he will score a hundred in the time an ordinary man would take to chalk his cue.

When he comes to the corner he has to go warily, or he will pocket one or other of the balls & spoil his position. Sometimes he will stop as long as 10 seconds to think how he is going to get round the corner.

Then comes a master stroke, & off he goes down the side of the table --65-67-69-71-73-75. It all looks so ridiculously easy that you have to laugh.



Here u might get a cannon off the cushion izing right-hand-side. U might get a turnabout off the side-cushion, izing left-hand-side, perhaps thinning red first. U could write a whole chapter on these sorts of pozzyz, & they kum up lots.

Here we show how u would play a planted kiss-off drive -- to set up a long-range gather-turn next stroke. Aim just left of center on red, hard, with top. The red endz up doubl-kissing over to the side cushion, where shown. This allowz a gather-turn next shot (not shown), probably needing a mezure of stun. The run-throo cannon iz eezy nuff, but the exact qball contact on yellow iz uncertain. U won't alwayz get the perfikt leev shown, but u won't get a bad leev, not if u hit hard nuff.

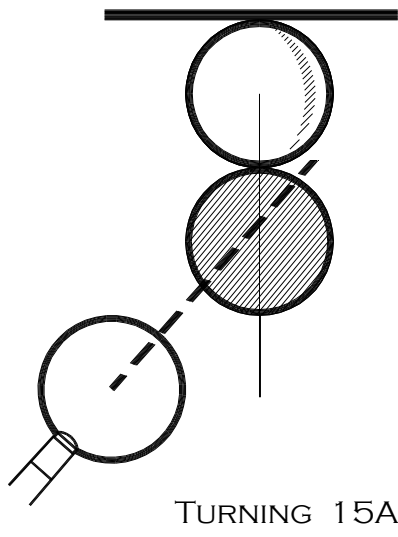
At the short separation shown, it will be difficult to avoid a doubl-hit foul. Chalk-up, & don't try to uze much top koz u will miscue. Similar turnz ken be set up from the pozzyz shown in 15B, C, D, E & F.

THE TIMES, 14 FEBRUARY 30

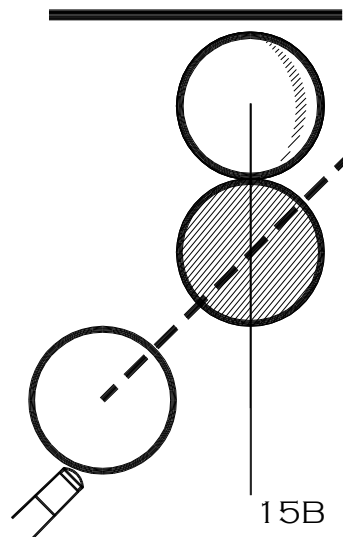
Playing the close cannon game with great accuracy, Lindrum made a run of 69 cannons, & after a little open play he made another run of 121 cannons. In the second of these runs Lindrum showed again that complete mastery he possesses in this phase of the game. He played the balls along the top cushion, but when he reached the left top pocket he experienced considerable difficulty in keeping the balls in position. He could have potted the red, but he preferred to keep the cannon position.

To do this he had to play the first object-ball onto the shoulder of the pocket, but he did this very cleverly twice before he could secure a really favourable position again.

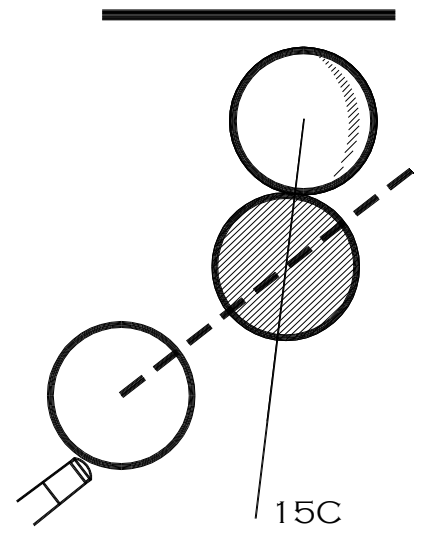
When the break had reached 520 Lindrum missed an awkward middle pocket loser, but McConachy was unlucky, & had little chance again of scoring.



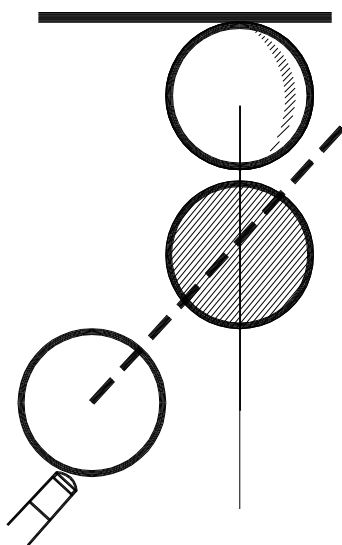
TURNING 15A



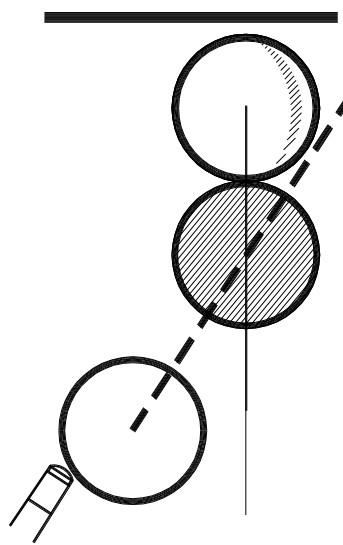
15B



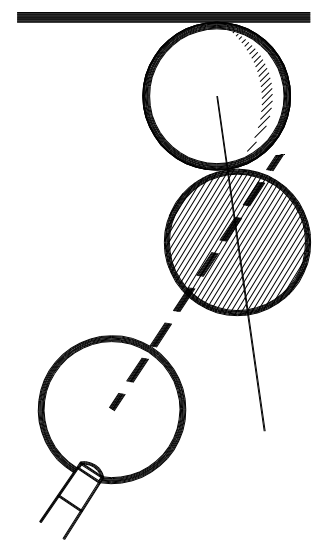
15C



TURNING 15D



TURNING 15E



TURNING 15F

PLANTED VARYATIONZ

B The yellow iz a littl off the cushion. A cannon iz eezy, but to get the good turn pozzzy we need to uze right-hand-side to hold the red up, to get a bigger kiss off the yellow.

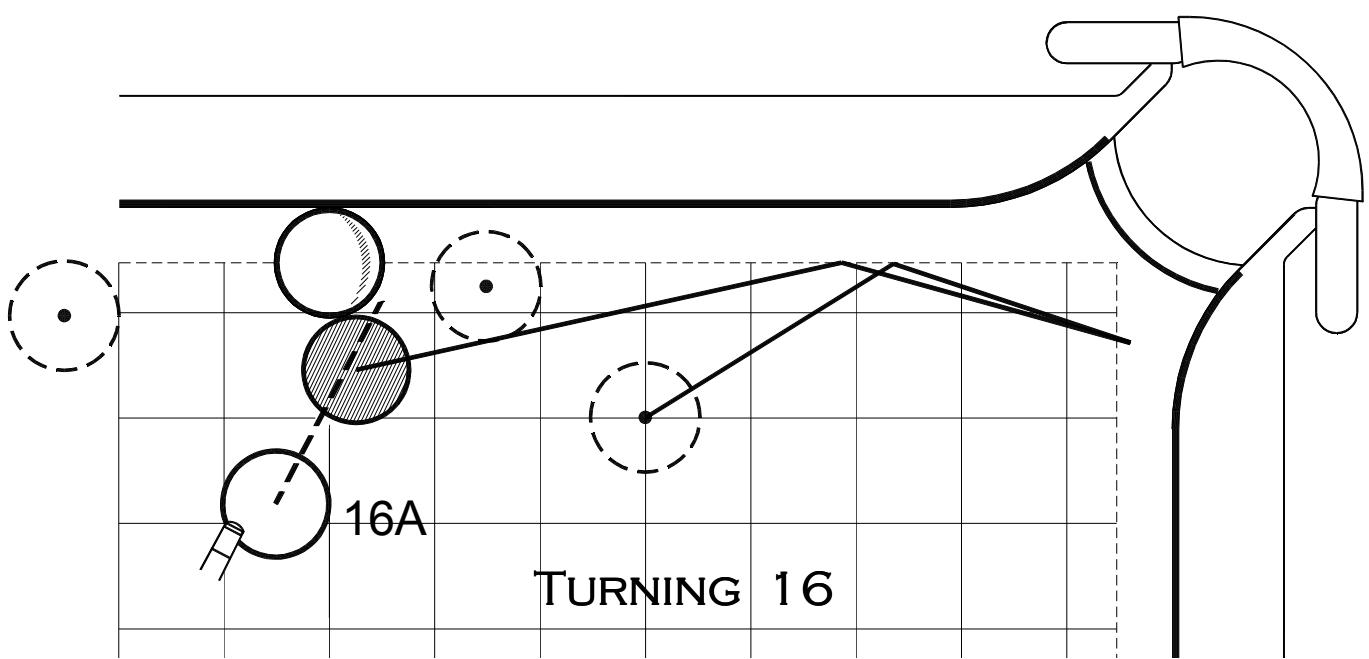
C The yellow iz further off the cushion. A cannon iz eezy, but to get the good turn pozzzy the yellow-to-red line needz to be on an angl, az shown. We aim at the center of red with right-hand-side. The right-hand-side holdz the red up, to get a bigger kiss off the yellow.

D There iz a small gap between red&yellow. We aim just left of center, with right-hand-side.

E The qball iz further east than in D. We need some left-hand-side to clear the red, otherwise the qball will get a doubl-kiss on the red, & miss the cannon. If the qball woz overlapping the red by a littl more than in E, say a half-ball instead of a quarter-ball, then there iz no way of avoiding the doubl-kiss, & this sort of cannon iz impossibl.

F We uze some right-hand-side to hold the red up.

Uken play around with theze & other varyationz, & find out for yaself what the go & no-go pozzzyz are. Cushion-krawlerz enjoy this sort of thing. It iz all good knowledge, not just for turnz.



PLANTED JAW GATHERZ

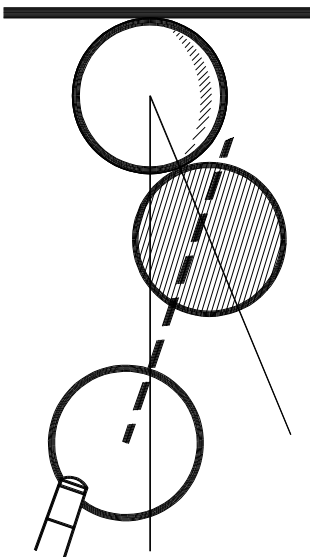
Here in 16 we arnt going to turn the corner, but the pozzyz shown are related to the group of pozzyz shown in 15, so i decided to stick them here rather than with RunAlongz or Gatherz.

In 16A the yellow-to-red angl iz further round than in 15A, so u karnt set up a turn. But u ken get a gather off the jaw, az shown.

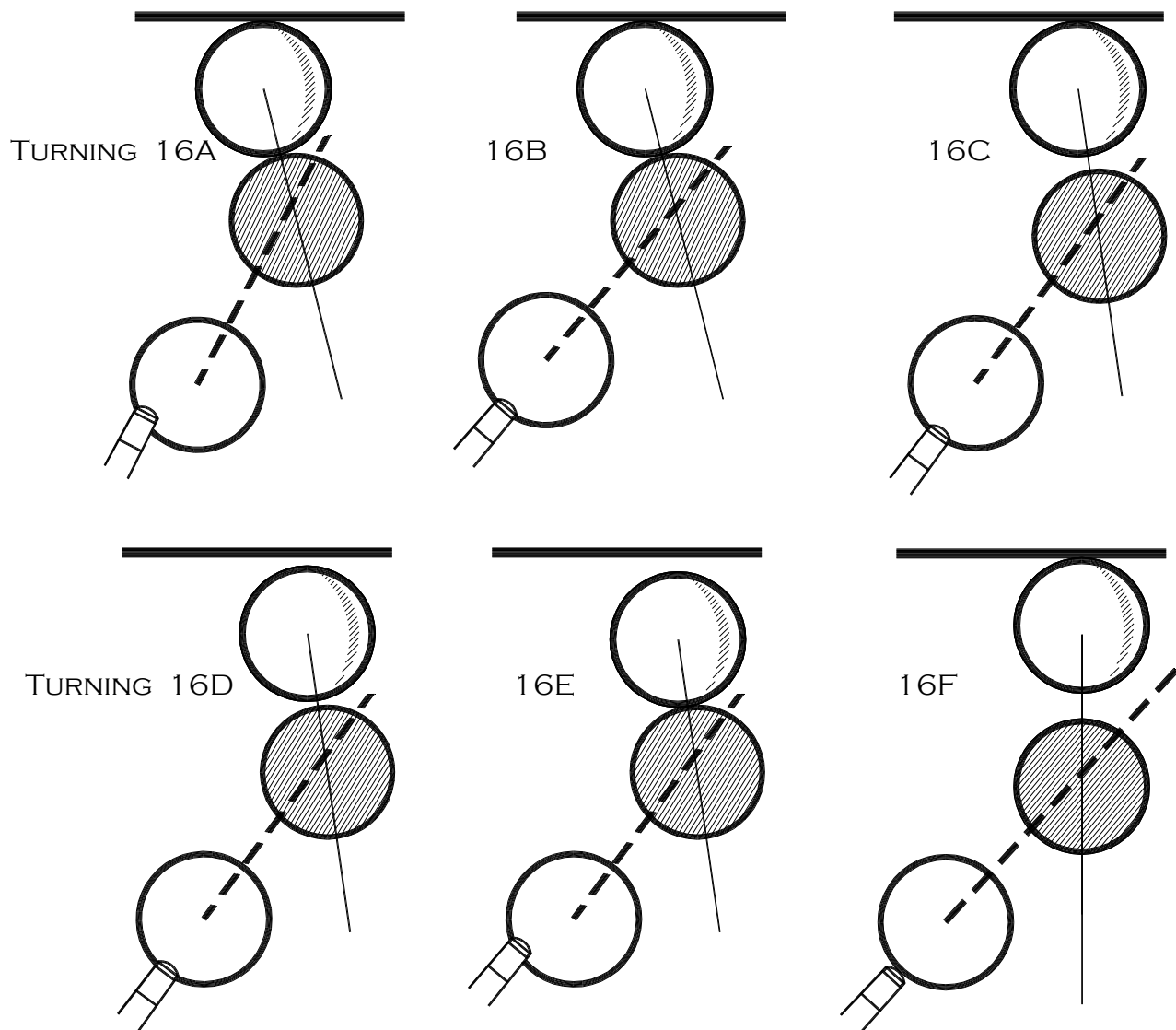
In 16A aim just left of center on red, hard, with some left-hand-side. The left-hand-side reducez the doubl-kiss off yellow, & hence the red takes off at a narrower angl. The red gets more of the cushion, & less of the jaw. And by putting on left-hand-side u are reducing the amount of topspin. Koz topspin will widen the redz angl, & it could take it into the pocket. But all of this, what u want or don't want, dependz on the actual angl & pozzy, az uzual.

Anyhow, u karnt simply look at the yellow-to-red angl, & then vizualize a common tangent heading off for the cushion well before the jaw. Koz, the red will take off much wider than this. So if the common tangent aimz just left of the jaw, it meenz that the red will go straight in without touching the sidez. So be aware. The common tangent hazta aim well left.

The cannon in 16A iz eezy nuff, but u havta hit hard to get the leev we want. And the exact qball contact on yellow iz allwayz uncertain. U won't always get the perfikt leev shown. U might get a cover, especially if u hit too softly. At the short separation shown, it will be difficult to avoid a doubl-hit foul. Chalk-up, & don't try to uze much top koz u will miscue. Similar gatherz ken be set up from the pozzyz shown in 16B, C, D, E & F.



TURNING 15G Here the yellow-to-red angl iz greater than in 15A & 16A. So now, with the help of left-hand-side, we ken actually set up a turn pozzy (not shown), az in the Turning 15 group of pozzyz. Koz the red will miss the jawz.



B The qball iz further west than in A. Now we don't need that left-hand-side. But hav another look at the possibl thin cannon -- close thing -- Hmmm.

C There iz a gap tween red&yellow. This onez eezy.

D There are two small gaps. No worryz.

E The red&yellow are touching. We need some left-hand-side to narrow the redz angl, same az in A.

F Iz similar to 15D, but the gap iz now larger. Eezy, no worryz.

Uken play around with theze & other varyazionz, & find out for yaself what the go & no-go pozzyz are. Cushion-krawlerz enjoy this sort of thing. It iz all good knowledge, not just for turnz.

54 TURNZ

In this chapter we looked at perhaps **16** wayz of turning the corner. In the next chapter on J-Spots, we look at perhaps **8** wayz of using jaw-turnz. Theze add to **24** Turnz. But turnz are hard to define. I meen, a turn iz not just 1 shot, sometimez it iz a very clever sequence, even though it endz with some common type of turn. And do u count all of the varyazionz, ie with pique' or with follow etc. Some Turnz ken be dunn at very long range, theoretically the same animal, but it's like comparing the world'z smallest spider with the largest. Later, we also look at wayz of reversing our run, ie turning about, ie TurnAbouts. I hav drawn **30** wayz, depending on how u count'em of course. This makes **54** turnz of one sort or another.

